**“Critical Thinking in English”: CLIL Methods Increase Student Participation**

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**Abstract**

The purpose of the one-semester “Critical Thinking in English” course in the from April 2021 to September 2021 at the Tokuyama campus of The National Institute of Technology in Japan, was to engage students in more active learning and increase their perception of English as a useful skill. The course was based on CLIL methodologies, placing equal emphasis on the subject (critical thinking) and the classroom language (English). Since the key to increasing student interest is to maximize the perceived relevancy of the subject to the students’ educational goals, the importance of critical thinking skills was explored on the first day of the course. Also explained at the outset was the purpose of studying critical thinking in English: thinking in a foreign language forces people to consider their decision-making processes, their word choice, and their responses. Over the next 15 lessons, students practiced various critical thinking strategies in English over five thematic units. A survey of the 110 students who completed the course indicated a positive reception of the course, its goals, and its methods. Of the 110 students who completed the course and the survey, 65 students said they would highly recommend this course to other students; 70 indicated they had no idea what critical thinking was before taking the course; 77 said practicing critical thinking in English is important; 79 stated the course was helpful in reaching their education goals; and 93 said their critical thinking skills improved. Such results suggest that increasing student engagement in English language courses depends on underlining its perceived authenticity and relevancy. Further, this type of foreign language course can raise students’ speaking time, motivate the students’ active engagement with the learning materials, and heighten their perception of the L2 as an indispensable part of their mental toolkit. This approach to foreign language classes should be used more because such CLIL-based English language classes focused on the subjects perceived as relevant to the students’ own educational and life goals—rather than primarily on grammar and vocabulary—have more of a chance of engaging students in active learning.

**Keywords:** *CLIL, English, Critical Thinking, Engagement, Motivation*

**Introduction**

In 2021, 5th year students at The National Institute of Technology, Tokuyama College (NITTC) completed a course titled “Critical Thinking in English.” This course was based on Content and Language Integrated Learning (CLIL) methods to address perceived inadequacies of current EFL teaching methods at the institution as indicated in an analysis of a 2017 survey of 493 NITTC students. In this survey, students agreed that they want more chances to use English outside of school, and that people outside of school do a good job of helping them understand how English is relevant to their lives after graduation; however, most students disagreed that English is relevant to their daily lives and that they seek resources for studying English outside of regular schoolwork. From these statements, we concluded the following:

1. The students perceive that English is important to learn.
2. The students do not perceive that English will be useful in their life after or outside of school.
3. “English is important” is a message they received from various people and sources, but it is divorced from their daily experience.

Based on these conclusions, this teacher decided to start an English course aimed at fostering an awareness of English as being useful in their present education and their future careers, and at increasing students’ perception of the English they learn at school as being authentic and relevant. Such an English course should emphasize communication, not the mastery of technical terms and grammar. The course should focus on building the perceived authenticity of the classroom language. To establish relevancy between English as a language of communication and the students’ lives, the materials being studied in the classroom need to be selected and presented in a manner that increases their perceived authenticity. CLIL methods seemed the perfect fit for these goals. To this end, “Critical Thinking in English” was offered to all fifth-year students at NITTC.

Propositions to use CLIL methods in classrooms in Japan are often met with concerns from teachers, students, and students’ parents, primary of which relate to the dual focus of CLIL: won’t focusing on both subject content and language content mean that students will have less chance to learn either subject or language? This concern has been echoed and addressed by several researchers into CLIL in Japan. Published research indicates CLIL does have a positive impact on student motivation and engagement in language learning. One study by Myowa-Yamakoshi and Machida (2018) examined the impact of CLIL on EFL learning in a Japanese high school and found a positive effect on learners’ engagement and motivation in EFL learning. Tsuchiya (2019) noted that a survey of 21 articles in secondary CLIL practices in Japan showed positive effects of CLIL on learning. Yamano (2019) showed that CLIL enhanced classroom engagement and cooperative learning. In a 2017 study of Japanese university EFL classrooms, Noguchi found that CLIL increased learner engagement and improved their language skills. Similarly, Hughes and Hashimoto’s (2018) examination of the effects of CLIL on Japanese university students’ English proficiency, motivation, and attitudes found positive correlations between CLIL and English proficiency and increased student motivation and engagement. Another study by Imamura (2018) investigated the impact of CLIL on motivation, attitudes, and listening ability of Japanese high school EFL learners, and found heightened motivation and listening ability. Additionally, Kanehiro (2018), in exploring the impact of CLIL on student engagement in an EFL classroom in a Japanese university, also observed enhanced student motivation and engagement. These studies indicate CLIL can improve language proficiency and other academic skills and contribute to a more engaging and motivating learning experience for students. Yet, further research is needed to explore the specific factors that contribute to the effectiveness of CLIL in the Japanese context. Keiko Tsuchiya notes a common concern: that “students may learn less subject knowledge through CLIL because of the difficulty in learning content in addition to language” and “that CLIL classes may hinder students’ language learning” (p. 48). However, it will be shown that in the case of “Critical Thinking in English” not only did CLIL increase student motivation and engagement in the learning process, it also did not detract from acquisition of subject knowledge.

**Materials**

“Critical Thinking in English” (hereafter referred to as CTE-CLIL) was a 16-week course (one semester), covering six thematic units: “Anime vs. Manga,” “Social Media and Humans,” “Solar Energy Benefits and Drawbacks,” “Robots, AI, and Human Employment,” “Population Problems,” and “Benefits and Drawbacks of Cram Schools.” These topics were chosen according to considerations of students’ interests, relevance to students’ education and future career goals, and based on student reactions in previous CTE-CLIL courses.

All materials were written in English, and all materials were prepared and developed by the instructor. These materials included printed handouts for students and online materials. The online materials were made available to students through Microsoft Teams and in Kahoot. For those not familiar with these platforms: Microsoft Teams is the current LMS used at Tokuyama College, and Kahoot is an online quiz generator. Printed handouts were five pages, detailing the questions, texts, vocabulary, and homework the students would be completing in that thematic unit. The first two pages of the handout were designed to be covered in the first class of the unit, the third page was homework to be done after the first class, and the final two pages were to be covered in the second class of the unit. The handouts primarily consisted of text, with minimal graphics. Online materials included vocabulary, grammar, and reading quizzes in Microsoft Forms, and similar quizzes and opinion polls in Kahoot. All materials were accompanied by concurrent in-class slide presentations in Microsoft PowerPoint, which students had access to both before and after the lesson through postings in Microsoft Teams.

A brief overview of the first two pages of a sample handout from the first thematic unit “Anime vs. Manga”: 1) a prompt for pair talk, in English, introducing the topic; 2) listen and repeat sample responses; 3) a prompt for pair talk; 4) vocabulary check in which students research and write the definitions for key vocabulary; 5) revisiting the key question: “Which is better, anime or manga?” 6) a prompt to consider the quality of the key question; 7) considering the key question in different situations; 8) vocabulary check; 9) reading; 10) conversation prompt based on the reading; 11) discussion with partner based on new understanding of the key question.

Homework typically consisted of two to three activities: 1) interviewing people outside of the classroom with a question related to the unit theme, 2) reading, 3) answering questions about the reading.

The final two pages of the handout start with a review of the homework, in which classmates share the results of their interview. After that, ideas or questions considered in the first previous lesson are expanded upon or looked at in more detail. More, relevant vocabulary is introduced, followed by another reading, and then an examination of concepts introduced in the reading. Finally, there are plenary activities such as debates, role-plays, or questionnaires, all designed to encourage students to interact as a class, as opposed to interacting in pairs or small groups.

**Methods**

This course was listed as “合英語演習Ⅱ” (Comprehensive English Exercises II) in the syllabus. Students’ grades were evaluated according to the following criteria: 40% homework, 40% quizzes and class participation, and 20% based on their score in the TOEIC taken outside of classwork and according to the policies of The National Institute of Technology.

The “CLIL” of “CTE-CLIL” stands for Content and Language Integrated Learning, an internationally recognized method of English teaching that emphasizes the concurrent teaching of a foreign language and a subject content. In CLIL, there is an equal emphasis placed on the acquisition of the foreign language and of the subject content. In CTE-CLIL, the foreign language the be acquired was English, while the subject content was critical thinking skills. This dual focus was made clear to the students through the syllabus: “In this course, students will engage in discussions and activities which help them improve their critical thinking skills and their use of the English language. The focus of this class is engagement and conversation, not grammar and vocabulary.” This dual focus was again emphasized on the first day of class, and periodically in subsequent lessons, as the stated learning objective of the course: “Critical thinking means thinking about your thinking to make your thinking better. Poor critical thinking skills can lead to a poor quality of life. In this class, we use English as a tool by which to improve our critical thinking skills. Thinking in a foreign language makes us think slower and more carefully. Sometimes, thinking in a foreign language makes us think in different ways than usual.” In this way, the dual focus of the course was made apparent to the students, and all the materials and methods of the course were focused on achieving these goals. However, English was not the exclusive language of the course.

The students’ native language was not forbidden in the classroom, but it was discouraged in favor of English given the learning objective of the course. In fact, students were sometimes prompted to use their native language to discuss ideas together. Key English vocabulary was researched by the students and written in the native language. At various times chosen as appropriate to lesson goals, the teacher used the students’ native language to check comprehension, to explain difficult concepts or examples, or to answer student questions. Each lesson had a set frame aimed at increasing student understanding and involvement in the learning process.

First, the teacher would announce the schedule for that day’s lesson (the main activities of the lesson and any homework to follow), which would also be written and displayed on a PowerPoint slide. The purpose of this announcement was to make it clear to students the end-goal of the lesson and how each step of the lesson would give students the tools they would need to successfully accomplish the final task(s) of the lesson—in essence, each lesson is structured as a PBL: there is a project (the end goal), and the students work together with the guidance and assistance of their teacher to learn and develop the tools necessary for completing that project.

Second, the students would either discuss in pairs in English a critical thinking question related to the unit’s theme or the homework they had completed prior to the lesson. These critical thinking questions were repeated throughout the lesson, with students asking and answering the questions in a variety of situations or in relation to a variety of input. These questions guided students to focus on different aspects of critical thinking: purpose, question, information, inferences, concepts, assumptions, implications and consequences, and point of view.

Subsequent activities functioned by and large as language input: sometimes activities provided students with vocabulary and grammar templates for answering key critical thinking questions. Students were also notified, repeatedly, that in the interests of communication, the grammar they should use should be kept simple and kept to what structures they were already familiar with and had studied in school—that unnecessary complex grammar and vocabulary might inhibit communication with others and might make this English less useful as a tool for improving this student’s critical thinking skills. By this means, the teacher hoped to emphasize that the main purpose of CTE-CLIL was to improve the students’ use of English as a tool for improving their critical thinking skills (the dual focus of CLIL), not exclusively to improve their English conversation skills or increase their points on a future English test.

Most of the in-class activities were chosen or designed to encourage communication between students, either in pairs or in plenary. Some activities were designed to build from pair work to plenary discussions. Some of these activities were based on readings, others on ranking activities, and still others on researching information online. Regardless of the activity, the teacher emphasized that “there is no correct answer” to ease potential nervousness about sharing ideas and contributing to discussions.

The teacher provided minimal feedback on grammatical or vocabulary mistakes, only those which seriously detracted from the teacher or other students from communication, keeping in mind that the stated learning objective was to use English as a tool by which students would work to improve their critical thinking skills. The various activities took short amounts of time, between 3-5 minutes, so the teacher was able to circulate through the classroom and provide frequent direct feedback or gather examples to provide feedback to the class. The teacher tried to provide both examples of good uses of English and examples of English that needed some correction. Whenever possible, the teacher tried to elicit such correction from the class instead of providing it themselves, to help the students gain both confidence in their own English skills and motivation to participate in the learning process. Of course, some activities, such as those in Kahoot or in Forms, provided the chance to display written productions from students, and these gave the teacher chances to provide more visible examples of both good uses of English and English in need of correction.

Given that improving the students’ critical thinking skills was the stated objective of the course, one unvarying aspect of the homework was to ask for opinions from other people outside the classroom. Asking for and understanding the opinions of others is recognized as an essential critical thinking skill. The teacher encouraged students to interview people they might not usually talk to about these topics: other teachers, family members, and neighbors—unfortunately, given the students’ busy lives or small social circles, interviews were often conducted with classmates not enrolled in “Critical Thinking in English.”

**Results**

To gauge student perceptions of the course, a survey was given to all students who participated in CTE-CLIL. An identical survey was then given one year later to students who participated in “English Conversation,” a course that contained minimal CLIL methods and a very different learning objective. We will not look at this analysis in detail, but instead summarize its results because of what they suggest about the effectiveness of CLIL methods in improving student involvement in the learning process.

CTE-CLIL took place one year prior to “English Conversation” (EC). Both courses were listed in the syllabus under the same name. The two courses had very different learning objectives: CTE-CLIL to use English as a tool to improve critical thinking skills, and EC to improve English conversation skills. EC used a professionally developed textbook and multi-media materials. CTE-CLIL used handouts and materials developed by the teacher and, given that this course took place one year prior to EC, a less experienced teacher. Moreover, this teacher already had four years of experience teaching with the materials used in EC, but no experience using the materials of CTE-CLIL. This is significant because even though students in EC gave a higher score to teacher performance and classroom materials in a survey given to all students in both CTE-CLIL and EC, the EC students gave lower scores to their course in all other parts of the survey. Even though CTE-CLIL had lower quality materials, a less developed course structure, and a less experienced teacher, it nonetheless outperformed EC in several key categories. A summary analysis of this results of this survey comprises the final part of this paper.

For “Teacher Performance and Class Materials,” EC scored higher by a slight amount, likely due to having a more experienced teacher using professionally developed materials. For the purposes of comparision, then, the two courses were similar enough to more clearly observe the effects of CLIL in the classroom. In “Perceived Effectiveness of Education,” more students in CTE-CLIL felt increased confidence in English and a better understanding of the subject content, indicating that a CLIL course can succeed in its dual focus on foreign language instruction and subject content. In terms of “Perceived Authenticity or Value,” a higher percentage of students felt CTE-CLIL provided a more authentic or valuable education environment that helped them achieve their educational goals. For “Perceived Interest and Confidence in English,” CTE-CLIL students indicated increased interest in English at a slighlty higher rate (from 1% to 3%), suggesting CLIL’s effectiveness at hightening student interest in the foreign language. Finally, in terms of “Perceived Critical Thinking Awareness,” CTE-CLIL students indicated they gained a better understanding of the subject content (critical thinking). Given that students in CTE-CLIL also indicated an increased understanding and confidence in English, this indicates the dual focus of CLIL did not distract from the content in favor of the foreign language or vice versa.

Considering these results, it is reasonable to assert that, at least as measured by student evaluations of the two courses, the “Critical Thinking in English” course succeeded in meeting the two goals set by the teacher for its implementation National Institute of Technology, Tokuyama: 1) foster in students an awareness of English as being useful in their present education and their future careers, and 2) increase students’ perception of the English they learn at school as being authentic and relevant. Beyond these modest goals, the results of this survey indicate that CLIL methods have potential of improving the perceived effectiveness of education, and of increasing student interest and confidence in using English. The use of CLIL methods in class did not distract from the educational goals of the class, did not overburden students with “too much” subject matter, and did not reduce the perceived effectiveness of education in either the target subject or the language of instruction. Indeed, the use of CLIL methods enriched the learning environment by challenging students to use English as a tool to benefit both their current educational goals and their lives outside and after school.  In the case of “Critical Thinking in English” the use of CLIL methods increased student motivation and engagement in the learning process, and it did so in a manner that did not detract from acquisition of the critical thinking skills that were the subject content.

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