[Research Note]

Content and Language Integrated Learning (CLIL):

Compatibility of a European Model of Education to Japanese Higher Education

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Abstract

Universities have an obligation to live up to the expectations of the stakeholders students and their families, community groups, industries, and governments to ensure that their graduates have the requisite skills to succeed in a rapidly transforming world influenced by globalization, interconnectivity, and advancement in artificial intelligence. This paper reports on the findings of a study that explored the possibility of using English as a Foreign Language (EFL) Course as a platform for teaching of future-oriented skills—21st Century Skills and Global Competence through an instructional approach which has gained currency in Europe called, Content and Language Integrated Instruction (CLIL). The paper begins with an overview of the investigation into the origin of CLIL focusing on the context in which it was developed, and examines the issues and problems surrounding its inception. Then this paper examines the essential concepts of CLIL, its framework, and instructional principles derived from the framework, and discusses CLIL's potential to fulfil the goals of 21st Century skills and Global Competence. Last, the paper describes one EFL course in which CLIL was implemented. It is hoped that this paper will serve as an incentive for classroom practitioners to explore the use of CLIL in their classes and embed in their syllabus, approaches and practices that develop 21st Century Skills and Global Competence.

Keywords: Global Competence, 21st Century Skills, CLIL, EFL.

1. Introduction

Educators in many parts of the world lament what appears to be the decline of education as the great equalizer, capable of promoting upward social mobility of students in low-income families and narrowing the gap between the rich and the poor. For example, Marginson (2016) states that in United States, social mobility is decreasing and access to university education has not been able to compensate for this decrease. He also states that higher education system in the United States is becoming increasingly hierarchical with access to elite institutions dominated by upper middle class, and middle and lower-tier institutions for the

masses becoming weaker with decreasing public support. Similarly, Darling-Hammond (2001) indicates that there exists a growing gap in the quality of education in primary and secondary schools in the United States and that access to high-quality curriculum and teaching which results in student achievement is largely unavailable to students of color.

In contrast, Japan appears to be a model country in terms of both learning achievement and equity in primary and secondary education. According to OECD results from PISA 2015, Japan ranks 2nd, outperformed only by Singapore in the 15-year-old students' science achievement, and in both reading and math, it is ranked 5th following Singapore, Hong Kong, among other countries. Perhaps more importantly, the same study also shows that in Japan, less than 10% of the variation in student performance is attributed to differences in students' social economic status as opposed to 13% of variation across OECD countries (OECD, 2015). Indeed, Japan's relative ability to provide equity in education at the elementary and secondary levels appears to be well-supported.

The landscape for Japan's higher education though is different from what we see for elementary and secondary education. OECD data reveals that while 60% of high school graduates study at a university, public spending on higher education accounts for only 34% of total expenditure which is half the amount of 70% that other OECD countries spend (OECD Education at a glance, 2017). This means that households bear a large share of the cost of university education which is also among the highest across OECD countries. In addition, despite the huge expenditure students and their families bear for university education, the evaluation of the quality of Japanese university education has produced mixed results. Stating that the literacy rate of university graduates is the highest among member countries, OECD asserts that the quality of Japan's universities is excellent. However, Times Higher Education ranks Japan's top two public universities—The university of Tokyo and Kyoto University at rank 46 and 74 respectively in 2018 World University Ranking which is remarkably low for a nation that boasts a third place in GDP after the United States and China. Among Japan's private universities which comprise 80% of all universities, the two top tier universities Keio University and Waseda University are both ranked between 600-800 (Times Higher Education, 2018).

With so much at stake for the students, universities should live up to the immediate goals of the students and their families and ensure them an appropriate "return on investment" which in one measure is labor market success. Fortunately, today's solid labor market, 98% of university graduates find jobs by the beginning of the fiscal year (Japan Times, 2018). However, universities should also implement measures to educate students so that they have the skills that enable them to succeed not just in finding their first jobs but in years ahead. Globalization, interconnectivity, and advancement in artificial intelligence is transforming the job market and

the society in unprecedented ways, and individuals will need future oriented skills and attitudes that enable them to adapt to continuous changes throughout their lives (McKinsey, 2017). Scott (2915) identifies such skills as 21st Century Skills and categorizes them in terms of the following framework (see Figure 1):

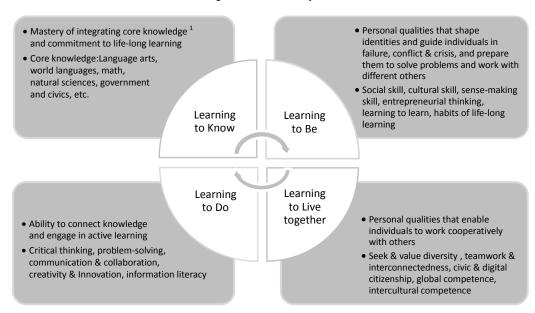


Figure 1 21st Century Skills

Adapted from Scott (2015) What kind of learning for 21st century

UNESCO's International Bureau of Education underscores the importance of 21st Century Skills suggests that educational style of the industrial society which focused on the development of factual and procedural knowledge is no longer adequate in this knowledge society.

In addition to the 21st Century Skills, universities should also exercise foresight to think beyond this economic social imaginary and prepare students for the future by implementing measures to develop the students' Global Competence which can be defined as:

Capacity to examine local, global and intercultural issues, to understand and appreciate the perspectives and world views of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development (OECD, 2018).

This definition is represented in Figure 2 below:

• Take action for Engage in open, appropriate and collective well-being effective interactions and sustainable across cultures development attitudes values knowledge skills • Examine local. Understand and global and appreciate the intercultural issues perspectives and world views of others

Figure 2 Global Competence

Adapted from PISA 2018 Global Competence

Transnational organizations, governments, accreditation agencies and universities all agree that students need these future-oriented set of skills to cope with challenges that they will inherit such as rise in ethnocentrism and violence, unprecedented movement of people across national boundaries, and ever-increasing threats to the environment made by humans. However, for many Japanese universities, preparing students so that they have the requisite skills for the future is a major undertaking: How will they educate students so that they become proactive individuals who can synthesize knowledge acquired from their classes to solve the complex problems of the future? How will they coach students to transform their attitudes and dispositions from an inward looking one to an outward looking one?

Instructors who teach in Japanese universities are likely to acquaint students to issues and topics from across the world in hopes to awaken their intellectual curiosity and awareness of the many global issues that need to be addressed. Yet in typical classes with an instructor to student ratio of 1 to 50 or more, it will be difficult for them to engage students in meaningful discussions that stimulate critical thinking or organize cooperative learning activities that support intercultural understanding. It will be equally challenging for instructors to give writing assignments and then provide meaningful feedback on the assignments to facilitate problem-solving skills. However, these practices could be implemented in English language classes which often have one of the lowest instructor to student ratio and by its very nature, lend themselves to groupwork and introduction of various content using authentic materials.

This paper reports on the findings of a classroom-based study that explored whether

the teaching of future oriented skills—21st Century Skills and Global Competence can be incorporated into the English language curriculum through the implementation of Content and Language Integrated Instruction (CLIL) in a required second year English language course. The paper begins with an overview of the investigation into: (1) the origin of CLIL focusing on the context in which it originated and examines the issues and problems surrounding its inception; and (2) the essential concepts of CLIL, its framework, and instructional principles derived from the framework, and discusses CLIL's potential to fulfil the goals of 21st Century skills and Global Competence. The latter part of the paper describes one English course in which CLIL was implemented. It is hoped that this paper will serve as an incentive for classroom practitioners to consider using CLIL in their classes.

2. What is CLIL?

(1) The Origin of CLIL

Literature on Content and Language Integrated Learning (CLIL hereafter) indicates that CLIL is an umbrella term now accepted internationally for the teaching of content subject through the medium of a second language.² One of the first widely circulated definitions of CLIL is, "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language" (Coyle, Hood, & Marsh, 2010), and according to Marsh (2012), it is a uniquely European framework to promote bilingualism or multilingualism launched in 1964 to realize a vision of enabling Europeans to achieve mobility that requires a high level of second language competence. Indeed, supported by the Council of Europe which advocates proficiency in first language and two other EU languages to all citizens (Commission of the European Communities, 2003), it quickly became the most coveted approach to second language learning and teaching.

Cenoz, Genesee, and Gorter (2014) question whether CLIL is *uniquely European* stating that, "although CLIL's origins in Europe might make it historically unique, this does not necessarily make it pedagogically unique" (p.244). Studies concerning CLIL's theoretical underpinnings and concepts (Mehisto, Marsh, & Frigols, 2008) indicate that CLIL cannot be characteristically distinguished from Immersion Education whose practice is teaching content subjects in the students' second or subsequent language and whose core concept promotes second or subsequent language development and also nurtures multilingualism in the community where two or more language groups come into contact. Other studies (Cenoz, 2015; Dalton-Puffer; 2007; Ruiz de Zarobe, 2008) indicate that CLIL is nearly the same as Content Based Instruction (CBI) which originated in the United States.³

The most well-known and successful immersion program recognized by CLIL educators is the Canadian immersion program which started in 1965 in St. Lambert, Quebec. This program involved teaching school subjects such as math and science in French to English-speaking elementary school children so that they become highly proficient in both English and French and develop *integrative motivation*—a desire to appreciate the people and culture of the French-speaking Canadians (Ball, Kelly, & Clegg, 2015). For Canada, troubled by a deep divide between the French and English-speaking communities, this educational initiative embedded a hope to repair the divide and unify the country. This unifying concept was likely to have been appealing to not just Europe but also to other regions, and variations of the immersion program have been implemented all over the world with both successful and unsuccessful outcomes having to do with various contextual factors (Wesche, 2002). However, in the university setting, the term immersion education has not been used and instead, CLIL has become the catch all definition for a wide range of programs in which a second language is used to teach content.

Finally, it should be noted that CLIL and immersion education concepts were also influenced by the Language Across the Curriculum (LAC) movement which emerged in Great Britain in the 1960's under the slogan of "every teacher an English teacher" and by Writing Across the Curriculum (WAC) movement in secondary and post-secondary education in the United States (Hanesová, 2015) which can be characterized as "every teacher a writing teacher." In both cases, the approach was introduced to develop academic literacy including reading and writing skills across content areas of students from linguistically and culturally diverse backgrounds.⁴

CLIL is deeply connected to EU's vision of developing its own competitive power in the global marketplace (Commission of the European Communities, 2003). Hence, its goals are different from the 21st Century Skills and Global Competence goals whose focus is more global and not limited to a single region. However, CLIL as well as Immersion and Content Based Education also view language learning as both key to bridging differences and unifying communities and as means of empowering individual students. Therefore, this goal resonates with the educational needs of contemporary society reflected in 21st Century Skills and Global Competence both of which want students to be empowered to "take action."

(2) The Essential Concepts of CLIL

Because language communities in Europe and the relationships between these communities are both complex and diverse, how CLIL is implemented in the classroom is diverse with differences in the starting age of the students, adopted content subjects, instructional

objectives, and so on. Also, as mentioned above, some researchers, particularly those who investigate immersion programs take issue with CLIL's defining concepts. However, a cursory examination of research on CLIL shows that the earlier conceptualizing work done by Coyle, Hood, and Marsh (2010) is serving as a guiding principle for practitioners in many regions in Europe and elsewhere. Hence, I describe two concepts they introduce as central to CLIL.

The first widely circulated concept put together by Coyle and her colleagues is the Language Triptych which represents components for language progression that occurs through language use as shown in Figure 3 below:

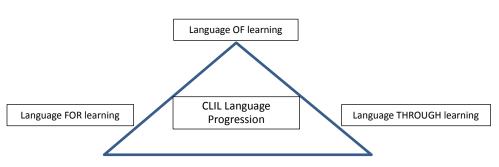


Figure 3 Language Triptych in CLIL

Adapted from Coyle, Hood and Marsh (2010)

In this Figure, Language of Learning consists of content obligatory language such as key concepts related to the content subject which the students need to access. For example, in an interdisciplinary university course on globalization, students will have to become familiar with terms such as nation states, transnational organizations, and modernity. Language for Learning consists of both formal and informal language needed to communicate in the classroom and beyond—to participate in activities such as pair-work, discussion, debate, and negotiation. Language through learning consists of new language that emerges through communication and negotiation of meaning in the classroom which need to be recycled and developed.

The Language Triptych serves as a reminder for practitioners that language is central in any learning process. However, the components in the triptych are common concepts in education and they are not new or uniquely European. For example, language for learning has always been emphasized in early childhood education which suggests that explicit teaching of classroom language will support children learning better in the elementary classroom. Of course, this practice is common in the ESL classroom as well. Language of learning and teaching as well, has been an important topic for classroom researchers as well as those concerned with language policy because what language will be selected as language of learning will determine access to

education in a multi-lingual classroom.

Another concept Coyle and her colleagues state as essential for CLIL is the 4Cs framework consisting of 4 interdependent components—Content, Communication, Cognition, and Culture. Stating that this concept is unique to CLIL, they insist that CLIL should be taught with these four principles in mind—Content refers to the subject content (for example, subject such as science, history, or cross disciplinary themes such as sustainability or global citizenship), Communication refers to a focus on interaction in the classroom that is needed for knowledge construction, Cognition refers to higher order thinking and problem solving skills, and Culture refers to awareness of self and others which facilitates cooperation and intercultural communication (Coyle, 2015). Figure 4 shows how 4C's might be used by CLIL instructors as a guide to curriculum or syllabus development.

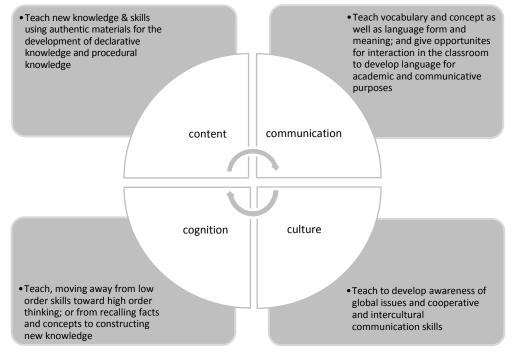


Figure 4 4C's for teaching using CLIL

Adapted from Coyle, Hood and Marsh (2010) and Coyle (2015)

The 4C's guides instructors in considering Content that go beyond the traditional approach to teaching whose aim is to transmit specific knowledge and skills and instead, promote *understanding* or acquisition of *deep knowledge* that enables students to construct their own knowledge and utilize it in their own future. Ikeda (2011) adopts the term declarative

knowledge and procedural knowledge to distinguish these two kinds of knowledge. The 4C's also guides instructors when designing lessons to be cognizant of Communication and therefore, to create opportunities in the classroom in which language is used for learning, and learning takes place as students communicate with the instructor and other students. In addition, it guides instructors to consider Cognition and to ensure that students are engaged in activities that develop their high order thinking skills so that they can find creative solutions to problems. Finally, 4C's also reminds instructors that Culture is an important consideration and that they need to make sure students develop an awareness of differences between self and others. It also reminds instructors to use authentic materials from different contexts and cultures and to design cooperative learning activities in which students must work with different others.

Again, as in the case of Language Triptych, the concepts introduced in the 4C's framework are not new. In fact, they are all concepts commonly used in education. For example, the use of authentic materials was proposed in the field of second language teaching as early as 1980 (see for example Schmidt & Richards, 1980). The concept of declarative and procedural knowledge is taken from cognitive science though discussions of their distinctions take place in widely different fields such as mathematics and business administration, and the focus on teaching low and high order skills is taken from Blooms' Taxonomy (Ikeda, 2011) to classify different learning objectives that instructors can set forth. What is new, perhaps is that these concepts are assembled and packaged in a way that can be easily unpacked by practitioners to design the type of CLIL that matches their particular context and teaching goals.

How compatible is CLIL in designing a curriculum or syllabus that develops 21st Century Skills and Global Competence? To address this inquiry more effectively, the two competencies were reorganized into two distinctive components—a cognitive component and an affective-social component within which are specific elements consisting of descriptors and examples. It should be also underscored here that both competencies firmly endorses the idea that education involves bestowing students with knowledge and skills as well as cultivating the students' attitudes, values, and dispositions for the purpose of interpersonal and intercultural understanding and cooperation.

As for the compatibility inquiry, Figure 5 and Figure 6 demonstrates clearly that CLIL's teaching principles depicted in 4C's are directly targeted for the development of both cognitive and affective-social components of the two competencies. For example, Figure 5 illustrates that the cognitive component of the 21st Century Skills includes *doing something* such as solving real-world problems using acquired knowledge, and similarly, Global Competence states *taking action* for collective well-being or sustainable development as a goal. It is clear that such active engagement cannot be easily nurtured in a traditional classroom where students are

expected to absorb information presented by the instructor. On the other hand, since CLIL's 4C's mandates the use of authentic texts that can raise the students' awareness of global problems and motivate them to think deeply about the problems, it has a possibility of involving students in finding solutions to problems and in knowledge construction. Also, as shown in Figure 6 below,

Figure 5 Cognitive Components of 21st Century Skills & Global Competence

Compatibility with CLIL Principles 21st Century Skills-Learning to Know language arts, math, science Learning to Do: critical thinking, problem solving, creativity Global Competence Knowledge & Skills Cognitive Component examine local, global & intercultural issues take action for collective well-being & sustainable development Compatibility CLIL Content and Cognition Move away from teaching low-order skills and teach high-order skills, focus on knowledge constsruction; using authentic materials, teach procedural knowledge than declarative knowledge Figure 6 Affective-Social Components of 21st Century Skills & Global Competence Compatibility with CLIL Principles

Affective-Social Elements

21st Century Skills-Learning to Be social skills, cultural skills, entrepreneurial thinking Learning to Live Together teamwork, global competence, intercultural competence engage in open, appropriate & effective interactions across cultlures understand and appreciate perspectives & world views

Compatibility

CLIL

interactive skills, awareness of global issues, & intercultural communicarion skills

70

the affective-social component of both 21st Century Skills and Global Competence includes teamwork and intercultural communication skills. In CLIL, these competencies are learning goals that can be met through activities that prompt the students to communicate with each other and in so doing, develop an awareness of interpersonal differences even if they are members of the same community, and hopefully, find ways to work together with support of the instructor.

3. Why CLIL in Japanese Universities?

The use of CLIL has spread across Europe supported by EU's policy that advocates plurilingualism—competence in first language and two other EU languages for all its citizens. However, in Europe, English has become pervasive as the second language that CLIL is used for teaching. Hence, CLIL is sometimes referred to as CEIL or Content and English Integrated Learning. This certainly appears to be the case in Japan where the Ministry of Education, Science, and Technology (MEXT) uses *gaikokugo* (=foreign language) to mean English.

Indeed, in Japan, CLIL is actively promoted for developing English skills especially through the collaborative effort of Society for Testing English Proficiency (STEP) and Sophia University. There is even a website dedicated to CLIL whose aim is to disseminate information to support teachers who wish to implement the approach in their classrooms. Advocates indicate that CLIL has a great potential for facilitating English as a second language education in Japan. Ikeda (2011), for example, states that CLIL excels because its 4C's framework is well-developed and user friendly, and the approach can be adopted to a wide range of situations. For example, if an instructor wishes to emphasize language learning more than content learning, Soft CLIL can be adopted. Conversely, if the instructor wishes to emphasize content learning more than language learning, Hard CLIL can be adopted. For an instructor who wishes to use CLIL a few times within a course, then Light CLIL can be used. In contrast, if the instructor wants CLIL to be the used throughout the course, then Heavy CLIL can be adopted.

Although this paper does not address the issue of CLIL effectiveness, my research and classroom experience suggest that following conditions are likely to affect its learning outcomes:

- 1. Level of students' foreign language ability (English)
- 2. Level of students' first language academic literacy
- 3. Degree of class diversity
- 4. Instructor's knowledge of content
- 5. Instructor's competence in the instructional language
- 6. Number of courses taught in foreign language
- 7. Position and use of foreign language in the community outside
- 8. Degree of institutional support

4. An Experimental CLIL Course

This section describes an experimental course (syllabus) designed using CLIL's 4C's Framework. The class was implemented to seek new ways to motivate and prepare students to pursue their majors while fulfilling relevant parts of the 21st Century Skills and Global Competence. It was hypothesized that CLIL is a compatible approach to meeting these goals based on an analysis of its goals, framework, and teaching principles. The final decision was made to implement the new CLIL syllabus based on the criteria listed in Figure 7 below—the possibility for achieving a successful learning-outcomes was high.⁸

Criteria	Evaluation	Comment
Level of students' foreign language ability (English)	High Intermediate	TOEFL ITP
Level of students' first language academic literacy	Medium-with some difference	University Freshmen with near 3.0 GPA average
Degree of class diversity	Diverse	5 foreign students 25 Japanese students
Instructor's knowledge of content	High	
Instructor's competence in the instructional language	High	
Number of courses taught in foreign language	Limited	Japanese/English 10/1
Position and use of foreign language in the community outside	Valued foreign language	
Degree of institutional support	Unknown	

Figure 7 Criteria for Successful Outcomes

The syllabus of the English course was designed to reflect the CLIL approach as much as possible as shown in Figure 8 which breaks it down to the four components of the 4C's framework as will be explained below.

(1) Content

The Content selected for the course were: (1) Future of Work; (2) Womenomics; and (3) Immigration. These topics are aligned with both 21st Century Skills and Global Competence goals as shown in Figure 9.

The essential questions for each of the topics were created to ensure that students obtained declarative knowledge about the topic first and later, endeavor to answer questions that require procedural knowledge (see Figure 9). The set of materials were both written and spoken texts and selected based on quality, variety, and whether they were relevant and recently produced. Also, effort was made to select materials that represented diverse viewpoints from diverse groups.

Figure 8 Course Topics & Their Relationship to 21st Century Skills and Global Competence

Course Topic	21st Century Skills	Global Competence	
Future of Work	Interdisciplinary Focus provides an opportunity to connect knowledge: • Economics & Business • Education Essential questions are asked to develop critical thinking and problem-solving skills.	Meets All 4 Goals Focus on SDG's No. 4 Quality Education No. 9 Industry, Innovation & Infrastructure	
	Group-work is used so that students experience working cooperatively with different others. Group-work experience enables students to seek and value diversity, and, teamwork & interconnectedness.		
Womenomics	Interdisciplinary Focus: • Economics & Business • Gender Studies (See above for other 21st Century Skills)	Meets All 4 Goals Focus on SDG's No. 5 Gender Equality No. 10 Reduced Inequalities	
Immigration	Interdisciplinary Focus: • Economics & Business • Ethnic Studies (See above for other 21st Century Skills)	Meets All 4 Goals Focus on SDG's No. 11 Sustainable Cities & Communities No. 8 Decent Work & Economic Growth	

For example, for the topic on Womenomics, students listened to a lecture on Abenomics given by the instructor and read two articles published by a research institute that include economic data showing labor shortage in Japan, ratio of Japanese women in part- and full-time work, Japan's M-curve, etc. They also watched a video of a forum sponsored by Asia Society in California, United States titled, *Gender Equality in Japan and the U.S.* which featured a professionally and ethnically diverse group of panelists including a university professor, a corporate consultant, and an NPO executive.

(2) Cognition

The development of Cognition when the topic on hand is complex requires multiple steps. In this course, as a first step, worksheets were assigned to students for "recalling" what was presented in the material (see for example, Appendix 1). This was an extremely important step without which student activities that followed could not have been done. As it is usually the

Figure 9 Syllabus Outline for CLIL Course in the Advanced English Program

Content	Cognition	Communication	Culture
<u>Topic</u>	Low-order skills	Focus on Language	Awareness of Global Issues
Future of work: • What skills are needed in the future and how can these skills be learned? • How can we make the future of work better for people in Japan and in developing countries? Womenomics: • Why aren't there more women in leadership roles? • What can we do to create more women leaders in Japan? Immigration: Is it a solution to declining and aging population? • What can be done to prevent problems that might occur if Japan implements this policy?	Focus on "remembering content Comprehension worksheet (Appendix 1)	Spoken Language of discussion Discussion Speech language & structure Debate language & structure Essay & report writing Feedback on content and form after students write discussion response on the whiteboard	Select authentic materials from other parts of the world Invite guest lecturers from other cultures to provide alternative perspective Invite students to explore related global issues
Input Material Spoken Icture by instructor YouTube videos of forums & roundtables, presentations by experts, street surveys Written academic journal articles, online articles, journal articles	High-order skills Focus on essential questions such as: Prime Minister Abe has been committed to realizing a society where all women can flourish (=女性が輝ける社会). Discuss whether the Prime Minister is an advocate of gender equality. Project or Problem—based learning See Appendix 2	Focus on Communication Class discussion Online discussion Group presentation	Intercultural Communication Skills Create diverse groups (mixed age, gender, cultural background) Overtly address intercultural communication issues
Authentic Materials from diverse source intended for a wide range of audience		Class and Online discussion Writing Task	Creating diverse groups (mixed age, gender, cultural background)

case, authentic materials like these are difficult for university students since most of them have spent their secondary school years working on non-authentic materials—textbooks. Therefore, providing students with well-developed support materials such as worksheets and clear, explicit instruction in listening and reading strategies are critical for accessing the materials. ⁹ The second step began when students had acquired adequate declarative knowledge about the topic. They were asked to work on tasks that demanded higher-order thinking. Naturally, this part of the course goal is the most difficult to achieve and probably an area where the instructor's effort to facilitate the thinking process becomes critical as will be explained below.

(3) Communication

Communication, whether it is student to student or student-teacher is central in CLIL, and in keeping with second language acquisition theory, the course was designed to make sure that each student had ample opportunities to communicate—or produce comprehensible output even though 30 students were enrolled. Therefore, students worked in groups of 4 to 6 and spent approximately 60 percent of the course-time in their groups. They were also put purposely in groups that were as diverse as possible. For example, for each topic, students had to work in a new group. Each group consisted of both male and female students, and whenever possible, each group had a student from a different age-group, from other cohorts, or from different ethnic group. Online learning system was used to promote online discussion—and it served an integral purpose of promoting equitable "speaking time" for all students. This in turn demonstrated that some students whose social style categorized them as reticent, having lower communicative needs because they communicated less in the classroom had opinions and thoughts that: showed that they were indeed participating in their own way in their group and had ample things to say. Hence, ICT served an important purpose.

While student-to-student communication was important, the role of the instructor as a communicator and a facilitator of learning for both language and content was critical for the course. Just as students were not used to authentic materials, they were not used to the communicative, active-learning classroom. Therefore, class time was allocated to explicit instruction on the language of discussion, discussion management strategies and so on as shown in Figure 9 above. Also, discussion tasks had clear goals and at the end of the discussion, groups had to "publish" the results of the discussion on the white boards placed in different sections of the classroom and make a presentation of what they discussed. This session served as an opportunity for the instructor to give feedback, not just on the content but also on the language form that the students produced.

An essential part of the class was guiding students from recalling and summarizing

information, analyzing, synthesizing, and evaluating it, and finally, responding to the essential questions by making, for example, policy recommendations along with a plan to implement them. This was done in this course with the instructor and the other students giving feedback to group presentations and getting the group to make revisions. Hence, students' work received constructive feedback and an opportunity to think again and make revisions. However, this was the most challenging part that utilized question strategies such as: (1) Lets find out more about that (to encourage further investigation); (2) Are there other explanations for this (to encourage an alternate line of reasoning or explanations); and (3) What are the strength and weaknesses (to encourage evaluation of ideas). Since students had to think about complex ideas in a second language, the cognitive load on them was heavy. In some instances, students needed time to respond to the questions. In other instances, the class resorted to *translanguaging* by leveraging their Japanese language to *think aloud* to sort out the thinking process.

(4) Culture

A consideration of culture was at the core of the syllabus design. How culture weighed in the selection of authentic materials and in grouping students for class activities has already been explained above. This section explains the criteria by which material selection were made and the activities that were implemented to raise the students' consciousness about cultural differences and ways to accept the differences and work together in teams: For example, if a news video is adopted, an effort was made to expose students to, American and European, as well as Indian and Middle Eastern news sources. Students do notice the differences in communicative style easily—hence a part of the class-time was used to discuss these differences. Similarly, if a recording of a forum is adopted, an effort was made to ensure that speakers who appear in the video were both men and women, and that they represented diverse ethnicities as well. Again, class time was used to develop student awareness about gender and ethnicity along with communicative style differences. Finally, differences in organizations do affect how information is constructed and published as texts. Therefore, students were made aware of these differences. For example, students noted the differences in writing style between academic articles and reports written for transnational organizations or corporations and discussed differences in the intended readership. They also discussed both the usefulness and quality of the texts. In short, the concept of culture was widened for the course, and by using the Internet to retrieve authentic materials, students were exposed and sensitized to a wide-range of cultural differences.

As mentioned above, groupwork is not easy for the students and within group problems arise inadvertently. These problems were taken as "critical teaching moments" where

simple conflict resolution strategies were used to talk through the differences instead of ignoring them as unfortunate incidents to be avoided. Teaching these strategies were important because they were tools that students do not yet have at their disposal and they also solved communication issues effectively. Therefore, the instructor's leadership in providing tools for communication and conflict resolution was critical to learning intercultural communication skills.

(5) Summation and Path Forward

Designing and teaching the CLIL experimental course was at once a challenging and enjoyable endeavor which paved a way to formal curriculum implementation. What remains to be done is an investigation on whether students learned the requisite content knowledge, acquired higher level competence in English, and developed both 21st Century Skills and Global Competence. Objective assessments of the latter cannot be done easily. However, a portfolio system, for example with student self-assessment and other classroom products might be the first step toward investigating the efficacy of CLIL in a university English classroom.

5. Conclusion

This paper reported on the findings of a study which investigated whether the use of Content and Language Integrated Instruction (CLIL) in the required English course can be used in the students' acquisition of content knowledge and English along with 21st Century Skills and Global Competence. An analysis of existing literature on CLIL that investigated its origin and its key teaching principles and subsequent comparison of these with 21st Century Skills and Global Competence indicates a high degree of compatibility. In addition, the actual experiment in attempting to design and implement a CLIL course shows that CLIL serves as an excellent approach to teaching both content and English as a part of a larger goal of preparing students to meet the challenges they might encounter in their futures.

However, there are important caveats that need to be mentioned. Designing a CLIL syllabus, especially selecting materials that meet the conditions outlined above and preparing worksheets is a time-consuming endeavor that requires higher degree of content knowledge and second language education expertise. Not only that, it requires a high level of commitment to professional development on the part of the instructor, since such expertise cannot be developed by attending a few workshops on teaching English or acquiring content knowledge by, for example, reading a book or two on the subject. Perhaps more importantly, it requires instructors to leave their comfort zone, reflect objectively on their own practice by investigating a wide

range of materials on how best to teach university classes, and finally, experiment with new ways—through a trial and error process—to teach better.¹¹

Notes

- 1 Integrating core knowledge means ability to integrate and synthesize knowledge acquired from individual content subjects such as math, science, and language arts rather than to know them separately.
- 2 In this paper, I use the term second language instead of foreign language. Terms such as new language or additional language are also used in research literature.
- Fortanet Gómez (2013) points out that CLIL and CBI are nearly the same. However, she asserts that the goal of CBI is mainstreaming limited English proficient students in North America to make them proficient in English without promoting the students' first language, and therefore, it is different from CLIL whose goal is multilingualism. Similarly, Ikeda (2011) states that the principal difference between the two rests in its different contextual origin—CILI was born to serve the needs of Europe whereas CBI was born to serve the needs of students in North America.
- Asserting that writing is thinking manifest, these approaches placed the responsibility of teaching academic literacy on both language and content instructors. In practice, these approaches necessitated the content instructors to use teaching strategies that make the content accessible to language learners in the classroom. Not only that, it also necessitated them to give and respond to writing assignments to develop language skills. "I'm not an English teacher," and "I don't have time to do a lot of extra correcting," are the refrains Goldberger (2014) continues to hear from content instructors when promoting WAC.
- 5 Coyle, Hood, and Marsh use the term Culture as a label for the 4Cs framework. However, some CLIL educators in Japan (for example Ikeda), claiming that since Japan is not as multicultural as Europe, prefer to use the term community instead. Community in this instance refers to other students, classroom, school, town, country, region, and the world.
- 6 Some researchers (see for example Lyster, 2007) state that the communication component should add focus on form so that students acquire target forms of the second language.
- 7 The descriptors and examples do not belong exclusively to a specific component. For example, in Global Competence, the descriptor, "examine local, global and intercultural issues" is placed in the Cognitive Component because *examining* requires cognitive elements. However, a deep examination of an intercultural issue may involve an Affective Component such as empathy and appreciation of different world-view.
- 8 The focus of the study was not the students' learning outcomes—that is a future research agenda. Therefore, reference to student learning made while describing the syllabus are based purely on impression.
- 9 Some practitioners advocate the use of video transcripts to enable students to access the content. However, one pilot study which surveyed 21 students regarding the provision of transcripts for difficult listening materials indicates that giving transcripts to the students is not an effective approach for language development and defeats much of the purpose of CLIL. Students testified that they take the time-saving route and read the transcript rather than to listen to the input. Hence, they may also miss out on rich information about communication and culture which they could obtain by watching the video, and on an opportunity to develop Global Competence is also diminished.
- Second language acquisition research points out that there are individual differences in social and cognitive styles though these differences do not affect the extent or speed of learning (see for example, Wong-Fillmore, 1979).
- 11 This comment is derived from Eric Mazur's video regarding his assumptions about teaching https://www.youtube.com/watch?v=D4-4tfYq3m4 and his video depicting his journey as an instructor of physics at Harvard University feature in https://harvardmagazine.com/2012/03/twilight-of-the-lecture.

Appendix 1 Womenomics 4.0: Time to Walk the Talk

- 1. In your own words, what is the economic reason for Womenomics?
- 2. Has the situation improved between 2010 and 2014? How about 2014 to 2018? (respond using these criteria: (a) overall female labor participation; (b) daycare capacity; (c) gender-related disclosures by corporations).
- 3. What areas are improvements needed for Womenomics? Use your own words to explain.
- 4. Look at the recommendations for government policy, private sector and society. For each sector, determine which one can be implemented the fastest and has the most impact. Create a matrix to decide.
- 5. Changing society's view is probably the most difficult to implement. Given that, what can be done to facilitate the change.

Appendix 2

Replacement Migration Policy:

What problems are likely to occur if Japan implements a policy that significant increases immigrants into Japan and how can these problems be prevented? (Describe the problems and propose a solution – ways to prevent the problems from occurring)

Watch the following video and read the following articles to answer the case study question presented above.

General Survey-Do Japanese want immigrants in Japan? https://www.youtube.com/watch?v=5W0tYeK kkA

Hidenori Sakanaka Searching for Immigrant Nation Japan https://www.youtube.com/watch?v=eXelbgSCX9o

United Nations Population Division, Replacement Migration: Is it a solution to declining and aging population?

- M. Shimasawa and K.Oguro: The Impact of immigration on Japanese economy: A multi-country simulation model
- H. Nakata: This is how an aging society is affecting Japan's attitudes towards immigration

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