【Research Article】

ONTOLOGICAL AND PEDAGOGICAL RE-CONSIDERATION OF CLIL: THOUGHTS ON CONCEPT, COURSE DESIGN, AND ASSESSMENT

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Abstract

Content and Language Integrated Learning (CLIL) is facing some form of identity and practice crisis where teachers may not know where to place and practice it. Just where is the "Goldilocks" of CLIL in the sea of soft and hard CLIL? How do we teach both content and language together in the classroom? This paper presents the problematization of CLIL, reconsiders its conceptual understanding of content and language, and proposes a cleaner conceptualization. In addition, it illustrates what a CLIL course can look like, based on the re-consideration, in the design of the course aim and learning outcomes, classroom pedagogy and assessment. The examples will demonstrate how content and language are clearly intended and taught together, attaining a neither soft or hard CLIL to what it means to be just right.

Keywords: *CLIL (Content and Language Integrated Learning), EFL (English as a Foreign language), theory, course design, classroom practice, assessment*

Introduction

In the field of foreign language learning, Content and Language Integrated Learning (CLIL) has been touted as a "well-recognized and useful construct for promoting L2/foreign language teaching" (Cenoz et al., 2013, p. 16) and an "increasingly acknowledged trend in foreign language teaching" (Pérez Cañado, 2012, p. 319). In the field of teaching content and language, CLIL is argued as "not a new form of language education. It is not a new form of subject education. It is an innovative fusion of both" (Coyle et al., 2010, p. 1). Seen as one that "synthesizes and provides a flexible way of applying the knowledge learnt from these various approaches" (Mehisto et al., 2008), CLIL has become a byword and much sought-after approach in English as a Foreign language (EFL) teaching.

However, there have been several issues facing CLIL. Issues such as curriculum design, classroom practice, linguistic ability of teachers, or types of materials used have led to the questioning of its conceptualization and pedagogical practice (Marsh et al., 2015). Bruton (2013) criticized its conceptual framework to have a "convenient vagueness" (p. 588) while Cenoz, Genesee and Gorter (2013) thought it to be "internally ambiguous" (p. 244). As a result, the implementation suffers from lack of clarity (Cenoz et al., 2013, p. 13), and there is a call to know "what it looks like in practice" (Bruton, 2012, p. 524).

Occam's razor dictates that theories should not be multiplied unnecessarily, and that the simplest version of the theory should be preferred over more complex ones. It is with this motivation that this paper seeks to understand CLIL and suggests some practical considerations. Another motivation was borne out of my teacher training sessions with CLIL teachers. Having taught other educational approaches such as team-based learning, active learning, problem-based learning, and language teaching courses such as task-based learning, communicative language learning, my CLIL workshops tend to garner more ontological struggles and classroom frustration. The recurrent

questions pertained to what CLIL really is, with so many concepts and labels. Further, how do we practically integrate language teaching in a CLIL class and yet incorporate the "4Cs" (Coyle et al., 2010, p. 41), "language triptych" (p. 36), basic interpersonal communicative skills (BICS), and cognitive academic language proficiency (CALP) (Cummins, 1984).

CLIL

CLIL, "a dual-focused educational approach"

CLIL emerged out of the sociocultural and cognitive perspectives of EFL with the backdrop of the early pace setters: sheltered instruction, immersion, and bilingualism that led to content-based instruction (CBI), then content-based language teaching (CBLT), language across the curriculum (LAC), and English Medium Instruction (EMI). CLIL, as a terminology, was coined and popularized in the mid-1990s by the European Network of Administrators, Researchers and Practitioners (EUROCLIC) (Coyle, 2007). Clearly, CLIL seeks to differentiate itself from the several previous iterations and labels. However, I believe that the choice of a single umbrella term (Cenoz et al., 2013; Dalton-Puffer et al., 2014) may not be so important after all, once we *understand* the many different nuanced approaches in the content and/or language driven continuum (Met, 1998). CLIL, or any other label, after all, seeks to teach language and content.

CLIL is "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language. That is…there is a focus not only on content, and not only on language. Each is interwoven." (Coyle et al., 2010, p. 11). So, clearly *both* content and language are emphasized. Further, CLIL is differentiated to more than just teaching content and language; it has an elevated notion of "not simply education *in* an additional language; and it is education *through* an additional language" (p. 12). This means that the development of the mind (cognition), self (culture), soft skills (communication), and with others (community) in the classroom/school (context) are to be learned with the target language. This extended notion of CLIL grew to appendage these other 'C' concepts. This was why Coyle et al. (2010) came up with the "4Cs" (p. 41) framework of planned integration of content, cognition, communication, and culture, with the additional focus on cultural awareness within the context of the classroom. The Bloom Taxonomy (Krathwohl, 2002) was included to specify the cognition and the awareness of cognition in teaching content. The prevalent socio-cultural zeitgeist of today's educational practice demanded the interactional (group work) and intra-personal (reflection) elements in the form of context, culture, and later community into the conception of CLIL. But how are we to know or express these elements in the CLIL? Language plays a key role in teaching and learning content, cognition, communication, and culture. Thus, three types of learning via language (language of learning, language for learning, and language through learning) were added to CLIL, called the "Language Triptych" (Coyle et al., 2010, p. 36). This represented how language is learned through an interrelated perspective. Cummins' (1984) BICS and CALP were incorporated to help language awareness of the Language Triptych (Coyle et al., 2010). From the early days of simply acquiring a foreign language in order to understand content (knowledge), learning a foreign language has now morphed into an "education through an additional language" (Coyle et al., 2010, p. 12). A very conflated notion indeed.

CLIL, what are you?

And yet, Coyle (2010) distinguished CLIL from CBLT in that CLIL is “without an implied preference for either” (p. 545) content or language, unlike CBLT. However, how can one begin a class or design a course with both content and language? This is perhaps the vagueness and ambiguity that Bruton, and Cenoz et al., were talking about. This is also perhaps why the implementation oscillated from the content-driven CBI (or soft CLIL as it has come to be known) to the language-driven thematic language classes (or hard CLIL) (Ball et al., 2015), but rarely hitting the sweet spot. So, where is the Goldilocks of CLIL, where it is just right? Moreover, with Coyle et al.’s (2010) description of CLIL as “one size does not fit all—there is no one model for CLIL” (p. 14), the understanding and practice of CLIL have been left wide open. While CLIL was conveniently conceptualized with its idealized notions of its wholeness and its integrated parts (content, communication, cognition, culture, context, and community), much was left unexplained on what and how they are to be ontologically and pedagogically understood.

In second language acquisition (SLA), where noticing and output hypotheses (as examples) are essential components for language acquisition and, similarly, cognitive and socio-constructivism are for knowledge construction, where does each part gets noticed and cognitively and socially constructed? Or are they left to chance, incidental learning (Marsick et al., 2017), or immersion (where CLIL is seen as closely connected to immersion, see Cammarata & Tedick, 2012; Genesee & Lindholm-Leary, 2013)? Conceptually, and more so practically, where do the lines, albeit flexible, end for each part and begin with another? The conceptualization of these CLIL components is not just testing the understanding of CLIL but also testing the practice of CLIL. For instance, what is the relationship among cognition and culture and others? And how do the other Cs, context, and community, relate to teaching and learning? These questions are often asked by practitioners whose time, competency, and resource are often an issue. As a result, while the notion of integration has been championed, it has struggled with different perspectives (Nikula et al., 2016). In a startling revelation after studying thirty European countries’ CLIL programs, Lagabaster and Sierra (2010) concluded that “different labels are used in different contexts. Thus, CLIL can mean many things and create much confusion in the mind of the reader” (p. 368).

CLIL’s woes

It is, then, no secret that CLIL suffers from practical issues. These include considerable number of learners having problems understanding the English-medium lectures, which were related to the meaning of words, unfamiliar vocabulary, and note-taking (Hellekjaer, 2010). There were also detrimental effects on content learning due to the inadequate competence of English teachers to teach content (Marsh et al., 2000). “CLIL affects the way the students learn the content because of the added extra cognitive burden represented by the presence of the L2…” (Coonan, 2007, p. 643). As a result, some research showed no differences in longitudinal studies (Admiraal et al., 2006; Vollmer et al., 2006). While there were favorable reports of CLIL in learners learning the language better than non-CLIL classes, the evidence has been a mixed bag.

The shift from “second language programs in which lessons are organized around subject matter rather than language points” (Lightbown & Spada, 2006, p. 197) to one that is of equal footing has posed competency challenges to the language or content teacher. It is not hard to see why this idealized notion of CLIL is fraught with difficulties. Teachers’ competence in both content and

foreign language teaching is hard to find. Swain (1996) observed this about CBI: “there is a lot of content teaching that occurs where little or no attention is paid to students’ target language use; and there is a lot of language teaching that is done in the absence of context laden with meaning” (p. 530) and this probably still holds true even for CLIL today. Hoare (2010) and Kong (2009) reported the lack of content depth, link between content and language, and clear language objective integrated into the content. They also had an imbalance of focus, resources, and well-designed curricula (Kong & Hoare, 2011). Indeed, “teachers must know and know how to teach is comprised of both subject matter content and language.” (Cammarata & Tedick, 2012, p. 254). My fear is that in most well-meaning CLIL classes, they are masquerading as content-driven EMI classes or language-driven English classes with thematic content.

Most CLIL classes today are designed from the language perspective. Known as “hard CLIL”, these courses have thematic topics or disciplines, and the classes (and textbooks) begin with target vocabulary, pre-reading, or listening language exercises. The classes are mostly designed with teaching the four skills and vocabulary in mind, and the content is still the means to an end (language). In addition, the content is often simplified or reduced in scope and depth compared to a regular content non-CLIL course. Cammarata and Tedick (2012) summed it well, “We have yet to understand, however, what balancing content and language really means for the teachers themselves.” (p. 251).

Conceptual re-consideration

Having foregrounded the problematization of CLIL’s ontological and pedagogical issues, how do we move forward? Let us return to the original conception of CLIL where the focus is only *both* content and language, which are “interwoven” (Coyle et al., 2010, p. 11). What CLIL was originally conceptualized should remain as the starting point. As it is not a new approach (Navés, 2009), CLIL should be simply re-casted as: teaching *both* content and language *together*. But what of the 4 Cs (or 5?), Language Triptych, BICS and CALP and Bloom’s Taxonomy? Thought (cognition) and language (communication) are so inextricably interwoven (Vygotsky, 1986) that it may be unnecessary to label them separately. Similarly, for content and cognition, what is content (knowledge or information) if it is not first thought of (remember or create), constructed (understanding, apply, analyze, or create), or interpreted (evaluate) in the mind (cognition)?

I think, therefore I speak (content).

In fact, Coyle et al. (2010) stated that content provides the *means* for thinking to occur and represented in the triadic interconnectedness of content, language, and cognition. As such, when we teach content, we teach the thinking *with* it. This is because the teacher is concerned with learner’s understanding of the content and its application. And when we assess the learner on content, we assess the remembering, understanding, application, analysis, evaluation, and creation (Bloom taxonomy) of the disciplinary knowledge. As we can see, content cannot exist without cognition, and separating them will decontextualize either one. Similarly, when we teach language, we are also teaching the thinking *with* it. When we teach reading skills (as an example of the four language skills), we teach learners how to identify (analyze and evaluate) the main idea (skimming) and details (scanning) and infer (predicting) the meaning of words and ideas of the author. Skimming and scanning involve analysis and evaluation. Predicting involves analysis, evaluation, and creation.

Assessing language also means we assess the learner's ability to remember and understand the disciplinary vocabulary (terminology), to apply the disciplinary manner of writing and speaking, and to create the disciplinary forms of text and speech. Language, just like content and cognition, is equally interwoven with cognition.

Therefore, when we are teaching either content or language, we *do* teach cognition as well. In the educational scene, these are known as thinking skills or recognized as critical or creative thinking (others may include problem solving skills). Teaching thinking skills outside of content is akin to teaching language in a decontextualized manner. Ontologically then, cognition is inextricably connected to both language and content. This then means that when we think of content and language, we should be thinking of content *with* cognition and language *with* cognition. There is no need to dichotomize them. This streamlining of thinking has implications to the pedagogical issues which we will discuss later.

Having re-considered the ontological understanding of both content and language *with* cognition, it is useful to re-visit the relationship between content and language. Coyle et al.'s (2010) dual focus of content and language may be presumed due to the coming together of both disciplines and tradition, but some clarity to their relationship will aid us in our practice of CLIL. Advocates of the immersion programs will argue that content and language are interwoven, and language is best acquired the immersion way. After all, disciplinary knowledge (content) is understood and created *through* language. In fact, content is represented *by* language, without which, it cannot be understood nor communicated. Content needs language to be visible. Content and language then, appear to be ontologically inseparable. And by extension, if we argue for the nonseparation of cognition with content and language, should we not be consistent and argue for the nonseparation of content and language?

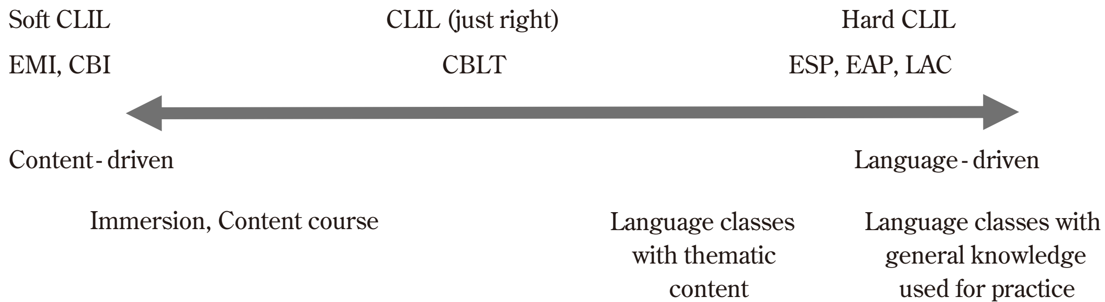
Therefore, ontologically speaking, content and language are interwoven and learned *together*, whether in a content or language. class Here, we make a distinction between what is learned and what is acquired. In a content immersion (e.g., EMI) class, learners learn the disciplinary content and acquire the target language *through* using the language *without* an explicit focus on the language structures. In these classes, we also *acquire* language through listening and speaking the target language (Krashen, 1981). In a language class, learners learn the target language *through* using general knowledge and acquire content implicitly. What is learned is assessed, but what is acquired is not assessed. However, there is linguistic content in a language class such as parts of speech or terminologies (e.g., patterns of organization, cohesive markers, reading skills, etc.), which are taught but not necessarily assessed as content.

Understanding CLIL in a continuum.

Despite Coyle et al.'s (2010) confidence that CLIL "is an innovative fusion of both (*content and language*)" (p. 1), it is really not all that new. Navés' (2009) remark, "Integrating content and language is not new. It has been used for decades under different labels" ....not only helps to demystify the elevated notion of CLIL but also helps us see what CLIL really is. In the early days of sheltered instruction and immersion programs and later CBI classes, the starting point was not from language learning perspective but content. The goal was to have learners to be able to learn content through the target language. Language lessons ran parallel to support the content classes. The idea was that having reached a certain sufficient level of the language through these parallel or pre-content classes, the learners would be able to understand the content *and* acquire the language in the target language-

medium content classes. Language lessons sought to raise the proficiency levels of the learners with the explicit teaching of language structures, components, and use. Understanding CLIL together with all the other labels in a content and/or language-driven continuum (adapted from Met, 1998, p. 1) helps us appreciate the many different nuanced approaches to teaching content and language (Figure 1).

Figure 1.
Where CLIL is with other labels of teaching content and language



Dedicated language classes that familiarize learners to the target language of the content such as English for Specific (ESP), English for Academic Purposes (EAP), and LAC are considered as hard CLIL where language is the starting point (language driven) of the course aim. At the other end of the continuum, content classes are conducted in the target language, with content as the starting point and language being acquired but neither explicitly taught nor assessed. In the middle where the sweet spot of CLIL is, CBLT, which essentially shares the same ideology as CLIL (Cenoz, 2015), perhaps offers a perspective where the starting point is content with language teaching coming alongside.

Content and language can sometimes be separated.

As argued earlier that content and language are interwoven, should content and language be labelled separately, apart from historical and disciplinary reasons? This is where the pedagogical turn argues for them to be seen differently from the learning perspective. Disciplinary knowledge (in terms of vocabulary or terminology) has different representations in different languages. As such, learning content in a target language will be *new* to the learner even though the very same knowledge (in L1) has already been understood. In this respect, the content clothed in target language is and can be considered different *content*. As a result, cognitively, the mind recognizes the L2 representation as different from the L1 representation and, therefore, is seen separate. There are then two different 'content' as it were. This phenomenon happened in multilinguistic settings where a common L1 is not afforded in a classroom as is the case and nature of CLIL classes. Second, when language is taught, it is learned from a form-focused perspective. Form-focused learning demands attention to structures and components peculiar to language. For example, grammar rules, genre moves, speech acts, etymology, idiomatical expressions are some examples of these linguistic structures that are clearly different from the target content taught in a CLIL class. Also, these linguistic structures belong a different content domain of the field of linguistics. As such, language can be seen as a different 'content', both representationally in a multilinguistic setting and structurally in knowledge construction. And thus, language can be conceptualized differently from content. Therefore,

ontologically, while there are clearly no hard lines drawn between these three: content, language, and cognition in a common (L1) language, content and language do have pedagogical distinctiveness due to foreign language acquisition and multilinguistic settings. Seeing content and language pedagogically different while recognizing them *as* ontologically interwoven helps in our practice of CLIL.

How do we weave in other Cs, culture, context, and community? When content, language and cognition are taught, as in any learning situation, they are situated in the culture of the content, the language it is expressed in and the cognition that is demanded of it. When a Chinese teaches Physics in China, the teacher uses Chinese to explain the concepts using the Chinese textbook and Chinese expressions and examples. This teaching context would be very much different from another context, say in India, or anywhere else in the world. The context can be different also if the Chinese Physics class is taught in Beijing or Hong Kong. And the community of learners and teachers that learn from each other will also be very different from place to place. While I have illustrated the different cultures, contexts and communities that are embedded in different learning environments, there are also disciplinary content cultures that different disciplines conduct themselves. The way that humanities create, construct, and share its knowledge is different from the way the sciences do. These cultural conventions and expressions are different and are communicated and thought out in the classrooms driven by the content. In order words, the content, language, and cognition that are taught are contextualized and encultured in the disciplinary culture, local context, and learning community of the learner. Of course, each of these notions, culture, context, and community are fluid, with each overlapping and including one another that it can be difficult to draw hard lines between them. These are useful concepts to be acknowledged in any learning environment, but we shall not seek to include them in the pedagogical considerations as they are inherently embedded in the learning environment.

Practical considerations

Having re-considered how content, language, and cognition can be understood in context and culture, we now turn to pedagogical considerations of this understanding in the CLIL classroom. As intimated earlier to the Occam's Razor's principle, keeping the CLIL conceptual framework simple will better serve practitioners to faithfully apply CLIL as well reaping the benefits that CLIL offers. As mentioned earlier, when we teach and assess content and language, we also teach the cognition *behind* them and assess them embedded in disciplinary culture, context, and community. This section will now illustrate pedagogical implications of this re-considered conceptual framework.

Writing CLIL Aims and Learning Outcomes

Let me use a soon-to-be-adopted CLIL course at Rikkyo University to illustrate why and how content and language can be taught and assessed. I will also explain the differences between a CLIL and a non-CLIL course in the aims and learning outcomes (LOs). This course, CLIL Ecology, is to be taken by students at the CEFR B2 level with the intent to reach C1 level. The course aims and LOs are listed below:

This course aims to create an awareness of and concern about the ecology and its associated problems, with the goal for students to discuss these issues and present possible solutions in English. Students will learn the extent of these current global ecological challenges, their impact on ecology and human life, and their personal responsibility through collaborative learning and problem solving.

Students will also acquire critical thinking skills and appropriate English expressions to effectively communicate these ecological issues through discussion and presentations.

At the end of the course, students will be able to (LO1-3):

1. Identify and explain the concerns about the extent of the current ecological challenges, their impact to ecology and human life including personal responsibility.
2. Evaluate and propose solutions to current ecological problems through collaboration.
3. Identify arguments, nuances and implied meaning of texts and digital media on current ecological issues.

As we can see, the course is very much described like a content course with some differences. The inclusion of the words, "in English" and "appropriate English expressions" (see above), specify to readers that English is the communication mode of this course and in particular, the receptive skills of the target language. The productive language skills of "to discuss these issues and present" and "to effectively communicate" indicate the language abilities to be performed in this course. These inclusions are significant to CLIL especially when it is conducted in a non-English speaking environment. If it is conducted in an English-speaking environment, these words would have been unnecessary. Explicitly stated words such as these are helpful in conveying the target language, and acquisition and production are part of the aim of the course. These words are also meaningful without having to include technical jargon such as 'CLIL' and yet stay true to the emphasis on both content and language.

Attention can be drawn to a specific set of cognition, though not necessary, in the stipulated words of 'acquire critical thinking skills' and 'problem solving'. But these inclusions are not necessarily 'CLILish' but are also found in non-CLIL content descriptions of the aims. Likewise, words, 'through collaborative learning and problem solving' and 'through discussion and presentations' stipulate the learning process context and learning community, which can also be found in non-CLIL courses.

A point to note is these '*through'* language productive output, 'discuss…and present…' and 'through discussion and presentations'. Although they may also be found in carefully written non-CLIL courses' aims, the implicity of the language focus is made explicit with the words, "in English" and "appropriate English expressions". Thus, stating the latter in the description is significant, drawing the reader's attention to these communicative modes of learning, including assessment. But here in the aim, we can already see how interwoven the language ('*discuss* these issues' and '*present* solutions'), the content ('discuss these *issues'* on 'awareness of and concern about the ecology') and cognition ('*discuss* these issues and *present* possible *solutions'*) are.

Having declared what entails in the course aims, how do we tell what exactly *is* to be taught and assessed? The course cannot possibly teach all that has been mentioned and assess them. LOs are not only where these can be clearly observed and measured but also where CLIL elements are made explicit. This is where the students are expected to demonstrate their learned competencies by the end of the course. All the LO's have observable verbs, 'identify', 'explain', 'evaluate' and 'propose'. What teachers can observe are not just the content ('extent of', 'impact to', 'personal responsibility' and 'current…problems') but the language ('explain' and 'propose') which includes cognition ('identify', 'explain', 'evaluate' and 'propose'). Again, we can see how the content, language and cognition are seen as together, not separated.

While LO1 and LO2 (Figure) may appear to be atypical of a content non-CLIL course, it is the inclusion of LO3 that reveals the language components that are expected to be learned and therefore taught. In identifying "arguments, nuances and implied meaning of texts and digital media", this

competency clearly involves both listening and reading (or viewing) skills (which incidentally is a CEFR descriptor (number 85) for a communicative receptive skill). Some non-CLIL courses may have this type of outcomes but having this here clearly heighten the language focus.

But what of 'discuss' and 'present'? And 'collaborative learning', 'problem solving' and 'critical thinking'? Since 'discuss' is not found in the LOs, it is expected to be taught nor assessed, and 'present' can be counted under 'explain' and 'propose' if that is the design of the course. Both 'explain' and 'propose' can be observed either as an oral presentation or written report. 'Collaborative learning' and 'problem solving' are seen as the means rather than an end to be assessed in LO2. And 'critical thinking' is the larger category of 'identify', 'explain', 'evaluate' and 'propose'.

The materials and teaching plans for language structures are now then designed *from* the content. This suggests that the relevant language structures in the content, which otherwise would not have been taught in a regular content class, are now equally intended as LOs for the learners. For example, in social science disciplines such as sociology, economics, geography, or history, the discussion or report writing style are included as a LO in the course. Or in the hard sciences, such as biochemistry, medicine or physics, science communication presentation or scientific hedging are to be taught. This also suggests that regular academic content is used as text or material for learning of the language. In the more language driven CLIL, the thematic content, or general knowledge approach should be replaced by academic and disciplinary knowledge that are taught in regular content classes. So, in terms of what is taught, a CLIL course uses non-CLIL content and have language learning outcomes in its teaching.

"What it looks like in practice"- driver and co-driver.

Skehan's (1998) flexible wielding of the focus on fluency and form in language learning are useful for our consideration here. Form focused is to pedagogically draw "attention to the forms and structures of the language within the context of communicative interaction… by giving metalinguistic information, simply highlighting the form in question, or by providing corrective feedback" (Lightbown & Spada, 2006, p. 199). While Skehan was balancing the teaching of fluency with form, Lyster's counterbalanced instruction (Lyster & Mori, 2006) sought to provide a useful direction of "systematically integrating content-based and form-focused instructional options" (pp. 3-4). This counterbalanced approach helps us to see how language can be taught *within* a content class.

So then, we can illustrate this counterbalanced approach with content as the driver and language as the co-driver. This is a pedagogical distinction in order for both content and language to be taught together in the classroom. The driver takes a certain direction, and the co-driver comes in as and when there is a need to advise or point out certain things that the driver may have missed. In addition, sometimes during the journey, the co-driver may take over the driving for a while for the driver to take a rest. This section will now suggest three ways on how and when language is 'driven' alongside content.

a. Language is taught episodically as an intervention.

Gibbons' (2015, p. 227) hourglass analogy on how teachers can focus on language as a study and Lyster's (2018, p. 99) instructional sequence for CBLT offer us an approach *when* to teach language and *when* content takes precedence. As the analogy suggests, a CLIL class can begin with the content teaching but is "narrowed" at some points to teach the language at the appropriate time. These are the times when the teaching of the content necessitates an etymological understanding or a

subsequent communicative act. It begins with the whole (content class) and moves to the parts (language episodes). Comparisons can be drawn from Long's (1991) "focus on form" (p. 46) during the focus on meaning in a communicative learning activity. In a similar fashion, a time out can be called on the content teaching, to detour to a language structure teaching and subsequently return to the content teaching. This can mean a language activity or mini lecture to "notice" (Schmidt, 1990) and explicate the language structure. The language activity may include enhanced input, noticing and awareness tasks, production practices, and negotiation for feedback (Lyster, 2007). Here, Lyster (2007) mentioned the use of prompts and recasts. These can both emerge incidentally or pre-planned as a language outcome in the class.

These focus on form moments are by no means ad hoc or incidental but are pre-planned at the classroom level and at the course design level, and as indicated by the language LOs. These interventions may last for a few minutes to draw learners' attention to the form, or a 15-minute episode of language learning activity to an entire lesson. While planned by the instructor, language learning may also be requested by learners during the teaching of content, a dedicated time to deliberate and focus on the linguistic form. Thus, language teaching becomes episodic and serves as interventions to the linguistic needs of the content and learners' feedback.

b. Language episodic teaching is engendered by the context of the content teaching.

The content taught serves as the context for the language teaching in the classroom. Because the teaching of language is not incidental but purposeful, the episodic language lessons are planned interventions driven by the contextual needs of the content. For example, at the course design level, in preparation for writing a scientific report or presentation in a week's time, the teaching of the writing or oral presentation takes place during the previous weeks. Or at the classroom level, where the problem solution pattern of organization or collocations of technical vocabulary is needed to be explicated to deepen the understanding of the content, they are taught episodically at that point. The context of the content teaching can come from the design of the content before class, learners' feedback, and instructor's observations during class.

The context of the content teaching (the linguistic form and meaning, conventions and currency, academic and professional practice, etc.,) engenders the design (both before and during the semester) of these episodic language teaching in the class and course. Socio-culturally, the learners in the classroom, the instructor responsible for that class, and the affordances in the classroom are the cultural elements that shape the context as well. Thus, a CLIL course uses the content context to design the language learning activities, and the context also affords the emergence of these episodic language teaching that is specific to the class. The context engenders the language teaching.

c. Language is taught inductively.

In language-driven CLIL classes (or regular language classes), language structures are taught as principles or forms at the beginning followed by examples and explanations. Take the grammar form or vocabulary as examples, the grammar is introduced first as a rule at the sentence level or a pre-reading word list is first given. These language structures are then explained and practiced until they are understood, before they are seen in the larger context, a reading text or chapter. However, in a dual-focused CLIL class where the content is first introduced, the language structures are induced, or they emerged *from* the context of the content. Learners encounter the grammar structure or vocabulary in the content *first* before these language structures are made aware of and focused on as an episodic study. Language learning is induced from the content and not de-contextually taught.

In CLIL, learners see the whole (language *and* content) before they see the parts (language *in* content). Learners do not learn the parts first before seeing how they fit the whole.

Learning language in this manner has several advantages. First, language is learned in a contextualized manner which prolongs memory, provides relevance, and engages interest. Second, learners see the direct connection and the 'interwovenness' between language and content. Third, language is learned in a 'naturalistic' setting where learners encounter the 'reality' of language use in an authentic situation of an academic or real-world text, face a cognitive conflict of unresolved understanding of text, and receive help to understand and learn the knowledge (and language) of the text. This process of learning fits well in the sociocultural constructivist and interactionist theories of learning (Vygotsky's (1986) Zone of proximal development, mediation, scaffolding, and activity).

CLIL lesson plan

Table 1 shows an illustration on how and where the input and output of content and language are facilitated. The lesson begins with the input (1) of a content text where learners seek to understand the content in the target language. Besides grappling with the new disciplinary content, the learner is also facing the vocabulary and idiomatic expressions of the discipline. Once the learners have finished reading the text, they are quizzed (2) on their understanding of the content and language components inherent in the text. Here, the instructor must be selective and design the language goal of this class into the quiz questions. The quiz consists of equal, if not similar, number of questions on content and language. This is where the language focus begins at the output level. Learners are cued to notice the language components when answering these language questions. This is CLIL at work.

Table 1
Example of a CLIL Lesson Plan

	Learner activity	Where content and language are taught
1	Read text	Content text in target language
2	Quiz on text	Equal number of quiz questions on content and language
3	Discuss answers with instructor	Equal amount of time spent on discussing content and language questions.
4	Listen to mini lectures	Instructor explains content (from text) to fill the knowledge gaps.
5		Instructor explains language structures derived from text.
6	Review lesson	Instructor reviews both content and language

The discussion of the answers (3) next allows learners to surface their knowledge gaps of not just content but also language. This is followed by mini lectures from the instructor to explain further the concepts if necessary. This is also where the language components are introduced (5) and focused where they may not be apparent especially when the general attention has been on the content. It is important to note that the introduction of the language component *is not* teaching a new and unrelated language structure. The language structure *emerges* from the text that was read. For example, in teaching patterns of organization, the pattern that the content text uses will be discussed and not from another text. This way, learners can see how interwoven content and language are and their relevance to each other. As evidenced in this lesson plan (Table 1), language is taught alongside content in an episodic manner derived from content.

Assessment drives learning and therefore teaching.

No discussion on the practice of teaching approach is complete without having some thoughts on assessment. The assessment is arguably the reason for task performance and learning whether we see it as an end (of learning) or as the way to learn (for learning) (Black, & Wiliam, 1998). When the teacher ignores either the content or language (and cognition for that matter) in the assessment of an assignment, the learner will take the cue from assessment. As a result, whether in a CLIL or non-CLIL class, the assessment must remain true and assess the intent and outcomes of the course. As such, for a CLIL course to be true to its intent, *both* content and language must be assessed, and *equally*.

In the assessment of a CLIL course, equal if not similar weighting of grades should be accorded to content and language. And this is often not stipulated in the description of assessments or assignments. By extending to both equally, this stipulation will not only ensure the assessors' attention to both without neglect one over the other, but also draws learners' attention that language is equally important. This stipulation can be best expressed in the marking rubric where they are taken as the reference point for assessing learners' output. Taking the rubric example (Table 2) of a presentation assignment in the proposed Ecology CLIL course, we can see the clear inclusion of the category of language and that it is equally valued in terms of the allocation of criteria. This may also translate into similar or equal weighting for each criteria of the final grade for a learner presentation. The inclusion of marking criteria for language is often missing in non-CLIL courses.

It is noteworthy to point out that what is assessed is the content and language *learned* and not what is *acquired*. When learners work in groups (community), they acquire collaborative or cooperative skills, but these skills are not assessed as they were not explicitly taught, unlike content and language. What has not been explicitly stated in the aim, learning outcomes, and assessment criteria should not be assessed so as to be true to what is intended and negotiated with the learner. This is also known as constructive alignment (Biggs & Tang, 2011) in course design where the aim, learning outcomes, teaching, learning activities, and assessment are aligned.

Table 2
Example of Marking rubric of a CLIL Environmental course

Assessment rubric for Presentation		Assessment criteria
Content	**Knowledge of deforestation, biodiversity loss, waste disposal, climate change, pollution, etc.**	**Identifies *appropriate* concerns about the *actual* extent of a current environment challenge, its impact to *both* environment and human life.** e.g., identifies *key* issues, evidence, and reality of the ecological problem.
		Evaluates *appropriately* and *sufficiently* a current environmental problem. e.g., identify and analyze the *struggles, controversies,* opportunities, and criteria to assess the situation to redress the ecological problem.

Content	**Knowledge of deforestation, biodiversity loss, waste disposal, climate change, pollution, etc.**	**Produces *appropriate* and *logical* ideas or solutions to a current environment problem.** e.g., Generates practical answers and ways to reduce, stop, prevent, or reimagine the management of the ecological problem.
	Procedural knowledge on global and personal response	**Identifies an *appropriate* and *logical* personal responsibility to a current environment challenge.** e.g., Presents a practical and personal plan in response to an ecological problem.
Communication/ Language	**Coherence and organization**	**Expresses *coherently* and *cohesively* the concerns of, and solutions to a current environment challenge.** e.g., Produces clear, smoothly flowing, well-structured language, showing controlled use of organizational patterns, connectors, and cohesive devices. (CEFR 1297)*
	Clarity and multimodal media	**Produces *clear* and *well-structured* texts and visuals of a current environment challenge.** e.g., Shows organized, relevant, intelligible, and significant information with relevant examples in multimodal media. (CEFR 317)*
	Confidence and gestures	**Appears *calm*, *relaxed*, and *does not need to think* about content when signing.** e.g., Demonstrates confidence in public speaking with relevant gestures and presence. (CEFR 1761 and 1762)*
	Vocabulary and idiomatic expressions	**Uses *appropriately* the range of technical vocabulary and idiomatic expressions common to the field of environment.** e.g., Presents words and phrases that are specific to the academic language and professional practice of environmentalists. (CEFR 1156)*

* The Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2018)

As we can see, in the assessment, when we judge a learner's content, we are judging how the learner 'identifies', 'evaluates', and 'produces' knowledge that is appropriate, real, logical, and sufficient to be deemed satisfactory. The appropriacy, logic, reality, and adequacy of knowledge presented *is* quality of the *cognition* of identifying, evaluating and production. Likewise, for language, how the learner 'expresses', 'produces', 'appears', and 'uses' the language and language related devices also demonstrate the quality of the *cognition* of application. Each of the language criteria is taken from and referenced to the Common European Framework of Reference for Languages Descriptor Scheme (Council of Europe, 2018) with the corresponding number code and level.

Conclusion

In our re-consideration of the current understanding of CLIL, we have pared CLIL to essentially the teaching and learning of the two, content and language. We have shown how inseparable and interwoven content, language, and cognition are. The other concepts of culture, context, and community are situated and interwoven *in* the teaching of content, language, and cognition. They are all essentially relational and contextualized and contingent on the content taught and language use.

Pedagogically, we have illustrated how content and language can be taught together with the illustration of content as the driver and language as the co-driver. CLIL teachers need to concern themselves with designing a content class with a language focus at appropriate and critical junctures, teaching language episodically and inductively for learners to learn the content *through* and *with* the language. This begins with the design of the course aims and learning outcomes with explicit mention of the target language. The teaching is also designed with content (the whole) as the starting point, interspersed with focus on form (language use), but engendered from content. The assessment is also designed with explicit measurement of language components that are equally weighted on content and language. This not only distinguishes itself from non-CLIL classes but also ensures learners' attention as to what is valued in a CLIL class. We believe that this is what CLIL ought to look like in practice.

There is, of course, more to be discussed regarding the ontological relationship of the other Cs that this paper did not have the space to do so adequately. There is also more to be detailed in the classroom practice at the pedagogy level. CLIL is an approach with much of the pedagogy of learning left to the interpretation of practitioners. It is with hope that this paper has contributed in some ways to streamline the clarity of what CLIL is and how it can be demonstrated in the classroom.

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