



**Annual Review  
of  
English Learning and Teaching**

No. 26

---

**Article:**

Content Selection in Japanese Content and Language Integrated Learning  
..... Saeun LEE 1

**Instructions for Contributors** ..... 25

**The JACET Kyushu-Okinawa Chapter**

November 30, 2021

## Content Selection in Japanese Content and Language Integrated Learning

Saeun LEE

Miyazaki Municipal University

*E-mail: saeunlee@miyazaki-mu.ac.jp*

### Abstract

Content and Language Integrated Learning (CLIL) has been frequently implemented in many countries where there is a perceived need for foreign language instruction for academic and professional disciplines. Within this paradigm, content learning plays a significant role in CLIL classrooms along with language learning. In Japan, CLIL instruction has become popularly adopted in English classrooms (e.g., Lockley, 2014; Ohmori, 2014; Tsuchiya & Murillo, 2015; Yamano, 2013a). However, although CLIL aims for both content learning and language development, Japanese CLIL teachers put more weight on language teaching than content teaching. They tend to underestimate content development and what content to teach in CLIL and the content is not taken seriously (Ikeda, 2012; Nishino & Watanabe, 2008). Therefore, this study investigated the content selected for learning in a Japanese university CLIL course and discussed preferred content topics. Students indicated that the integrated content influences their classroom engagement, affective reaction, meaningful interaction, and the class level adjustment. In addition, participants preferred the content topics that are relevant and familiar to them and desired to learn about study skill methods. As content selection in CLIL cannot be arbitrary (Coyle, Holmes, & King, 2009; Snow, Met, & Genesee, 1989), this study invites Japanese CLIL practitioners to recognize the significance of intentional content selection and may contribute to developing criteria for integrating appropriate content in a Japanese CLIL context.

**Keywords:** content and language integrated learning (CLIL), content learning, the choice of content, language learning, Japanese English education

### Introduction

Content provides a primary motivational incentive for language learning insofar as it is interesting and meaningful for learners. Language then will be learned as “it provides access to content, and language learning may even become incidental to learning about the content” (Snow, Met, & Genesee, 1989, p. 202). Content cannot be separated from learning a language as language cannot be used without content. On the basis of the importance of content involvement in language learning, Content and Language Integrated Learning (CLIL) has been established in Europe as a teaching approach which combines language learning and content learning. Mehisto, Marsh, and Frigols (2008) defined CLIL as “a dual-focused educational approach in which an additional language is used for the learning and teaching of

both content and language” (p. 9). CLIL emphasizes both content and language to be taught in one classroom.

CLIL has a 4Cs framework constructed by Coyle in 1999; Content, Communication, Cognition, and Culture/Community. *Content* refers to a subject or theme that educators selected to teach students “the knowledge, skills, and understanding” (Coyle, Hood, & Marsh, 2010, p. 53) and the *communication* domain indicates “learning to use language and using language to learn” (Coyle, Hood, & Marsh, 2010, p. 53). CLIL also “creates new knowledge and develop new skills through reflection and engagement in higher-order as well as lower-order thinking” which refer to the third framework, *cognition* (Coyle, Hood, & Marsh, 2010, p. 54). Through the last category, *culture*, CLIL hopes to “offer rich potential for developing notions of pluricultural citizenship (local and global) and understanding” within learners (Coyle, Hood, & Marsh, 2010, p. 55).

Moreover, a CLIL approach creates a meaning-focused naturalistic language learning environment (Dalton-Puffer, 2007; Dalton-Puffer & Smit, 2007). CLIL has been implemented by many language educators in many different countries over the last two decades, and ample studies have identified its positive effects on learning (e.g., Doiz, Lasagabaster, & Sierra, 2014; Ikeda, 2013; Korosidou & Griva, 2013; Lasagabaster, 2009; Llinares & Pastrana, 2013).

A number of studies on CLIL implementation in Japan have outlined positive outcomes (e.g., Ikeda, 2013; Oi, Kato, & Kobayashi, 2014; Yamano, 2013a, 2013b). However, although CLIL highlights both language and content development, many of these empirical studies have neglected to explore content learning and/or the content choice. Among a handful of empirical studies exploring content learning in CLIL classrooms, several of them have indicated that content development is insufficient (e.g., Lockley, 2014; Ohmori, 2014; Tsuchiya & Murillo, 2015). Content for a CLIL approach should be new, skilled, and understandable (Watanabe, Ikeda & Izumi, 2012). For CLIL in a European context, content learning involves school subjects such as mathematics, biology, and history from the required curriculum. Some Japanese CLIL practitioners integrate academic knowledge (e.g., Lockley, 2014; Sasajima, 2011; Tsuchiya & Murillo, 2015) but some others integrate content that is more topical and thematic as the conventional English classrooms from the previous in Japan (e.g., Ibaragi, 2013; Ikeda, 2013; Koseki, 2015; Pinner, 2013; Yamano, 2013a, 2013b). This is named as *soft/weak CLIL* and many Japanese CLIL practitioners have implemented it in Japanese language classrooms (Ikeda, 2013). Even with thematic content integration, content learning is not incidental in soft/weak CLIL (Paran, 2013).

Despite the fact that researchers and practitioners integrate various types of content knowledge as the goals of each class in different contexts, there is no standard or specific guideline of what content to integrate for Japanese learners (Izumi, Ikeda, & Watanabe, 2012). Furthermore, Japanese CLIL teachers pay less attention to content learning and its choice because as Mehisto, Marsh, and Frigols (2008, p. 98) addressed, “teachers are not in

a habit of integrating both content and language, and as a consequence neither are students.” This leads to CLIL not being significantly different from other traditional language teaching approaches in Japan. For successful CLIL implementation, content selection and contemplating what it means while teaching a language are predominant components to achieve meaningful content learning as well as language improvement. Therefore, content choice is highly significant and it should be thoroughly considered by CLIL practitioners.

In this regard, empirical studies regarding content selection are essential for simultaneous learning of meaningful content knowledge and development of language skills in a CLIL approach. To examine appropriate content selection to implement CLIL in a required English course in Japanese universities, this study adopts various topics of content knowledge from one of the commercial textbooks. The instructional devices are mainly consisted of content reading notes, English lectures, authentic materials, discussions, various tasks and activities, and journal writing; detailed sample lesson plan is written in the method section. This study focuses on the important notion of content integration in Japanese CLIL classrooms by investigating how the content learning influences students’ learning and some of the aspects of consideration on content choice.

## **Literature Review**

### ***Historical Background of CLIL***

CLIL was initiated in European language education. A tremendous number of studies have demonstrated the positive outcomes of its implementation including improving students’ language (Aguilar & Muñoz, 2014; Chostelidou & Griva, 2014; Korosidou & Griva, 2013), increasing motivation (Çekrezi, 2011; Harrop, 2012), developing new content knowledge (Theologou & Papadopoulos, 2015; Xanthou, 2011) and cultivating higher-order thinking skills (Chostelidou & Griva, 2014; Coyle, Hood, & Marsh, 2010; Ioannou-Georgiou, 2012; Korosidou & Griva, 2013). CLIL has also begun to proliferate in Japanese English classrooms along with evidence of it being an effective teaching approach (e.g., Godfrey, 2013; Ibaragi, 2013; Ikeda, 2013; Koseki, 2015; Pinner, 2013; Yamano, 2013a, 2013b).

However, it cannot be ascertained that students positively experience content learning integration in a language classroom. In advance of implementing CLIL in a language classroom, investigating students’ perspectives on content integrated learning is necessary with regard to the quality and nature of students’ experiences in order to enable their learning to become more successful (Coyle, 2013). There are only a handful empirical studies to have been conducted and motivation is one of the noticeable aspects (e.g., Lasagabaster, 2011; Lasagabaster & Doiz 2015; Oxbrow, 2018; Pérez-Vidal, 2013). To illustrate, Pérez-Vidal (2013) stated that students’ motivation increased notably due to the greater appeal of subjects in English and from practicing various activities following the 4Cs principles. Moreover, a survey result from primary and secondary students exhibits higher levels of motivation on both language learning and content subject learning (Oxbrow, 2018). Lasagabaster and Doiz

(2015) also provided a survey to students from the results of which they perceived greater development in CLIL classes compared to regular English classes, but the study was specifically focused on language learning process without investigating content development. As CLIL aims for simultaneous content and language development, it is crucial to explore the students' perceptions on content learning integration and how the content learning influences students learning experiences, however, there is less emphasis on students' experiences of content learning in Japanese language CLIL classes.

What is more, a number of CLIL scholars have offered criticism of content learning, such as its ineffectiveness in regards to the development of content knowledge (e.g., Apsel, 2012; Bruton, 2013; Makropoulos, 2010; Netten & Germain, 2009; Marsh, Hau, & Kong, 2000). Japanese CLIL implementation also faces this issue (e.g., Lockley, 2014; Ohmori, 2014; Tsuchiya & Murillo, 2015). Paying insufficient attention to content choice has been shown to result in inefficient content knowledge development (e.g., Lockley, 2014; Ohmori, 2014; Sasajima, 2011; Tsuchiya & Murillo, 2015). For instance, Lockley taught history to Japanese university students. From students' reflections, he found the learning of history was determined to be an inappropriate choice because some of his participants questioned why they had to learn Japanese history in English. Similarly content teaching of art and science resulted in high linguistic demands on participants from a survey to explore students' perceptions of CLIL in Tsuchiya and Murillo's study (2015). In this respect, Ohmori (2014) articulated that content learning improvement is unclear and insufficient in many Japanese university CLIL classrooms because instructors emphasize language learning over content learning. As aforementioned, studies resulted in ineffective content learning, content should be intentionally selected along with a careful consideration of students' needs, the scope of content, and the sequence of content in order to achieve effective content learning for Japanese students.

### ***Strategies for Content Selection in CLIL Classrooms***

In Europe, scholars of CLIL have published various trade books and resources. As content selection cannot be arbitrary in any CLIL class, many researchers proposed guidelines for content teaching and its choice. A CLIL trade book by Pavesi, Bertocchi, Hofmannová, and Kazianka (2001) explained in detail how to integrate academic subjects and Mehisto (2012) emphasized grade-appropriate academic content integration to avoid cognitive overload. It is suggested that instructors should re-sort, re-write, or reduce the text, and apply non-verbal input as the need arises (Pavesi et al., 2001). Moreover, CLIL educators highlight that content learning should be relevant for learners and interlinked with their daily life (Coyle, Holmes, & King, 2009; Darn, 2006; Sepesiova, 2015). It is also emphasized that integrated content should be related to learners' interests. Moreover, familiarity is another key for successful content learning in CLIL (Montalto, Walter, Theodorou, & Chrysanthou, 2014). Overall, learners' interests, needs, familiarity, and linking to learners' lives are

commonly indicated in a content evaluation list. In addition, academic content subjects are also frequently integrated in CLIL courses in European higher education.

### ***Content Choice in Japanese CLIL Classes***

As the Japanese educational environment is different from Europe, Japanese CLIL courses integrate content topics regarding students' interests, especially in primary and secondary education settings (e.g., Ibaragi, 2013; Koseki, 2015; Yamano, 2013a, 2013b). The content topic choice in elementary schools with lower levels of English learners is concerned with increasing classroom engagement and results in the selection of topics such as cooking (e.g., Ibaragi, 2013). Admittedly, cooking could be an interesting topic that helps students to pay attention, especially for lower level of English students. However, from the aim of the CLIL approach, a question arises whether learning how to make a dish is pedagogically meaningful for students' content knowledge development other than language learning practices through cooking activities. It can be assumed that a needs analysis of content choice to build content knowledge may be lacking in the process of designing CLIL lessons that use such topics. Engaging students' interests is important for successful lessons, however, educational benefits of content development should also be considered. Other primary CLIL courses in previous studies (Yamano, 2013a, 2013b) integrated the content of animal species and the life of frogs, which are related to other subjects such as biology and science. This study demonstrated positive outcomes from students' classroom tasks and classroom observation that students were actively engaged with the content, even though the linguistic demands were made on the young students regarding related scientific vocabulary (Yamano, 2013b). As shown, CLIL teachers should focus on content topics that result in meaningful content knowledge development with younger and lower English level students in order to differentiate with traditional English classes where language improvement is the main goal.

In another CLIL study, Koseki (2015) selected teaching about the country of Rwanda to build a global mindset to high school (CEFR A2-B1) and university students (B1). Even with this unfamiliar topic, the content teaching from the final examination was effective because the level of content did not require background knowledge about Rwanda. Moreover, this study indicated that background knowledge about the selected content is another important criterion from students' questionnaires. A study by Oi, Kato, and Kobayashi (2014) supported this argument by demonstrating that the content teaching of electric signal generators to junior high and high school students was effective even though the content is driven heavily by engineering, as students already had background knowledge from learning in previous classes. Oi, Kato, and Kobayashi (2014) also articulated that students had strong interest in science.

Moreover, numerous secondary and university CLIL classes in Japan have adopted international content topics such as the origin of chocolates, racism, global warming, endangered species, human rights and peace, and conflict (e.g., Ikeda, 2013; Ohmori, 2014; Yamano, 2013a). In these studies, CLIL instructors integrated teaching globalized content

topics as they are reasonable to learn in English. In contrast, learning Japanese history in CLIL was abnormal for students (Lockley, 2014). Lockley implemented CLIL integrating Japanese history as content choice in a Japanese university elective course and several participants claimed in the reflections that they were confused why they had to learn Japanese history in English and they felt odd from being taught Japanese history by a foreign looking teacher even though it was world history of Japan related content. As a result, Lockley (2015) integrated international history content that focused on international posture in the same research site and observed that students were more engaged during CLIL lessons. Lockley shows how the choice of content impacts students' attitude toward the lessons.

In a slightly different vein, some CLIL instructors have integrated content teaching of academic subjects, particularly in higher education institutes, but many of those studies resulted in insufficient achievement of academic content knowledge (e.g., Ohmori, 2014; Sasajima, 2011; Tsuchiya & Murillo, 2015). To illustrate, in Sasajima (2011), CLIL teachers selected biology and the human body for content learning because participants were medical university students. The CLIL lessons included answering questions about medical related content (e.g., "What is complementary/alternative medicines?"), lecturing about complementary therapies and anatomical regions in the body, and discussing the content with authentic materials in English. However, their content knowledge development was ineffective. Students were able to understand the technical terms and their basic concepts, but they were not able to thoroughly comprehend highly complex content that demanded cognitively challenging academic lectures. Even with various attempts to explain the content knowledge, some participants experienced difficulty in comprehension. Ohmori (2014) also indicated similar results from exploring recent CLIL practices with literature, anthropology and natural science, in that the degree of content learning improvement was not acceptable. Tsuchiya and Murillo (2015) also found that Japanese students experienced linguistic demands when learning art and science in English. In this respect, they articulated that CLIL teachers should begin with an activity and a task about the content with low linguistic and cognitive demands, and then lead learners to a task with several steps of high linguistic and cognitive demands. This issue has been discussed from CLIL researchers: as more technical content renders less interaction (Smit, 2010), students may reach a threshold of learning content and language (Gierlinger, 2007; Marsh, Hau, & Kong, 2000; Várkuti, 2010). From the aforementioned studies, it is reductive to assume that academic content resulted in ineffective content development, however, the studies provide an insight into the importance of integrating appropriate level academic content in Japanese CLIL courses. Careful consideration and systematic analysis of content choice is a vital process for designing CLIL classes to reach acceptable development of both content and language.

### **Research Aims and Research Questions**

From the review of the previous literature, it can be ascertained that there seems to be an

imperative need for further empirical research into the students' perceptions on integrated content topics in Japanese CLIL classrooms and more exploration of appropriate content integration in a Japanese university context. Hence, this study is aimed at exploring students' perceptions on the integrated content topics and identifying some of the important aspects in students' content preferences and achievement. Moreover, this study discusses what types of content topics would be beneficial for content and language learning in a Japanese university English course. Two specific research questions were investigated:

1. How content influences a CLIL classroom for students?
  - What is the role of content learning in a Japanese CLIL classroom?
  - What do students say and/or write about content topics in a language classroom?
2. In what way should content be selected in a CLIL class?
  - What topics of content do students prefer to learn in English?

### **Method**

This study follows a qualitative approach to provide thick descriptions for interpreting and understanding content integration in required English courses in a Japanese university. The qualitative research method was adopted to allow for the collection of participants' experiences, thoughts, and feelings with ample time for deeper meanings to emerge from the students' interviews and reflective writing. A detailed explanation of the data collection and analysis will be provided in the Instrument and Data Collection section below.

#### ***Participants and the Course Description***

The research site was two CLIL classes (26 and 27 students) at a public university in Southern Japan. The majority of students were from Kyushu and a handful of students were from mainland Japan. Nine students (two male and seven female) volunteered to participate in the study. All nine participants used pseudonyms: Ai, Mai, Tomoko, Yuki, Shuhei, Fumi, Hana, Saya, and Saki. They were all second-year students (20 years old). The participants' English level was somewhere between B1 to A2 (CEFR). Some participants responded that they were interested in English and liked studying English, but not all participants expressed interest in studying and improving their English skills.

The investigated course in this study was a required English course. The instructor was from Korea and the primary classroom language was English. The class met face-to-face twice a week (90 minutes) for 12 weeks. The integrated content knowledge was from a textbook, *Prism Reading 3* (B1 to B2 CEFR) by Cambridge University Press (Kennedy & Sowton, 2018). It is composed of six units with 12 different content topics as shown in Table 1.



Table 1  
*Content Topics by Unit and Schedule*

<b>Unit</b>	<b>Globalization</b>	<b>Education</b>	<b>Medicine</b>	<b>Energy</b>	<b>Architecture</b>	<b>Art</b>
<b>Content Topic</b> <i>Related Academic Disciplines</i>	Week 1 Turkish Treats ( <i>Cultural Studies</i> )	Week 3 Choice of majors ( <i>Communication</i> )	Week 5 Homeopathy ( <i>Medicine</i> )	Week 7 Alternative Energy ( <i>Engineering</i> )	Week 9 Form or Function ( <i>Urban Planning</i> )	Week 11 All that Art is ( <i>Design</i> )
<b>Content Topic</b> <i>Related Academic Disciplines</i>	Week 2 Food globalization ( <i>Sociology</i> )	Week 4 Distance vs. Face-to-face learning ( <i>Education</i> )	Week 6 Healthcare Today ( <i>Health Sciences</i> )	Week 8 Reduce, reuse, and recycle ( <i>Physics</i> )	Week 10 Green buildings ( <i>Architecture</i> )	Week 12 Photography as Art ( <i>Fine Art</i> )

Each topic was based on different academic disciplines. The course was carefully designed and planned for 12 weeks, on the basis of four CLIL principles: Content, Communication, Cognition, and Culture/community (4Cs) (Coyle, 2005). Each CLIL lesson consisted of a series of language learning tasks and follow-up activities designed to help the learners leverage their prior content knowledge in developing new language competencies. Each lesson began with a discussion of the reading passage and the instructor-provided reading worksheet. Students could therefore share their questions in understanding the unit content and vocabulary before moving into the main part of the lesson. This was followed by a 20-minute lecture, during which students were encouraged to take notes. The additional content knowledge provided in the lecture was followed by discussions, role plays, and mini-presentations designed to encourage students to transform their content understanding into communication, cognition, and culture/community building activities. At the end of each lesson, students were required to engage with the lesson content in English, before writing up semi-structured journal reflections based on a series of comprehension questions designed to provoke critical engagement with the content of each unit.

### ***Instruments and Data Collection***

All nine participants wrote an additional 1-page reflection after each unit discussing what they had learned as part of class assignment (see Appendix). Students wrote the reflection after the class and submitted on the same day of the class in order to avoid the situation where, due to too much time passing between content learning and reflective writing, students were unable to sufficiently recall the class. Moreover, students could choose to write either in Japanese or English to allow for the collection of detailed data. The second instrument was an interview which was conducted at the end of the course to explore the experience of CLIL throughout the semester and the students' opinions about the role of integrated content knowledge in English classes and the choice of topic. The individual interviews were generally about 30 minutes in Japanese and recorded and transcribed by the author. Semi-structured interview questions (see Appendix) were used and careful probing was facilitated by more

specific questions, if necessary, to elaborate participants' opinions. During the interviews, the researcher emphasized creating a relaxed atmosphere and ample time for students to respond to the interview questions because the questions about content learning could be difficult and unfamiliar making it challenging for students to give their opinions (Rubin & Rubin, 2005). In addition, the participants were encouraged to use examples of content topics from English textbooks in rephrasing their responses to the interview questions. This recalling of students' past experiences in their English classes proved crucial to helping participants express opinions more clearly. Written informed consent forms were obtained from all participants. The interview was the major instrument used to answer the two research questions, and the reflections were analyzed to understand participants' opinions and perspectives regarding the first research question, along with gaining holistic thoughts on content learning in a language class. Reflections and interviews were translated by the author and checked by two native speakers.

### ***Data Analysis***

Content analysis methodology was employed to analyze reflections and interviews by coding and categorizing the data into key themes, patterns, ideas, and concepts (Hesse-Biber & Leavy, 2006). Both reflection and interview analysis followed the five steps of responsible interviewing analysis technique outlined by Rubin and Rubin (2005):

- 1) Recognition: finding the concepts, themes, events, and topical markers;
- 2) Clarify and Synthesize: through systematic examination of the different interviews and reflections to begin understanding the overall narrative;
- 3) Elaboration: generating new concepts and ideas after clarification and synthesis;
- 4) Coding: systematically labeling concepts, themes, events and topical markers, giving them a brief label to designate each and then marking in the interview and reflective text where they are found;
- 5) Sort: sorting the data units and ranking them and building relationships toward a theory (p. 207)

This process was repeated multiple times to refine and evaluate codes and categories that answer the research questions from participants' reflections and interviews. Then, the reflections and interview data were synthesized and converged to delineate findings using themes, patterns, connections and relationships. (Weston, Gandell, Beauchamp, McAlpine, Wiseman, & Beauchamp, 2001). In the process of data analysis, an audit trail, member checks, transparency in decision making and checking with other colleagues were carried out throughout the whole process to enhance the trustworthiness of the study (Houghton, Casey, Shaw, & Murphy, 2013).

### **Results and Discussion**

In this section, the result and discussion of two research foci are described: 1) how the

integrated content influenced students' learning, 2) the considerations for content selection based on students' preferences. Firstly, this section demonstrates four aspects of the effects from content themes in a Japanese English course with CLIL approach.

### ***The Influence of Content in CLIL Classrooms***

The class reflections and interview scripts were analyzed to explore the role of content in content integrated English classes. The collected data indicated that the role of content is related to four aspects: *engagement*, *affective reaction*, *meaningful interaction*, and *cognitive demand of content level*.

***Engagement.*** According to participants, content plays a role as a motivational boost for their engagement in CLIL classes. In other words, depending on the integrated content topics, participants manifested different levels of engagement, which is defined as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1993, p. 297). Hana, Fumi, Saya, and Ai described their physical and psychological involvement during learning each content topics and their energies toward CLIL lessons were up-and/or-down depending on the topics.

- If the content is interesting to me, I become more curious... If I am not interested in the content, my motivation decreases, so I lost my concentration (*physical energy down*). [When the content topics are interesting,] I forgot that I was learning in English. I was more motivated (*psychological energy up*) even though I did not understand English sometimes. (Hana, Interview)
- When the content is not interesting, I easily get bored. X-reading (extensive reading materials) is very much so. When I have to read a book about boring stuff, I do not want to read (*psychological energy down*) and stop reading [it] (*lost physical energy*). (Fumi, Interview)
- Students (our group members) were quiet (*physical energy down*) today. They had less opinion about homeopathy, than other topics. (Saya, reflection)
- I am usually sleepy (*physical energy down*) because the class is 1<sup>st</sup> period, but I remember that I loved learning about art on that day. (Ai, Interview)

The data suggests that the topics of content is an important factor for students' motivation and engagement toward tasks and readings. It echoes with a previous study of Yamano (2013b) that when students were interested in what they learn, students' engagement and motivation increased regardless of the language challenge. In this regard, content topics of readings play an important role for active engagement to students' performances, which echoes with the statement of Guthrie and Wigfield (2000) that reading motivation relate to the processes of engagement, the topics, and the outcomes of a reading.

***Affective reaction.*** Furthermore, content topics determine participants' emotional response. Participants experienced negative emotional responses for specific content.

- Homeopathy was not interesting (negative emotional response: boring) because it

does not really relate to me. I do not remember much of the details and I do not have much opinion about it. It was difficult, too. (Yuki, Reflection)

- For example like Homeopathy, I thought it [the class] was hell (extremely negative emotional response). I never want to (negative emotional response: boring) study about it again. For me, the content that I am studying is very important. (Shuhei, Interview)

Such remarkable excerpts from the interviews reveal that content themes influence participants' emotional responses toward learning, which was also recognized in several previous studies (Lockley, 2014, 2015). In addition, positive aspects such as enjoyment with favorable content topics also revealed.

- Food globalization and art content was exciting (positive emotional response). I enjoyed (positive emotional response) learning both content in English. (Saya, Reflection)
- It was very interesting (positive emotional response) to learn different types of art and the stories behind them. Although it was an English class, I felt it was an Art class (depicted positive emotional response). I was happy (positive emotional response) to learn about Art. (Ai, Interview)

As shown, depending on the content topics, participants felt enjoyment or lethargy while learning the given content. Negative emotions prevent learning from occurring as it is difficult to become better at something if one dislikes it and positive emotions magnify learning to be more effective and enjoyable (Erickson, 1987). From the participants' excerpts, considering learners' affection is an important component when selecting content to integrate in CLIL courses.

***Meaningful interaction.*** Furthermore, integrated content topics are related to an active and meaningful interaction during CLIL lessons. The content teaching about education from the textbook led participants to interact with peers from discussing what it means to be educated to taking an active approach to college study. Participants' reactions toward learning Education content illustrated meaningful interaction in the thorough classroom discussion of the content.

- When we learned about Kurt Wüthrich for the Education major unit, our group discussed more actively [than before] even we were talking in English. We had a lot to talk about. I learned a lot from sharing information. It was very meaningful and beneficial for us. I thought about education and my future and now. I have to think more. It was a great opportunity to think about education and my future. (Mai, Interview)
- We have often discussed “general (common/trivial)” topics such as global warming, aging populations, but I remember that the discussion was superficial and banal. I want to have a meaningful conversation [for me] with good content topics. News and specific issues that are happening now would make us discuss the current situation

and are more important than just talking in English about trivial content for me. I can say more about the recent news than simply practicing conversation such as asking for hobbies and weekend plans with friends. (Saki, Interview)

As shown, accessing, demonstrating, and constructing meaningful content knowledge for students represents practical and real-world learning, which participants desire to think and discuss about in class. These two excerpts demonstrate one of the advantages of CLIL that CLIL classes provide interaction in a social environment that leads to conversations that are relevant for students about the content while practicing English (Coyle, Holmes, & King, 2009). Moreover, Pinner (2013) claims that content integrated instruction of a second/foreign language takes place in social interactions with others. As students learn a language efficiently in meaningful and purposeful social interactions (Snow, Met, & Genesee, 1989), integrating content learning in CLIL allows the language learning to occur as a social activity and the content plays a role as a vehicle for socially constructed learning from meaningful interactions while improving language skills unintentionally and naturally.

***Cognitive demand of content level.*** Another fascinating result reveals from data that integrated content determines the level of the CLIL class. In other words, when the topic is unfamiliar and/or technical, students perceived the class as too challenging. The data indicates that depending on the content, the class difficulty increases, decreases, or is appropriate for students.

- The content topics are very important. I mean, choosing an ‘easy and light’ content [that is an appropriate level for us] is important. If the content is difficult, I think, English also becomes difficult like the Homeopathy unit. Homeopathy was difficult. There were many medical terms that I had never heard before. It seems that topics regarding science are always difficult in some degree and have technical terms. Architecture unit was also the same. (Shuhe, Interview)
- Homeopathy’s class was more difficult than other classes. I couldn’t understand many [English] words and it was difficult to grasp the [content] meaning in the passage. Education related content and the recycling unit were easy to understand [the content] and there was no vocabulary that I have seen for the first time. (Ai, Reflection)

According to excerpts, integrated content enables adjusting the class level; unfamiliar and high cognitive loading content result in difficult language learning and familiar and less technical content result in easy learning of content and language. This finding aligns to numerous previous literature that one of the major reasons for insufficient content learning outcome is from integrating difficult content because it renders linguistic demands (e.g., Ohmori, 2014; Sasajima, 2011; Tsuchiya & Murillo, 2015). The aforementioned excerpts from Shuhe and Ai provide insight into the value of content choice as integrated content plays an important role to determine the CLIL class level.

In summary, the data in this study reveals that integrated content influences students’ engagement, motivation, and emotional response toward CLIL classes. Moreover, integrating

appropriate content topics invites students' learning to be more socially constructed and render meaningful and active discussions while reflecting on the integrated content and interacting with others. In addition, students experienced challenges with the content that was cognitively difficult. In conclusion, content plays various important roles in Japanese university CLIL classrooms, thus, what content to integrate in Japanese CLIL classrooms cannot be underestimated and requires thorough consideration.

### ***Considerations for Content Selection***

***Preference of content topics.*** Investigating students' preferences provides insight on selecting content in a language classroom. Participants liberally listed preferred content topics for CLIL lessons during the interviews are shown in Table 2.

Table 2  
*Preferred Content Topic List*

	<b>Preferred content topics</b>
<b>Personal related</b>	<b><i>College</i></b> e.g., Study abroad, Part-time work (3); College life in foreign countries (5); Real life experiences (3) <b><i>How to</i></b> e.g., Study strategies (3); Use money; Communicate with foreigners (5); Use computers; Live independently <b><i>Future</i></b> Job hunting (3); Jobs (CA, teachers) (6) <b><i>Health</i></b> e.g., Diet (2); Food (4); Self-management Content for improving <b><i>critical thinking skills</i></b> (2) <b><i>Didactic (Instructive) content</i></b> e.g., Biography of famous and successful people; Successful stories (2); Liberal arts subjects
<b>Current issues</b>	<b><i>Japanese social issues</i></b> e.g., Declining birth-rate; Gender problem; Aging population (2) <b><i>Media</i></b> e.g., SNS (4); Smart phone (4); IT (2) <b><i>Worldwide news</i></b> e.g., Poverty; Environmental issues; Politics; Religion; Global manners (2); Working in foreign; Countries (3); Cross-cultural issues (4)
<b>Novel topics</b>	TV celebrities (4); Movies (6); Animation (3); Game (2); fairy tales; Trivia (4); Fashion (3); Sports (4); Animals; Disney; Love (3); Death; Life (2)
<b>Cultural related</b>	Cultural differences (4); Japanese culture (2); Foreigners' thought (5); Various countries and Culture (6); Stereotype (2); World heritages; World Landmarks (2)

*Note.* Participants' general preferences regardless of the CLIL course in this research and the numbers in parenthesis are the number of students' references.

Overall, the topics the students found especially interesting were predictable, however, there are several important features to deliberate for appropriate content selection to result in effective content learning. The list of students' preferences in Table 2 involves important features for determining appropriate content to integrate in CLIL; *relevance*, *study skills*, *background knowledge*, and *novelty*, which will be discussed in the following section.

***Relevance.*** Relevance of content is one of the salient components for selecting content topics for effective CLIL classes. Participants preferred content that is associated with themselves as self-relevant content motivates students to pay attention and learning becomes more meaningful.

- I want to learn about something that is related to my daily and future life, something like... college life, future career, how to increase motivation to do things. And, something that can stimulate us for self-disciplinary and living in general. When I hear other real experiences of being successful or instructive content, it makes me do something. I think English class is good for learning and talking about it because we can easily use English. (Tomoko, Interview)
- Today's class (Homeopathy) was not interesting to me because I did not really care about homeopathy. I do not know anything about it. I still do not understand what it is and why we learned it, to be honest. (Shuhe, Reflection)

The interview and reflection of Tomoko expressed satisfaction after the CLIL lesson of Education because the content was beneficial and closely related to her. In contrast, Shuhe reported feeling apathetic about the lesson on homeopathy. This indicates that relevant content choice entails an important role for beneficial content learning by encouraging students to have a real conversation in a targeted language. The examples of relevant content were illustrated from the data of students' preferences: real life-related, studying strategies, didactic (instructive) content, managing college life, life-living tips and careers. Such relevant topics can be appropriate in that CLIL aims to provide opportunities for 'real communication' from integrating content learning and tapping into them for meaningful and natural use of the targeted language (Dalton-Puffer, 2007). As indicated, a number of Japanese CLIL educators integrated relevant content that is closely related to students' lives (e.g., Ibaragi, 2013; Yamano, 2013a, 2013b). The study by Algee (2012) is also evidence to the outcome that personal oriented content invites learners to be more engaged and motivated within language learning.

**Study skills.** In addition to relevance, content topics related to learning how to study effectively were preferred by participants. For instance, a number of participants described that they want to learn educationally influential and instructive content topics which are practical for them to apply in their studying: learning strategies, study methods, study habits, how to manage college life, successful case learning (e.g., biographies), and didactic (instructive) content.

- I want to learn how to study effectively. I remember when we study about Kurt Wüthrich, it was very beneficial. I know that I have to study vocabulary and listen to many audio-clips and so on to improve my English, but actually, I want to know more specific and practical methods. I want to know how other people really improved their English skills. We can learn about that, right? It will be helpful to learn and we can do that in English. (Hana, Interview)
- [I want to learn] some knowledge and methods about how to manage college life well and keep good grades. I want to understand how to study more effectively. Such content would be good to learn and discuss in English class. There is no class that we learn and talk about how to study. I feel like I need to learn that in university... I think

English class can be good for that. I would feel more relaxed talking [in English] about those topics, because it does not seem too difficult to learn in English. (Saki, Interview)

Teaching language learning strategies is an important component in language classroom teaching (e.g., Chamot, 2008; Cohen, 2011; Cohen & Macaro, 2007; Oxford, 1990), and also in CLIL classes (e.g., Gutiérrez Martínez, & Ruiz de Zarobe, 2017; Ruiz de Zarobe, & Zenotz, 2015; Yang, 2017). Many CLIL instructors employ language learning strategies and teaching as a part of the instructions (Marsh, Mehisto, Wolff, & Frigols, 2010; Mehisto, 2012). Furthermore, Saki and Hana explicitly depicted that they desire to learn about a variety of successful studying scenarios and study methods. Hence, in addition to teach effective study skills and methods, it would be beneficial to go further teaching in-depth, such as the function of the actual process of studying and in what way human's learning generates integrating some of the liberal arts subjects that are related to studying, such as philosophy, pedagogy, psychological approach of learning, cognitive development process of human. These content topics are generally taught for students of education major, however, learning about aforementioned content topics could benefit all college students who are aiming for higher academic achievement. This outcome is fascinating as it broadens viewpoints of content choice in English classes and it is another robust support of the first feature, relevance, for determining what content to teach in Japanese CLIL.

**Background knowledge.** Having background knowledge is another significant criterion for content learning choice. Knowing in some degree about the content is necessary for participants.

- I would like to learn content that is familiar to me some extent. It would be difficult to learn in English if I do not know about it. The homeopathy and architecture units were like that. I actually do not remember what I learnt about the content detail. (Mai, Interview)
- Among various topics, I realized that my comprehension [the degree of understanding] is different between the content that I know and I don't. I have learned about alternative energies before [when I was in high school]; thus, I was able to understand the content very well and comprehended the reading text easily. In contrast, I felt it was difficult to study about the medicine unit, particularly homeopathy. Of course, the technical terms were difficult but more importantly, I could not imagine or grasp the content even I was reading multiple times. In class, we searched about homeopathy and you explained, so I was able to understand, but still don't know much, haha. I think, the content that I have some knowledge of, or am familiar with, is very important because it relates to my understanding because we are learning about it in English. (Yuki, Interview)

As indicated from two excerpts, integrating familiar content learning is one of the keys when designing CLIL classes because students learn the content in a second/foreign language.



Content topics that are familiar to learners provide less cognitive demand. Particularly in a language classroom, students' poor performances are correlated with the limited prior content knowledge (Waxman & Tellez, 2002). Having background knowledge about the integrated content is considered as an essential component in CLIL guideline books. Montalto, Walter, Theodorou, and Chrysanthou (2014) stated that new content must build from what students already know. Furthermore, Meltzer and Hamann (2004) claimed that clear connections of new and background knowledge become a vehicle for future learning. As Mai and Yuki described and Coyle, Holmes, and King (2009) and other numerous CLIL scholars proposed, appropriate content involves previous knowledge for discovering new knowledge in CLIL. Given that, it could be worthwhile to identify students' background knowledge when determining what content to teach, and systematically organizing the sequence of content is also crucial for CLIL classes.

**Novelty.** While considering students' background knowledge for content learning is fundamental, participants pointed out the repetition of content topics in many of their previous English classes. They stated that they wish to learn new and novel content. Japanese students have been learning English since elementary education with various topics regarding global issues repeatedly because they are related to the foreignness for learning in English.

- We've been learning and discussing a lot about social issues like aging population, birth-rate decline, environmental issues like saving energy etc. They are not interesting anymore because we already know and talked too much about them in high school. I want to learn about something new and interesting [in English classes], no more global warming. (Tomoko, Interview)
- We have talked a lot about saving energy in junior and high school classes, so it [Alternative energy unit] was too easy to understand. I didn't feel that I learned something [for content learning]. It was boring, to be honest. (Shuhe, Interview)
- I want to learn interesting content that gives me more stimulated interests. Some of the content like saving energy, recycling, distance and face-to-face learning because they are too easy and I have already learned and talked about them in many high school English classes. Art unit was very good because I learned many new things about Art. And architecture unit was interesting as well because I could learn important functions for building and how to build. I made me to build my house. (Yuki, Interview)

As Tomoko, Shuhe, and Yuki noticeably described, similar content topics of learning from the past leads to no additional content development which fails to meet the CLIL content learning goal. It has been discussed in a study of Kim and Tracy-Ventura (2013) that repeated topics and tasks often demotivated students, and result in less learning engagement. In the CLIL guideline, appropriate content should invite students to discover and learn new knowledge, develop existing skills, and deepen understanding (Coyle, Holmes, & King, 2009). There are several attempts to avoid the repetition of content topic integration from conventional English classes of secondary education and teach academic content knowledge

in university CLIL classes (e.g., Ohmori, 2014; Sasajima, 2011; Tsuchiya & Murillo, 2015). As participants found it boring to study some of the repeated content topics, new and novel content topics integration in CLIL is important. However, the data also showed that background knowledge and the sequence of content integration is also an essential component to consider. Therefore, these two components, novelty and background knowledge, should be considered together depending on the purpose of the classes. For the general English classes in this research site, students should have new and interesting input to attract their attentions, and background knowledge could be more important if the course goal is integrating academic content learning. From this aspect, pre-assessment and needs analysis are essential for CLIL practitioners.

### **Conclusion**

In conclusion, active research on how integrated content topics influence both content and language learning is crucial for successful CLIL implementation in Japan. This study suggests that selecting appropriate content is the necessary first step toward increasing students' classroom engagement and motivation. Moreover, meaningful conversations occur depending on the content that students learn. Integrated content also influences the students' perception of content difficulty. In taking the students' content preferences into account, relevancy is a key element for enhancing content integration into developing language learner competencies. Students want to learn how to develop their study skills, and learn about new/novel content that is related to their daily lives. Moreover, choosing content that is age appropriate and that can leverage students' existing background knowledge is also necessary in developing more engaging learning environments and practices.

This study reinforces the notion that deliberate planning of what content to teach is crucial for effective content learning as well as in developing language competencies in a Japanese CLIL course. As Coyle, Hood, and Marsh (2010) stated that “[t]he operational success of CLIL has been in transferability, not only across countries and continents, but also across types of school” (p.1), investigating this particular research site contributes to knowledge of appropriate content selection for Japanese CLIL classes. For CLIL to help students develop their literacy skills and communicative competencies in English, it is necessary for teachers to analyze students' needs, interests in the process of lesson planning from students' side and contemplate what to teach for meaningful content learning. Moreover, active research on what content topics to teach as the needs of current society is also one of the important tasks for CLIL instructors. The time required for instructors to develop appropriate CLIL materials is thus an essential aspect of making CLIL successful in the varying socio-cultural and institutional settings. In addition, more professional development workshops and tailor-made hands-on guidelines for Japanese CLIL practitioners may also prove crucial to the successful integration of CLIL into Japanese university language classes. Lastly, further empirical investigation of content integration will likely prove critical to the

effective data collection necessary for the further integration of content learning in Japanese CLIL courses.

### Acknowledgements

First and foremost, my sincere gratitude goes to Professor Tom Salsbury, who expertly guided me through an earlier stage of the research and whose unwavering support has kept me engaged with the current study. Furthermore, my deepest appreciation also extends to three anonymous reviewers for their insightful and valuable comments and suggestions. Last but not least, I would like to thank all of the research participants for sharing their time and genuine opinions.

### References

- Aguilar, M., & Muñoz, C. (2014). The effect of proficiency on CLIL benefits in engineering students in Spain. *International Journal of Applied Linguistics*, 24(1), 1–18. doi: 10.1111/ijal.12006
- Algee, L. M. (2012). *Exploring English language learners (ELL) experiences with scientific language and inquiry within a real-life context* (unpublished doctoral dissertation). University of California, Santa Cruz.
- Apsel, C. (2012). Coping with CLIL: Dropouts from CLIL streams in Germany. *International CLIL Research Journal*, 1(4), 29–35. <http://www.icrj.eu/14/article5.html>
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Bruton, A. (2013). CLIL: Some of the reasons why... and why not. *System*, 41, 587–597. doi: 10.1016/j.system.2013.07.001
- Çekrezi, R. (2011). CLIL and teacher training. *Procedia-Social and Behavioral Sciences*, 15, 3821–3825. <https://doi.org/10.1016/j.sbspro.2011.04.379>
- Chamot, A. U. (2008). Strategy instruction and good language learners. In C. Griffiths (Ed.), *Lessons from good language learners* (pp. 266–281). Cambridge: Cambridge University Press.
- Chostelidou, D., & Griva, E. (2014). Measuring the effect of implementing CLIL in higher education: An experimental research project. *Procedia-Social and Behavioral Sciences*, 116, 2169–2174. doi: 10.1016/j.sbspro.2014.01.538
- Cohen, A. D. (2011). Second language learner strategies. In E. Hinkle (Ed.), *Handbook of research in second language teaching and learning* (Vol. 2, pp. 681–698). New York: Routledge.
- Cohen, A., & Macaro, E. (Eds.). (2007). *Language learner strategies: Thirty years of research and practice*. Oxford: Oxford University Press.
- Coyle, D. (1999). Supporting students in content and language integrated contexts: Planning for effective classrooms. In J. Masih (Ed.), *Learning through a foreign language:*

- Models, methods and outcomes* (pp. 46–62). London: CILT.
- Coyle, D. (2005). *Developing CLIL: Towards a Theory of Practice*. APAC Monograph 6, APAC. Barcelona.
- Coyle, D. (2013). Listening to learners: An investigation into ‘successful learning’ across CLIL contexts, *International Journal of Bilingual Education and Bilingualism*, 16(3), 244–266. doi: 10.1080/13670050.2013.777384
- Coyle, D., Holmes, B., & King, L. (2009). *Towards an integrated curriculum: CLIL national statements and guidelines*. Guidelines/dp/0956425607. London: The Languages Company.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge: Cambridge University Press.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. Amsterdam, the Netherlands: John Benjamins.
- Dalton-Puffer, C., & Smit, U. (Eds.). (2007). *Empirical perspectives on CLIL classroom discourse*. Frankfurt: Peter Lang.
- Darn, S. (2006). Content and language integrated learning (CLIL): A European overview. *ERIC Education Resources Information Center*. Retrieved from <https://files.eric.ed.gov/fulltext/ED490775.pdf>
- Doiz, A., Lasagabaster, D., & Sierra, J. M. (2014). CLIL and motivation: The effect of individual and contextual variables. *Language Learning Journal*, 42(2), 209–224. doi: 10.1080/09571736.2014.889508
- Erickson, F. (1987). Transformation and school success: The politics and culture of educational achievement. *Anthropology and Educational Quarterly*, 18, 335–356. doi: 10.1525/aeq.1987.18.4.04x0023w
- Gierlinger, E. M. (2007). Modular CLIL in lower secondary education: Some insights from a research project in Austria. In C. Dalton-Puffer, & U. Smit (Eds.), *Empirical perspectives on CLIL classroom discourse* (pp. 79–118). Frankfurt: Peter Lang.
- Godfrey, C. (2013). Readdressing EFL approaches: CLIL curriculum in a Japanese medical university context. *The Asian EFL Journal*, 15(4), 365–371. Retrieved from <http://asian-efl-journal.com/wp-content/uploads/mgm/downloads/45155200.pdf>
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 403–422). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gutiérrez Martínez, A., & Ruiz de Zarobe, Y. (2017). Comparing the benefits of a metacognitive reading strategy instruction programme between CLIL and EFL primary school students. *Estudios de lingüística inglesa aplicada (ELIA)*, 17, 71–92. doi: 10.12795/ELIA.2017.117.04
- Harrop, E. (2012). Content and language integrated learning (CLIL): Limitations and possibilities. *Encuentro*, 21, 57–70. Retrieved from <https://files.eric.ed.gov/fulltext/>

ED539731.pdf

- Hesse-Biber, S. N., & Leavy, P. (2006). *Emergent methods in social research*. Thousand Oaks, CA: Sage.
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, 20(4), 12–17. doi: 10.7748/nr2013.03.20.4.12.e326.
- Ibaragi, A. (2013). CLIL (Naiyou Gengo Tougo Gakusyu) teki gaikokugo katsudou no Jissen to sono Kouka [CLIL in foreign language practice and effect]. *Joetsu Kyoiku Daigaku Gakukou Jissen Kenkyu Senta* [The Bulletin of Joetsu University of Education Practice and Research Center], 23, 13–18.
- Ikeda, M. (2013). Does CLIL work for Japanese secondary school students?: Potential for the ‘weak’ version of CLIL. *International CLIL Research Journal*, 2(1), 31–43. Retrieved from <http://www.icrj.eu/21/article3.html>
- Izumi, S., Ikeda, M., & Watanabe, Y. (2012). *CLIL (content and language integrated learning): New challenges in foreign language education at Sophia University. Volume 2: Practice and Applications*. Tokyo: Sophia University Press.
- Ioannou-Georgiou, S. (2012). Reviewing the puzzle of CLIL. *ELT Journal*, 66(4), 495–504. doi: 10.1093/elt/ccs047
- Kennedy, A. S., & Sowton, C. (2018). *Prism reading 3*. Cambridge: Cambridge University Press.
- Kim, Y., & Tracy-Ventura, N. (2013). The role of task repetition in L2 performance development: What needs to be repeated during task-based interaction? *System*, 41(3), 829–840. doi: 10.1016/j.system.2013.08.005
- Korosidou, E. I., & Griva, E. A. (2013). “My Country in Europe”: A content-based project for teaching English as a foreign language to young learners. *Journal of Language Teaching and Research*, 4(2), 229–243. doi: 10.4304/JLTR.4.2.229-243
- Koseki, K. (2015, August). *Enhance English language and global learning in the CLIL framework*. Paper presented at 6<sup>th</sup> International Conference on TESOL, Ho Chi Minh: Vietnam. Retrieved from <http://www.vnseameo.org/TESOLConference2015/Materials/Fullpaper/Ms.%20Kimiko%20Koseki.pdf>
- Lasagabaster, D. (2009). Language attitudes in CLIL and traditional EFL classes. *International CLIL Research Journal*, 1(2), 4–16. Retrieved from <http://www.icrj.eu/12/article1.html>
- Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching*, 5(1), 3–18. doi: 10.1080/17501229.2010.519030
- Lasagabaster, D. & Doiz, A. (2015). CLIL students’ perceptions of their language learning process: Delving into self-perceived improvement and instructional preferences. *Language Awareness*, 25(1–2), 110–126. doi: 10.1080/09658416.2015.1122019
- Lasagabaster, D., & Sierra, J. M. (2014). Language attitudes in CLIL and traditional EFL classes. *International CLIL Research Journal*, 1(2), 4–16. Retrieved from <http://www>.

icrj.eu/index.php?vol=12&page=73

- Llinares, A., & Pastrana, A. (2013). CLIL students' communicative functions across activities and educational levels. *Journal of Pragmatics*, 59(1), 81–92. doi: 10.1016/j.pragma.2013.05.011
- Lockley, T. (2014). Some learning outcomes and contextual factors of history as content and language integrated learning (CLIL) in a Japanese context. *Studies in Linguistics and Language Teaching*, 25, 165–188. Retrieved from file:///Users/gc004/Downloads/gengo25\_12Lockley-1.pdf
- Lockley, T. (2015). Promoting international posture through history as content and language integrated learning (CLIL) in the Japanese context. *Studies in Second Language Learning and Teaching*, 5(1), 87–108. doi: 10.14746/ssllt.2015.5.1.5
- Makropoulos, J. (2010). Students' attitudes to the secondary French immersion curriculum in a Canadian context. *Language, Culture, and Curriculum*, 23, 1–13. doi: 10.1080/07908310903494525
- Marsh, H. W., Hau, K. T., & Kong, C. K., (2000). Late immersion and language of instruction in Hong Kong high schools: Achievement growth in language and non-language subjects. *Harvard Education Review*, 70, 302–346. Retrieved from <https://files.eric.ed.gov/fulltext/ED443297.pdf>
- Marsh, D., Mehisto, P., Wolff, D., & Frigols, M. J. (2010). *The European framework for CLIL teacher education*. Graz: European Centre for Modern Languages.
- Mehisto, P. (2012). Criteria for producing CLIL learning material. *Encuentro*, 21, 15–33. Retrieved from <https://files.eric.ed.gov/fulltext/ED539729.pdf>
- Mehisto, P., Marsh, D., & Frigols M. J. (2008). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Oxford: Macmillan.
- Meltzer, J., & Hamann, E. (2004). *Meeting the needs of adolescent English language learners for literacy development and content area learning, Part 1: Focus on motivation and engagement*. Providence, RI: The Education Alliance at Brown University.
- Montalto, S. A., Walter, L., Theodorou, M., & Chrysanthou, K. (2014). *CLIL guide book*. Retrieved from <https://www.languages.dk/archive/clil4u/book/CLIL%20Book%20En.pdf>
- Netten, J., & Germain, C. (2009). The future of intensive French. *Canadian Modern Language Review*, 65, 757–786. doi: 10.3138/cmlr.65.5.757
- Nishino, T., & Watanabe, M. (2008). Communication oriented policies versus classroom realities in Japan. *TESOL Quarterly*, 42(1), 133–138. Retrieved from <https://www.jstor.org/stable/pdf/40264432.pdf>
- Ohmori, A. (2014). Exploring the potential of CLIL in English language teaching in Japanese universities: An innovation for the development of effective teaching and global awareness. *Rikkyo Daigaku Langeji Senta Kiyō* [The Bulletin of Rikkyo University Language Center], 32, 39–51.

- Oi, K., Kato, T., & Kobayashi, I. (2014). Reexamining the program “science and experiments through English for junior and senior high school students” from a perspective of CLIL. *Chiba Daiigaku Kyouiku Gakkubu Kenkyu Kiyo* [The Bulletin of Education, Chiba University], 62, 283–291.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.
- Oxbrow, G. (2018). Students’ perspectives on CLIL program development: A quantitative analysis. *Porta Linguarum*, 29, 137–158. doi: 10.30827/Digibug.54026
- Paran, A. (2013). Content and language integrated learning: Panacea or policy borrowing myth? *Applied Linguistics Review*, 4 (2), 317–342.
- Pavesi, M., Bertocchi, D., Hofmannová, M., & Kazianka, M. (2001). *CLIL guidelines for teachers*. Retrieved from <http://www.ub.edu/filoan/CLIL/teachers.pdf>
- Smit, U. (2010). CLIL in an English as a lingua franca classroom: On explaining terms and expressions interactively. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *Language use and language learning in CLIL classrooms* (pp. 259–278). Amsterdam: John Benjamins.
- Pérez-Vidal, C. (2013). Perspectives and lessons from the challenge of CLIL experiences. In C. Abello Contesse, P. Chandler, M. D. López Jiménez, & R. Chacón Beltrán (Eds.), *Bilingual and multilingual education in the 21st century: Building on experience*. (pp. 59–82). Bristol: Multilingual Matters.
- Pinner, R. (2013). Authenticity and CLIL: Examining authenticity from an international CLIL perspective. *International CLIL Research Journal*, 2(1), 44–54. Retrieved from <http://www.icrj.eu/21/article4.html>
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Ruiz de Zarobe, Y. & Zenotz, V. (2015). Reading strategies and CLIL: The effect of training in formal instruction. *Language Learning Journal*, 43 (3), 1–15. doi: 10.1080/09571736.2015.1053284
- Sasajima, S. (2011). *CLIL: New ideas for classes* [in Japanese]. Tokyo, Sanshusha.
- Sepesiova, M. (2015). CLIL lesson planning. *CLIL*, 131–152. doi: 10.17846
- Smit, U. (2010). CLIL in an English as a lingua franca classroom: On explaining terms and expressions interactively. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *Language use and language learning in CLIL classrooms* (pp. 259–278). Amsterdam: John Benjamins.
- Snow, M. A., Met, M., & Genesee, F. (1989). A conceptual framework for the integration of language and content in second/foreign language instruction. *TESOL Quarterly*, 23 (2), 201–219. doi: 10.2307/3587333
- Theologou, E., & Papadopoulos, I. (2015). CLIL community of students: A longitudinal project for developing content-based material within a learning community in primary

- education. *MIBES Transactions*, 9(2), 71–84. Retrieved from [http://mibes.uth.gr/vol9\\_issue2\\_2015/Theologou%20Papadopoulos.pdf](http://mibes.uth.gr/vol9_issue2_2015/Theologou%20Papadopoulos.pdf)
- Tsuchiya, K., & Murillo, M. D. P. (2015). Comparing the language policies and the students' perceptions of CLIL in tertiary education in Spain and Japan. *Latin American Journal of Content and Language Integrated Learning*, 8(1), 25–35. doi: 10.5294/laclil.2014.8.1.3
- Várkuti, A. (2010). Linguistic benefits of the CLIL approach: Measuring linguistic competences. *International CLIL Research Journal* 1(3), 67–79. Retrieved from <http://www.icrj.eu/13/article7.html>
- Watanabe, Y., Ikeda, M., & Izumi, S. (2012). *CLIL (Content and Language Integrated Learning—New Challenges in Foreign Language Education at Sophia University – Volume 1: Principles and Methodologies* (pp. 1–13). Tokyo: Sophia University Press.
- Waxman, H., & Tellez, K. (2002). *Research synthesis on effective teaching practices for English language learners*. Publication series. Philadelphia: Mid-Atlantic Laboratory for Student Success. Retrieved from <https://files.eric.ed.gov/fulltext/ED474821.pdf>
- Weston, C., Gandell, T., Beauchamp, J., McAlpine, L., Wiseman, C., & Beauchamp, C. (2001). Analyzing interview data: The development and evolution of a coding system. *Qualitative Sociology*, 24(3), 381–400. doi: 10.1023/A:1010690908200
- Xanthou, M. (2011). The impact of CLIL on L2 vocabulary development and content knowledge. *English Teaching: Practice and Critique*, 10(4), 116–126. Retrieved from <https://files.eric.ed.gov/fulltext/EJ962609.pdf>
- Yamano, Y. (2013a). CLIL in a Japanese primary school: Exploring the potential of CLIL in a Japanese EFL context. *International CLIL Research Journal*, 2(1), 19–30. Retrieved from <http://www.icrj.eu/21/article2.html>
- Yamano, Y. (2013b). Shogakkou gaikokugo katudouni okeru CLIL no jissentou kanousei [Implication and possibility of CLIL in primary education]. *STEP Bulletin*, 25, 94–126.
- Yang, W. (2017). From similarity to diversity: The changing use of language learning strategies in content and language integrated learning at the tertiary level in Taiwan. *English Teaching and Learning*, 41(1), 1–32. doi: 10.6330/ETL.2017.41.1.01

## Appendix

### Students' Reflection

今日学んだコンテンツトピックについての感想を書いて下さい。



### **Semi-structured interview questions**

1. どんなコンテンツトピックについて読み、学びたいですか。
2. 学問知識を英語で学ぶことに関してどう思いますか。
3. 一つのコンテンツに関する知識を深く学びたいですか、それとも、基本的だが多様なコンテンツを学びたいですか。
4. どのようなコンテンツトピックが英語授業に適すると思いますか。また、どのようなコンテンツトピックが英語授業に不適だと思いますか。
5. 今学期、授業で取り入れた内容に関して、上手く学習が出来たトピックはなんでしたか。反対に、あまり学びが出来なかったトピックはなんでしたか。
6. 一番興味深い、引き込んだ、または、授業に参加できたコンテンツトピックは何でしたか。それはなぜですか。
7. 過去の英語の授業で、どのようなコンテンツトピックを学びましたか。例をあげて下さい。また、過去の英語授業でのコンテンツ学習についての経験を教えてください。