

Considerations in Content and Language Integrated Learning

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Abstract

This paper outlines two forms of Content and Language Integrated Learning (CLIL) and outlines some of the theoretical and practical considerations that need to be made when planning content-led and language-led lessons that follow a CLIL approach to learning. It begins by defining CLIL and describing some of the key principals behind this approach, as well as, the low-order and high-order thinking skills that students will need to employ for certain activities. The author then recommends a three-dimensional approach towards planning and suggests scaffolding strategies that could be used to teach both content and language simultaneously through exploration, discovery, and peer interaction. The author gives examples of how he has used these methods in his own classes and some of the considerations that go into the planning and execution of course design. Finally, the author reflects upon his own experiences in teaching English debate and discusses the methodologies that already inform his approach to Teaching English to Speakers of Other Languages.

Keywords: CLIL, theory, planning, low-order thinking skills, high-order thinking skills

Introduction

The CLIL Approach

Content and Language Integrated Learning (CLIL) is an approach in which students learn a subject in a foreign or second language (Marsh, 2002). As content and language are taught together, students gain exposure to both foreign language input and output as they study a subject of academic or personal interest. Using this approach, students are able to learn grammatical structures, vocabulary, and specialised terminology without the need for additional language lessons outside of the course (Graddol, 2006). This allows students to learn the content of a subject while gaining exposure to the syntax and lexis that make up a foreign language. For example, a native Japanese student learning art in English would be exposed to new phrases and vocabulary in that target language while learning the key concepts of the subject simultaneously. Therefore, students need to improve in the foreign language in order to follow the content of the course and be successful in their studies (Marsh, Marsland, & Stenberg, 2001). This has huge implications as English increasingly becomes a global language, and means that the world is beginning to view English not only as a language but also as a key skill (Graddol, 2006).

Types of CLIL

There are two types of CLIL: strong and weak. Strong CLIL is content-driven and focusses on content learning, while weak CLIL is language-driven and focusses on second language learning (Ball, 2009, and Bentley, 2010, as cited in Ikeda, 2013). In a strong CLIL class, content is given the primary focus and concepts are presented in a foreign or second language (Cambridge Assessment English, 2019). However, in a weak CLIL class, the second language is the focus of the course as the students learn about a specific or specialised subject in a second language. This means that

educational bodies must consider whether to follow a content-led or language-led approach when designing CLIL lessons and planning assessment.

CLIL differs from regular language lessons where the subject, topic, or theme of a lesson may vary in order to promote a particular grammatical structure or communicative gambit with the hope that students will employ these skills out in the field. A CLIL approach negates this issue and instead allows students to gain exposure to foreign language as they learn the content without the need for additional language lessons outside of the course. Target language exposure can be in the form of either input (reading and listening) or output (writing and speaking). Depending on the subject being studied, output may or may not have a linguistic element. For example, in an art lesson, students might learn about vanishing points and light sources in English but then produce a painting as output with no linguistic element.

Advantages of CLIL

Since the year 2000, CLIL has gained popularity among educational bodies across Europe. This has been in response to the European Union's goal of making students proficient in at least two languages without the need for separate language lessons (Coyle, D., Hood, P., & Marsh, D., 2010). As students are able to learn content and a language simultaneously (Marsh, D. 2002), CLIL provides exposure to the target language as content is learned. Students are therefore not required to have the English language proficiency to cope with the subject before they begin their studies as the target language is learned at the same time as the course content. Moreover, students are able to learn vocabulary and grammatical structures related to subjects of personal or academic interest, which provides opportunities for employment in specialised or professional fields (Casal & Moore, 2009), essentially, killing two birds with one educational stone.

CLIL also motivates students to improve in the target language because the understanding of the subject content is compulsory. Moreover, the students are not being asked to talk about vox pop content (for example favourite movies, celebrities, things they like/dislike) where content is merely used to illustrate certain language structures. Instead, they are focussing on a single subject (for instance, history) and learning how to remember, understand, apply, analyse, evaluate, and create content in a second language. This gives the students a sense of accomplishment as they engage with the subject material and produce their own output.

Disadvantages of CLIL

One of the challenges that CLIL presents is that most learning materials and subject textbooks have not been designed with CLIL in mind. This means that teachers have to alter or adapt existing materials into more CLIL-friendly forms, and this can take time. Moreover, as we will see later, CLIL teachers need to have an awareness of grammar (Marsh, 2002) and the structural make-up of the target language, and this can be of some concern for teachers who are not well-versed in such structures (Pérez Cañado, 2011).

There are also different models and practices of CLIL that overlap with other communicative approaches. This makes it difficult to determine which model is superior as content and circumstances can vary greatly in terms of context, curriculum, and educational body (Gabillon, 2020). Some research into the benefits of CLIL maybe biased (Bruton, 2011), and that there is a need for more disinterested research needs into the efficacy of CLIL within a curriculum, as well as, its shortcomings

(Bruton, 2013).

Discussion

Key Principals

The key principles of CLIL are Content, Communication, Cognition, and Culture — the 4Cs (Coyle, 1999). Content relates to the information, concepts, and content of a specific subject that is to be learned by the students in a foreign language. Communication is the use of a second language to both learn and express ideas on a given subject of study. It is the language in which students will study the content. Cognition is the development and ability to understand abstract and concrete concepts relating to both the content and language of a CLIL-based curriculum. This dimension is concerned with the development of lower- and higher-order thinking skills with regard to the content and language the students are learning. Finally, Culture exposes the students' ability to reason outside of their own perspectives. This helps them to deepen their understanding of a subject's content, others, and themselves. Together, the 4Cs form the basis for a Content and Integrated Learning approach that relies on immersion, communication, exploration, and discovery to meet its goals.

Thinking Skills

There are two types of thinking skills: lower-order thinking skills (LOTS) and higher-order thinking skills (HOTS). LOTS are the students' ability to remember, understand, and apply knowledge, while higher-order thinking skills are defined by the students' ability to analyse, evaluate, and create their own output (Bloom, 1956).

For courses such as the language-led English Debate course at Rikkyo University where the author is a teacher, the students benefited from activities that first engaged their lower-order thinking skills (LOTS) at the start of lessons before later progressing to higher-order thinking skills (HOTS) to nurture a deeper understanding of the academic topics that were up for debate. During the warm-up activities of the lesson, the students completed various activities that pre-taught difficult unit vocabulary and scaffolded some of the functional language that would be used later in the lesson. Then, as the lesson progressed, the activities moved more into the scope of higher-order thinking skills.

An example of this would be when the students were discussing what a self-driving car should do when presented with the dilemma of swerving to avoid some innocent people in the event of a catastrophic brake failure. The choice was to either protect the inhabitants of the car or the innocent pedestrians on the street. As the students discussed each scenario, the individuals involved were swapped out for people of varying age, class, gender, levels of health, and occupation or even animals. It was observed that the students began to analyse and reflect on their prior answers to inform and formulate an ethical rule of what a self-driving car should do in such a paradoxical situation. They also discussed whether their original choices had been fair and whether they should be reviewed or changed. This pre-teaching of vocabulary, content, and concepts helped students progress from the reproduction of knowledge (LOTS) to the creation of knowledge (HOTS), which was the underlying purpose of this progression of activities.

Fat and Skinny Questions

To simplify this progression from lower-order thinking skills to higher-order thinking skills, a teacher should first consider the two types of questions — skinny and fat. Skinny questions focus on the recollection and regurgitation of knowledge. Examples of skinny questions could be prefaced with the following verbs: list, name, define, or describe. These types of questions encourage students to either recall previously taught vocabulary or activate the students' schemata to introduce a concept that will be explored more deeply as the lesson progressed (much like the artificial intelligence example above). Skinny questions can therefore be used as a warm-up to activate the students' lower-order thinking skills and introduce a concept in its most basic form.

Fat questions differ in that they require students to analyse, compare, contrast, and criticise information. This requires a much deeper level of thinking, and time should be allocated accordingly to accommodate this. Examples of fat questions could be prefaced with the following verbs: analyse, evaluate, construct, predict, hypothesise, reason, or reflect. These types of questions are more open-ended than skinny questions and usually require an evaluation, hypothesis, self-reflection, or the formation of an opinion on behalf of the student. In essence, skinny questions require lower-order thinking skills (LOTS) and fat questions require higher-order thinking skills (HOTS). Therefore, teachers should consider not only in which order they should introduce content but also how to scaffold activities so that they can be completed in a communicative way together.

Lesson Planning

The Three Dimensions

When preparing to teach a lesson, a teacher should look at it through the three dimensions of CLIL: concepts, procedures, and language. There also needs to be some type of input, process, and output. Materials should therefore be designed in such a way as to allow students to work together to solve problems with minimal input from the teacher. To do this, the teacher should think about which concepts the students will need to learn, how they will learn them, and which functional language the students will require to meet all these expectations. These are outlined in more detail below.

Concepts (What?)

First, a teacher should look at what concepts their students are expected to learn. For example, if they are learning art, what do they need to know? For instance, if they need to learn about primary and tertiary colours, which content should come first? A teacher should organise these concepts into a linear progression in which content builds upon prior content to deepen understanding. An artist would know that the first thing to consider when drawing a picture is the vanishing point. Then, they might consider where the light source is coming from. These progressions should be transferred to the student, and first and foremost, a teacher should ask themselves "What do my students need to learn and in what order should they learn it?"

Procedures (How?)

The next question should be “How?” How will the students learn these concepts? How can the materials be adapted to make sure that non-native learners understand them? How can the teacher ensure that the content has been understood? To answer this, the teacher should consider what input they will use and what output they should expect. For input, should they use text, videos, images, graphs, or realia? What are the benefits of each and which would be best? In the case of the aforementioned artificial intelligence debate, the teacher also used the image of a self-driving car heading down the road towards danger beside another image of the same car swerving to crash. Both options and their results were laid bare for the students to evaluate, consider, and weigh up the options. For the most part, the human brain thinks in pictures, so images or diagrams should be used whenever possible to illustrate concepts in the most accessible format.

Language (Which?)

The final question a teacher should ask themselves is “Which language structures and vocabulary will the students encounter and be expected to use?” For example, if we return to our lesson on artificial intelligence and the self-driving car, the students were pre-taught the vocabulary (‘swerve’) and grammatical structures (‘I think the [car] should [go straight]’) they would need to use before beginning the activity. This scaffold formed the basis for discussion in which students could share opinions, reasons, examples, and predict the risks and rewards of their choices in a communicative way.

Additionally, the students should be given scaffolds for functional language so that they can direct activities themselves. For example, a teacher might need to say things like ‘please get into [pairs]’ and ‘please get into [a new pair]’ as part of their functional language, while the students would use phrases like ‘let’s work together’ or ‘let’s swap chairs’ to find a new partner. In terms of language, it should all be scaffolded to accommodate not only the content but the functions that will need to be applied for students to work together and follow the teacher’s instructions.

Scaffolding Strategies

Showing rather than Telling

Students appreciate a scaffold of the language that they will need to accomplish a task. Moreover, it is also beneficial to briefly demonstrate how an activity can be approached using the second language. Scaffolded language reduces the need for students to revert to their native language and allows them to engage with the content of the lesson in the second language. This encourages the students to think in the same language as the content is being presented. What is to be avoided is telling students to do something in a second language without showing them how it can be done as an example.

Modelling (Showing)

Teachers should demonstrate how to use the target language so that students can observe and understand how to complete activities in groups or pairs. When doing this, functional language should be modelled with a student, and a language scaffold can be placed on the whiteboard or kept

somewhere consistent so that the students are familiar with it and it becomes habitual to use. For example, the phrases ‘Let’s work together’ and ‘I think [X] is [Y]. What do you think?’ can be used to set up and complete a variety of activities and also create a learner-centred environment. Students benefit from language scaffolds as they show them not only what is required from an activity but also how to do it.

On occasion, a teacher may inadvertently choose to model with a student who struggles with the activity. In cases such as this, the teacher should first praise the student before swapping roles and repeating the model. For instance, in its most basic form, if a teacher were to model an interaction with a student such as asking their name, and the student was unable to answer, the teacher should then take on the role of answering the question, having already demonstrated how to ask. The participants would then swap back to their original roles so that the student can demonstrate the model successfully.

Pre-Teach Vocabulary (Flashcards)

There are a few ways in which a teacher can pre-teach vocabulary for a lesson, but there are a number of considerations to take into account. Vocabulary activities should be designed in a way that encourages students to interact with each other to either organise, match, or infer the meaning of words together. The teacher should also consider the word class of the words and create individual activities by word class. For example, one method that can be used is to have students organise words into a Venn-diagram of positive, neutral, or negative words. In such cases, the use of flashcards allows the teacher to share the flashcards between pairs and provide a scaffold of functional language to help students discuss and organise the words into their respective section of the diagram. Flashcards are also useful in that they can be swapped out and activities can be manipulated to be more or less challenging.

Visual Aids (Images and Realia)

Visual aids, images, and realia are an incredibly fast and reliable way of introducing concepts. For example, in the case of the self-driving car, it was pretty evident what was happening in each picture, and this allowed students to visualise the hypothetical situation in a much more concrete way than if I were to just explain it. First, I showed them the images and then explained what was happening. Then, I left it up to the students to discuss the best course of action for the self-driving car as the concept was clearly displayed in front of them.

Differentiation

Mixed Abilities

Another consideration to take into account is differentiation and the mixed abilities of students. When planning a CLIL curriculum, the teacher or educational body needs to decide whether the CLIL course will be content-led or language-led. They also need to consider how content or language can be taught not only in tandem but also in a way that it is inclusive for students of varying or mixed abilities. Using the flashcards from before as an example, these types of learning materials can be created in such a way that allows teachers to manipulate, customise, and personalise activities for

different students during the lesson. For instance, if a student found the matching activity too easy, they could be given more cards to organise and discuss with their partner, while a student who is struggling could be given fewer cards and progress slowly from there. It is therefore wise for a teacher to anticipate and accommodate for potential challenges and design materials accordingly. Moreover, activities should always be designed in such a way that they can be scaled in difficulty to become either more challenging or forgiving, as required.

Assessment

Another consideration is whether the teacher is assessing content or language and whether this assessment should be formative or summative (Richards & Schmidt, 1985). In strong CLIL, it would be better to assess content, and in weak CLIL it would be better to assess the language. However, when assessing content, it is necessary to think about and avoid the pitfall of what is called the 'language-risk.' Meaning, if a student makes a mistake, is that because of their language ability or because they did not understand the content? A teacher would hope for the latter, as if they understood the content but could not appropriately prove their understanding of it, then they are inadvertently and erroneously being assessed on their language ability rather than their conceptual knowledge, which would not only be unfair but it would also be an inaccurate summative assessment of their true ability within a content-led CLIL course.

One way of negating this problem would be to offer multiple-choice or other closed forms of assessment or even skinny questions. However, this introduces another issue when a teacher wants to assess a student's high order thinking skills (HOTS) as questions would generally need to be open-ended.

Great care must be taken when planning a content-driven course to make sure that it is meticulously planned backwards so that all the language of 'Which?' and grammatical structures have been given adequate attention in activities so that students are well prepared for assessment and can express themselves appropriately. This means that content-led assessment questions would need to be either closed for lower-order thinking skills or written in such a way as to suggest a structure for students to follow for high-order thinking skills assessment questions. Again, this goes back to the three dimensions of planning (concepts, procedures, and language) that teachers should consider when planning lessons or designing a course.

Conclusion

Teachers who adopt a CLIL approach need to focus on activities that allow students to work together in a communicative and explorative way. Students need to be given the tools and guidance to understand the subject of study's content, and activities should be carefully designed by teachers to accommodate a variety of learner types and abilities. When designing a course, teachers need to consider the concepts, procedures, and language that need to be taught to the students and how this can be done effectively.

There are many parallels between my own method of teaching, the Communicative Approach, and Content and Language Integrated Learning in that all methods favour students learning through an active approach towards communicating and completing activities among their peers. I feel that this provides the most exposure to content and language, and through sharing ideas, students are able to gain a deeper understanding of the topics we discuss and debate in class. This helps to

develop their thinking skills and express themselves as active learners rather than passive listeners.

I also prepare all my materials to facilitate such an approach.

Given the current lack of CLIL-dedicated content textbooks, it is often up to the teacher to adapt textbook units and activities that have been designed for native speakers into something more accessible to second-language learners. Therefore, CLIL challenges teachers to be creative and think of the best possible ways to not only present concepts but also consider how to check that these concepts have been understood. This is what makes teaching fun and rewarding. With each lesson taught, teachers will need to reflect upon not only their student's development in class but also their own.

References

- Ball, P. (2009). Does CLIL work? In D. Hill & P. Alan (eds.), *The best of both worlds?: International Perspectives on CLIL* (p.32-43). Norwich Institute for Language Education, Norwich.
- Bruton, A. (2011). Is CLIL so beneficial, or just selective? Re-evaluating some of the research. *System*, 39(4), 523–532.
- Bruton, A. (2013). CLIL: Some of the reasons why ... and why not. *System*, 41, 587-597.
- Bentley, K. (2010). *The TKT Course: CLIL Module*. Cambridge University Press, Cambridge.
- Bloom, B. S. (1956). *Taxonomy of educational objectives; the classification of educational goals*. New York: Longmans, Green.
- Cambridge Assessment English. (2019). *TKT: Content and Language Integrated Learning (CLIL): Teaching Knowledge Test*. Cambridge University Press.
- Casal, S. & Moore, Pat. (2009). The Andalusian bilingual sections scheme: Evaluation and consultancy. 1. 36-46.
- Coyle, D. (1999). Supporting students in content and language integrated learning contexts: planning for effective classrooms. In J. Masih (ed.), *Learning through a foreign language: models, methods and outcomes* (pp. 46-62). Centre for Information on Language Teaching and Research.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge, UK: Cambridge University Press.
- Gabillon, Z. (2020). Revisiting CLIL: Background, pedagogy, and theoretical underpinnings. *Contextes et Didactiques*, 15, 88-116. <https://doi.org/10.4000/ced.1711>
- Graddol, D. (2006). *English Next*. British Council Publications.
- Ikeda, M. (2013). Does CLIL work for Japanese secondary school students? *International CLIL Research Journal*, 2(1), 31-43.
- Marsh, D. (2002). *CLIL/EMILE–The European Dimension: Actions, Trends and Foresight Potential*. Public Services Contract EG EAC, European Commission, Brussels.
- Marsh, D., Marsland B. & Stenberg K. (2001). *Integrating Competencies for Working Life*. Jyväskylä: University of Jyväskylä.
- Pérez Cañado, M. L. (2011). The effects of CLIL within the APPP: Lessons learned and ways forward. In R. Crespo, & M. García de Sola (Eds.), *Studies in honour of Ángeles Linde López*. (pp. 389-406). Granada: Universidad de Granada.
- Richards, J., & Schmidt, R. (1985). *Dictionary of Language Teaching and Applied Linguistics*. 3rd Ed. Edinburgh: Pearson Education.