**Translation in CLIL: Mission Impossible?**

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# 1. Introduction

Translation in CLIL? It may seem a contradiction in terms. CLIL means Content and Language Integrated Learning, and is based on the assumption that content is taught through the second/foreign language (or an additional language). Little or no room is left to the learners' mother tongue, which is either declared off limits or used in very limited cases. So, what is the role of translation in CLIL? Is there any place for it at all?

Drawing on current research on CLIL (Aiello, Di Martino and Di Sabato 2017; Baker 2014; Coyle, Hood and Marsh 2010; Dalton-Puffer, Nikula and Smit 2010) and on the pedagogical uses of "the 5th skill" (Cook 2010; Gaballo 2009c), this study sets out to investigate how translation can be integrated into language and content learning.

The methodological approach that underlies this analysis essentially combines several models which contribute to explaining the complex nature of the problem at issue (i.e., using translation to teach both language and content in the CLIL class), with its multiple variables to be taken into account. The section dedicated to the pedagogical framework describes the implementation of the ensuing model's design within CLIL contexts: examples are drawn from courses taught since 2005, inspired by social constructivist

pedagogy (Vygotsky 1978; Kiraly 2000; Gaballo 2009b) in a networked learning environment (Dirckinck-Holmfeld, Hodgson and McConnell 2012; Gaballo 2014), and a collaborative translation approach (Gaballo 2009a).

## 2. Scope and Background

For the sake of clarity, this article is concerned with the teaching of English to speakers of other languages (Hall and Cook 2012, 272-273) in content and language integrated classes. Before addressing the issue mentioned in the Introduction, a few important terms and concepts need to be clarified.

English will be termed 'L2', 'foreign language', or 'additional language' [1], as suggested by Coyle, Hood & Marsh (2010, 1) when denoting the language being learned, i.e., the object of study from the learner's perspective, and 'vehicular language' when denoting the language used to teach English as a foreign language in CLIL settings, i.e., from the teacher's perspective.

'L1', or 'first language', is the term used to name the institutional or dominant language used to teach subjects at primary, secondary, or tertiary level (teacher's perspective) and generally acquired by learners in their early years so that it becomes their natural instrument of thought and communication (learner's perspective).

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[1] An additional language is often a learner's 'foreign language', but it may also be a second language or some form of heritage or community language (Coyle, Hood and Marsh 2010,1).

The term 'own language', suggested by Hall and Cook (2012, 274) to define L1, is likely to create confusion, as it implies either a monolithic view of the learners' first language that does not reflect the current linguistic richness in today's intercultural classrooms, or a fragmented view of the learners' first language that requires teachers to deal with multiple and diverse instances of 'own language' that they would not be able, allowed or willing to make use of, if other than the institutional language (say Arabic, Chinese, Portuguese, etc.) depending on the composition of the classes.

The short designation 'L1' more aptly depicts the source language that learners are asked to work from in individual translation tasks in CLIL classes. Examples of such tasks include: intralinguistic translation (e.g., from the general language to the specialized language, i.e., LGP into LSP) used for instance to practice change of register (L1 > L1 / L2 > L2), or interlinguistic translation (L1 > L2), where L1 could be either the institutional language, or the learner's mother tongue, as in the case with current, global classes, hosting international students from all continents.

It is also worth spotlighting the most cited definition of CLIL, namely the one by Coyle, Hood and Mash who in 2010 defined it as follows:

Content and Language Integrated Learning (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, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even

if the emphasis is greater on one or the other at a given time (Coyle, Hood, Mash 2010, 1).

This definition highlights the perception of CLIL as an "innovative fusion" of both language education and subject education, as "an educational approach in which various language-supportive methodologies are used which lead to a dual-focused form of instruction where attention is given both to the language and the content" (Coyle, Hood and Mash 2010).

Only seven years later, Dalton-Puffer's interpretation of CLIL as transcending pedagogical practices while conflating traditionally separated fields of learning opens up to a broader view of CLIL (Dalton-Puffer 2017). It calls for transdisciplinarity and proves how the idea of CLIL is developing across time, and for the author herself, who had defined CLIL as "the use of an L2 in the teaching of non-language subjects", i.e., more in terms of EMI[2], some ten years before (Dalton-Puffer, 2008).

A more recent perspective provides a fluid vision of CLIL which blurs its internal boundaries even more and gives it a lot more flexibility of purpose:

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[2] English-Medium instruction (EMI) basically refers to the "English-only" trend in the offer of degree courses in higher education as a strategy to increase the 'internationalization' of universities located in non-English speaking countries. It is often mistaken for CLIL (Content and language integrated learning); however, attainment of English skills is not the priority in EMI settings, since English is considered a means for academic study, rather than a subject itself as it is in CLIL (Jenkins 2019).

This constant movement, this in-betweenness, is both CLIL's greatest strength
and challenge: it enables CLIL to be reinterpreted and reconfigured to address
specific local needs, and it can involve different points of rupture (Darvin, Lin and
Lo 2020, 104).

## 3. Theoretical framework

In the past few years, there has been a series of hectic efforts made by schools and
universities to organize CLIL programmes and teacher training courses, and a number of
studies have helped with the process (Deller and Price 2007; Mehisto, Marsh and Frigols
2008; Bentley 2010; Dale and Tanner 2012).

In order to fully understand the role of CLIL, a comparison of the different types of
foreign language teaching may help to provide a better picture of how CLIL differs from
other approaches.

### 3.1 Mapping CLIL

As the chart in Figure 1 shows, the fundamental difference between LGP and non-LGP
types of Foreign Language Teaching lies in the different use of language between the
language class and the content class. In the language class the four skills (reading, writing,
listening, speaking) are part of the learning outcomes and are used as a tool for

introducing new language, and for practicing and checking linguistic knowledge. In the
content classroom the four skills are a means of learning new content and displaying an
understanding of the subject being taught. The language is therefore a means to an end,
rather than an end in itself, and the structure and style of the language practiced is often
less colloquial and more complex (as Deller and Price pointed out in 2007).

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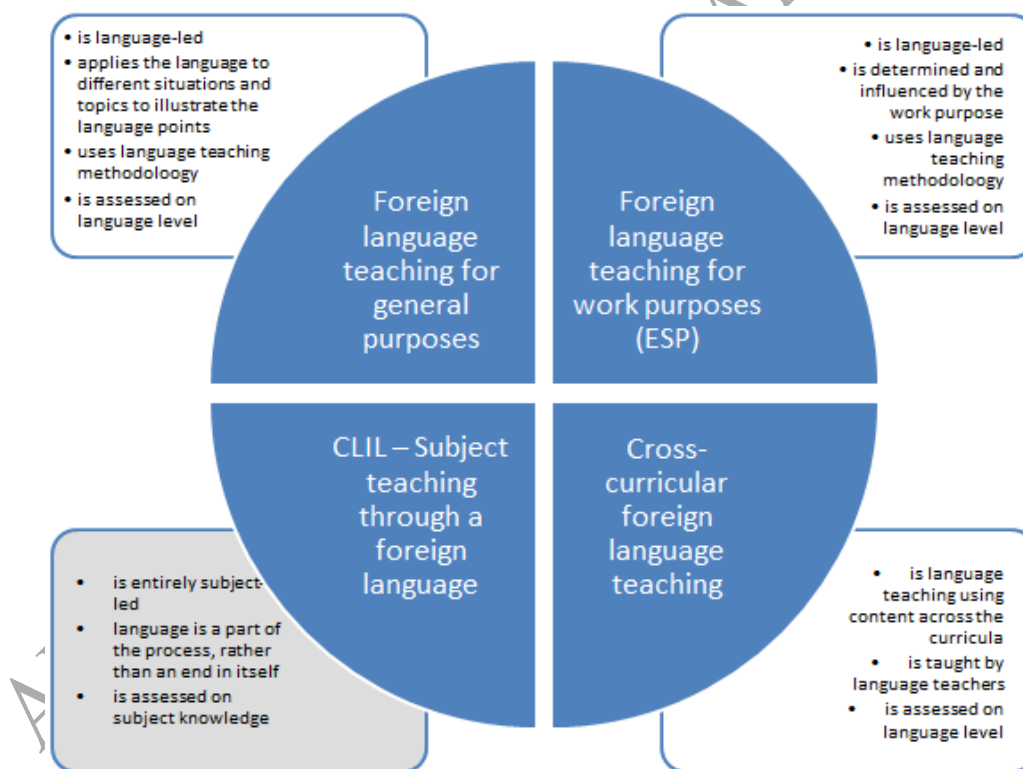
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**Figure 1.** Different types of FLT - Foreign Language Teaching (adapted from Deller
and Price 2007)

One more useful view of CLIL refers to how it is positioned in the panorama of ELT.

A first viewpoint[3] focuses on the different methodologies used to teach EFL/ESL, and sees CLIL as central in the virtual continuum between structure-based instruction in EFL and natural acquisition in ESL, locating it within the framework of Communicative instruction (Ikeda 2012, 2). In an interview with Laura McGregor in 2015, Ikeda underlined the importance of CLIL in the Japanese higher education context following the newly introduced Education Reform meant to develop global human resources, and specified that, since that is exactly what CLIL can accomplish, it should be considered the standard in language learning and teaching[4].

This view of CLIL is also supported by MacLellan, who sees a progression from Content-based Instruction (CBI) and Content and Language Integrated Learning (CLIL) in the early years to English-medium Instruction (EMI) at advanced levels (MacLellan 2018, 37).

Unlike Hancock (2013)[5], who provides a suggestive, albeit debatable map of ELT subdivided into four "regions" (Language, Needs, Tools and Learning) with CLIL totally decentralized in the Learning quadrant and very distant from anything else, especially

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[3] See Slide 3 at https://www.britishcouncil.jp/sites/default/files/eng-clil-overall-presentation-01-jp.pdf

[4] "CLIL is content and language teaching or learning, rather than just a language learning methodology. CLIL should be used in mainstream education. That's my final goal.".
https://jalt-publications.org/sites/default/files/pdf-article/40.1_tlt-art4.pdf

[5] See Page 2 at http://hancockmcdonald.com/sites/hancockmcdonald.com/files/file-downloads/MAP%20OF%20ELT%20FORMATTED%20ARTICLE_0.pdf

from those concepts (e.g., EAP, ESP) and descriptions (e.g., needs analysis, specific reasons for learning English, 21st century skills) that would best place it in the opposite quadrant, the Needs quadrant, both Airey (2016, 73)[6] and Lo (2020, 5) confirm the centrality of CLIL and place it between language-prevalent and content-prevalent extremes within the language/content continuum, as it has both language and content learning outcomes.

As a matter of fact, whatever the position assigned to CLIL, almost all of the different approaches to EFL, ESL or ELT share one basic feature: monolingual teaching, a legacy of the audio-lingual method, situational language teaching and communicative language teaching.


3.2 Monolingualism in CLIL


As Graham Hall and Guy Cook pointed out in their article 'Own-language use in language teaching and learning: state of the art' (2012)[7]:

Despite the overwhelming force of the arguments and evidence in favor of bilingual language teaching in a globalized multilingual world, many curricula, institutions, syllabus and materials designers, as well as teachers, parents – and,

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[6] See Slide 10 at https://www.diva-portal.org/smash/get/diva2:1278701/FULLTEXT01.pdf
[7] To date the most exhaustive survey on the role of learner's first language in the language classroom.

of course, students – remain committed to monolingual teaching. (Hall and Cook
2012, 297)

The article explores the reasons and contexts in which the monolingual trend
developed and also contains an entire section titled "Entrenched monolingualism in ELT",
which should actually read "Entrenched monolingualism in CLIL", since it is totally
devoted to discussing, or rather criticizing, both monolingualism and CLIL, as is apparent
from some of the quotations drawn from the article. One worth mentioning reads: "A
notable manifestation of diehard monolingualism, strangely posing as a new approach, is
content-based language teaching…" (Hall and Cook 2012, 297), which signifies the
authors' dismissiveness of the CLIL methodology altogether, apparently grounded on
externalities, such as language and post-colonial policies. As an example, they note how,
in practice, CLIL is most frequently used to extend the teaching of English, and they find
this strikingly odd as the EU had committed itself to maintaining linguistic diversity,
whereas English-medium CLIL in Europe has received intensive support. The authors
also note how the rationale behind this

[…] virtually ignores the complex impact on diversity and identity both of this
major extension of English into classrooms and subject areas where students' own
languages previously held sway, and in contexts where the ex-colonial language
maintains its dominant position" (Hall & Cook 2012, 298).

Cook had already remarked in 2010 that monolingualism is detrimental to the maintenance of linguistic diversity and argued that: "While there is surprisingly little academic criticism of English-medium CLIL, those asked to implement it sometimes express strong opposition and suspicion of the motives behind it" (Cook 2010, 115).

Some scholars – including Stern (1992), and Widdowson (1978) – had emphasized the importance of a communicative approach in foreign language teaching and learning in order to offer learners a 'foreign language atmosphere', but later advocated a 'new balance' between first-language use and exposure to the foreign language so that learners could understand both what is said and how it is said.

As a matter of fact, although there is clear evidence of the use of L1 in language classrooms, which is now accepted as a natural constituent of foreign language pedagogy and is no longer seen as an obstacle to be removed or kept away from the language classroom, the mother-tongue taboo still dominates the CLIL classroom.

3.3 First language in CLIL

In spite of the wide support that is now being given to the use of the first language in language learning, CLIL proponents (Coyle 2006; Mehisto, Marsh and Frigols 2008; Coyle, Hood and Marsh 2010; Dalton-Puffer, Nikula and Smit 2010) tend to neglect the role of L1 and translation in language [and content] learning (Cook 2010). Coyle, Hood and Marsh (2010), for instance, mention the use of the first language in a curricular

variation of CLIL involving code-switching between languages, which has been termed translanguaging[8]. Nikula, Dafouz, Moore and Smit (2016) provide an interesting dissection of how translanguaging is used in CLIL classes:

> […] When content-oriented, translanguaging is explicitly oriented to and used to scaffold meaning negotiation in the teaching and learning of content. When socially oriented, translanguaging is unmarked in the unfolding talk, with participants orienting primarily to the flow of interaction (Moore and Nikula 2016, 25).

However, this use of the two languages for specific types of activities (García and Wei 2014) does not really imply translation. Cook (2010) questions this neglect, and argues that translation in language learning should be re-considered, to the benefit of language learners (although his plea addresses LGP classes, rather than CLIL classes).

In terms of language competence, communication in languages (including the first language) is identified as a key skill – and listed along with mathematics, science and technology, digital applications, learning approaches, interpersonal, intercultural and social competences, entrepreneurship, and cultural adaptability – in the framework for Key Competences for Lifelong Learning in Europe[9] (2006). This clearly implies "a more

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[8] CLIL proponents seem to have banned bilingualism and the use of L1: "Bilingual teaching ('translanguaging' in the CLIL jargon) is seen as something which will – and should – wither away." (Marsh 2002, 98).

[9] The Key Competences for Lifelong Learning – A European Framework is an annex of a Recommendation of the European Parliament and of the Council of 18 December 2006

integrated language approach where first and other languages are conceptualized together as being complementary and contributory conduits for developing communication skills for lifelong learning" (Coyle, Hood and Marsh 2010, 156-157).

When CLIL first developed, the vehicular language tended to be a language which was not commonly used in the specific community or region, e.g., English-medium classes in most European countries. However, as globalization induced more mobility and linguistic diversity, the linguistic boundaries associated with the medium of instruction have become increasingly 'fuzzy'. In the new globalized, multicultural contexts (Leung and Valdés 2019), the CLIL vehicular language may be extremely varied: 1) the first language of some learners, 2) a language which has already been acquired by other learners, 3) a new language which is also being acquired at the same time as the main language of instruction, 4) a new language which is neither the learners' first language nor the language used in local or national settings, and so on (Coyle, Hood and Marsh 2010, 158).

Nowadays, many learners of English are plurilingual: they can speak more than one language to the extent they need to, without sacrificing any language they have acquired. Their identities as plurilinguals need to be considered and respected when designing and implementing the CLIL curriculum. As Cook puts it, the goal of language teaching should be successful language use and multicompetence (Cook 1995), instead of trying to get learners to imitate monolingual native-speaker use.

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on key competences for lifelong learning that was published in the Official Journal of the European Union on 30 December 2006/L394.

In addition, Coyle, Hood and Marsh (2010, 153) underline how the shift from knowledge transmission to knowledge creation in multilingual settings requires learners to be "skilled in not only assimilating and understanding new knowledge in their first language, but also in using other languages to construct meaning".

Zooming out of CLIL for a moment, and back to the macro lens (FLT), we can note how both the new Common European Framework for Languages (Council of Europe 2018) descriptive scheme (which reiterates the importance of an extensive use of the target language in the classroom: i.e., learning to use the language rather than just learning about the language as a subject) and the supported action-oriented approach (which puts the co-construction of meaning, through interaction, at the center of the learning and teaching process) actually aim at striking a balance between teacher-centered instruction and collaborative interaction between learners. And, in doing so, they admit that: "In the reality of today's increasingly diverse societies, the construction of meaning may take place across languages and draw upon user/learners' plurilingual and pluricultural repertoires" (CoE 2018, 27) and call out for a plurilingual and pluricultural competence (CoE 2009) in the place of the monolingual paradigm (Leung and Jenkins 2020).

## 3.4 Translation in CLIL

As pointed out elsewhere (Gaballo 2009b, 45), over the course of time, foreign language learning has been characterized by the continuous shifting of the focus on either language use or language analysis, the so-called pendulum syndrome, whereby "the pendulum has

swung back and forth between focus on language analysis and focus on language use with translation having a decreasing impact on foreign language learning as the pendulum swung towards language use" (Gaballo 2009b, 46). Whether we want to use the pendulum metaphor or prefer the Saussurean alternation between the emphasis on *langue* (the language viewed as a system) and the view of language as *parole* (the language which is actually produced in a specific context), the equation does not change as far as translation is concerned. Translation was considered either essential, e.g., within the frame of the grammar-translation method, or detrimental, as in the context of various communicatively-oriented approaches.

However, in recent years, an increasing number of pleas (e.g., Howatt and Widdowson 2004; Cook 2010; Laviosa 2014) have been made for a more balanced approach to the use of translation in FLT. Recent studies (Liao 2006; Fernández-Guerra 2014; Laviosa and González-Davies 2020) proved that both teachers' and learners' reactions to the use of L1 and translation in their language classes were positive. Translation is perceived as a necessary skill that learners need in their social and professional life in this globalized world (Campbell 2002). It helps them understand forms and contents of the source language text and increase their awareness of both SL and TL in terms of linguistic and cultural knowledge (Fernández-Guerra 2014).

While the role of translation as a fifth skill in FLT has been investigated thoroughly in the past decade, and studies have profusely spelled out the pros and cons of using translation in the language classroom, very few specific studies have analyzed the use of translation in CLIL classes at the tertiary level, most probably because EMI classes

prevail at such level, i.e., content (not language, or a mix of both) is the focus of the English-medium instruction at the tertiary level.

The few studies available, e.g., Dalton-Puffer (2017), report cases of translanguaging in CLIL classroom discourse whereby the function fulfilled is to scaffold language *for* learning in the L2 (academic language functions). This paper aims at focusing on the use of translation (Biel et al. 2019), rather than translanguaging (Li 2018; Lin 2019), in CLIL classes at the tertiary level, where translation is not simply regarded as a means (pedagogical translation), but as a goal in itself, achieved to co-construct knowledge.

## 4. Methodological framework

The first methodological issue to be addressed here is CLIL teachers' competence and, first of all, who teaches what in CLIL classes. As Mehisto et al. (2008) explained, the key aspect of a CLIL lesson is the idea of interwovenness of two elements (a subject and a foreign language), which implies, from both the content and language teacher's perspective, that some sort of educational convergence should be achieved. Elsewhere (Gaballo 2010), different variants of CLIL teaching were analyzed, e.g.: 1) a subject teacher, 2) a FL teacher, 3) a team of both, or 4) a teacher with dual education. While variants 3 and 4 would be preferable as they achieve greater balance between content and language, it is also worth noting how the coordination and collaboration work between subject teachers and FL teacher may become inoperable not only because of different teaching strategies and/or ineffective interpersonal relationships, but also because of costs.

In tertiary education, as Airey admits, "although the number of content lecturers teaching their subject matter in English is growing rapidly, few of their courses can be said to be CLIL courses, since language learning outcomes are seldom specified in the syllabus. In general, it appears that for CLIL to occur in a higher education context, language specialists need to be involved in some way" (Airey 2016, 77). However, Airey also suggests that team teaching "may be useful for a period of time with the goal of raising the awareness of language issues in content lecturers" as the ultimate goal is that of having "content lecturers taking responsibility for the development of both content and language" (Airey 2016, 78), whereas the notion of language experts teaching content is totally ruled out. Of course, the only possible comment is that, if a content lecturer and a language lecturer have both been trained in both language and content education, there is no reason why only one should be allowed to teach CLIL classes.

As a matter of fact, current trends show that universities, in order to further internationalize their campuses, are increasingly offering entire English-medium programs (EMI courses) without including any specific English language module/exam 'because all the subjects in the EMI programs are already being taught in English', thus failing to see not only the difference between teaching English and teaching a subject in English, but also the contribution that the analysis of the language used in context can bring to the understanding of the curriculum content. Recent studies have investigated about "the possibility of complementing the EMI experience with the assistance of a language expert to tackle language matters in the classroom" (Doiz, Lasagabaster and Pavón 2019), and also about "the fact that content EMI lecturers tend to avoid language

aspects, a weakness that could be overcome by boosting team teaching" (Lasagabaster 2018). Although "the number of studies available on this topic remains negligible" (Doiz, Lasagabaster and Pavón 2019, 153), researchers concluded that "universities should support this initiative [collaboration with language lecturers], as team-teaching is considered to be a very valuable resource by EMI lecturers despite some potential side-effects" (Doiz, Lasagabaster and Pavón 2019, 172). Actually, EMI lectures would lose their identity as "content lectures given by content lecturers through the medium of the English language", and the collaboration with language lecturers, if not merely instrumental, would turn EMI lectures into CLIL lectures to all effects, which is what both lecturers and students are demanding after all (Doiz, Lasagabaster and Pavón 2019).

The ideal CLIL teacher/lecturer is one that not only combines the functions of content and language expert, thus being ideally knowledgeable about both their content discipline and L2 teaching, but has also acquired some other key competences: 1) understanding of the theoretical underpinning of CLIL; 2) knowledge about teaching language, content and their integration; 3) lesson planning and pedagogy; and 4) intercultural learning (Brüning and Purrmann 2014).

The second methodological issue to be addressed concerns CLIL students' competence, and how they can achieve it in both content and language, including translation. This critical concept needs spelling out carefully. A very basic concept that can help is the idea of linguistic interdependence as depicted by Jim Cummins, according to whom two languages are like two separate icebergs. They apparently seem to be divided but, beneath the surface, they belong to the same large piece of ice (Figure 2). This submerged area is

what Cummins defines as the Common Underlying Proficiency (CUP), which means that knowledge of a language at levels higher than colloquial use, e.g. knowledge at a more academic level, provides the mind with resources to acquire a second language (and a third, and a fourth, etc.) because the skills that require greater cognitive efforts, such as reading-writing, content learning, abstract thinking and problem solving are common to all languages and use this area of knowledge.

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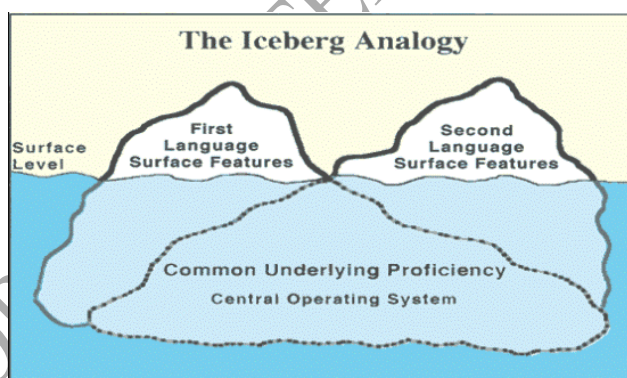----------------------------



**Figure 2.** Linguistic interdependence in FLT (Cummins 1984)[10]

This hypothesis fits nicely with recent findings from functional neuroimaging studies focusing on language processing in bilinguals (Sulpizio, Del Maschio, Fedeli and Abutalebi 2020), which confirm functional overlap between domain-general and

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[10] From the Wikimedia Commons, a freely licensed media file repository.

bilingual language control networks in language switching, and point to a shared neural network for L1 and L2 with few differences depending on the linguistic level. Particularly significant for our discussion is the comparison of the results for lexical-semantic processing in L1 and L2 (Sulpizio, Del Maschio, Fedeli and Abutalebi 2020, 846).

[…] The findings of a larger set of activated regions in L1 than L2, on the other hand, are rather unexpected, since previous evidence and reviews have usually reported larger networks for L2 than L1 (e.g., Abutalebi and Green 2007). On the basis of the present results, one possibility might simply be that word processing in an individual's native language is mediated by the access to a more sophisticated and richer lexico-semantic system, supported by a larger neural network. However, if this were the case, one would have expected the results not to be affected by L2 AoA. Since instead an extensive activation for L1 is mainly associated with simultaneous bilingualism or early experience with L2, an alternative explanation is needed. Specifically, the extensive L1-related activation might have two complementary reasons, grounded on the speakers' bilingual experience. First, the conceptual system might be shared across bilinguals' languages, and, when processing a linguistic stimulus, an early proficient bilingual would access the whole set of semantic features associated with that stimulus in the two languages (e.g., Kroll *et al.* 2010). Hence, by incorporating knowledge from two languages and cultures, the semantic system of a bilingual individual with extensive and long-lasting experience with two languages may be richer than

that of a monolingual. Second, in lifelong proficient bilinguals, each language possibly maintains full activation without interfering with the others because the extensive acquaintance with the two systems would allow the bilingual brain to organize the L1 and L2 knowledge in separate lexical spaces (Hernandez *et al.* 2005). This would reduce the level of lexical competition between languages, yielding a more efficient lexico-semantic mapping.

The findings above advance our understanding of the neural mechanisms involved in bilingual language processing, and confirm the interdependence of L1 and L2, which brings us to reconsider how we should help learners achieve and organize such knowledge of L2 that might resonate with their L1 so that they can activate both the shared semantic system and the separate lexical spaces.

What we need first of all is a reference model that will guide us to identify the competences learners need to perform in the vehicular language while carrying out real-life tasks in which they develop their discourse in the direction of the text types and subject genres related to their current or future professional lives in both their L1 and, of course, in the L2. Then, the model is to be turned into an operational map of individual learning instances that might address the above-mentioned need, as well as other needs emerging from the Needs Analysis (NA) conducted as a starting point of our curriculum or syllabus design.

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INSERT FIG 3 HERE

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**TARGET SITUATION ANALYSIS:** includes objective, perceived and product-oriented needs

**PRESENT SITUATION ANALYSIS:** estimates strengths and weaknesses in language, skill, learning experience

**DEFICIENCY ANALYSIS:** considers learners' present needs and wants

**STRATEGY OR LEARNING NEEDS:** includes subjective, felt and process-oriented needs

**MEANS ANALYSIS:** the environment in which the course will be run

**REGISTER ANALYSIS:** focuses on vocabulalry and grammar of the text

**DISCOURSE ANALYSIS:** investigates how sentences combine into discourse

**GENRE ANALYSIS:** focuses on the regularities of structure that distinguishes one type of text from another

**Figure 3.** Needs Analysis (adapted from Dudley-Evans and St. John 1998)

The concept of NA referred to in this study is the one proposed by Dudley-Evans and St. John and summarized in the building blocks represented in Figure 3. It has been chosen because it encompasses previous approaches and can be extended to host new needs and methodologies. As a matter of fact, it includes an all-encompassing rubric of indicators that may cater well to a NA applied to CLIL, but should still be complemented with more specific indicators aiming to address the needs of today's connected learners, i.e., the additional building blocks shown in Figure 4:

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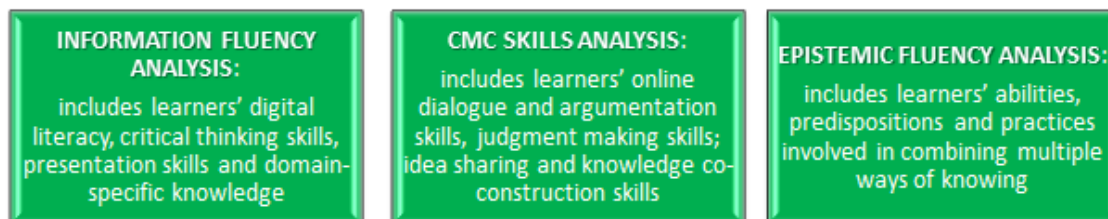
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| INFORMATION FLUENCY ANALYSIS: includes learners' digital literacy, critical thinking skills, presentation skills and domain-specific knowledge | CMC SKILLS ANALYSIS: includes learners' online dialogue and argumentation skills, judgment making skills; idea sharing and knowledge co-construction skills | EPISTEMIC FLUENCY ANALYSIS: includes learners' abilities, predispositions and practices involved in combining multiple ways of knowing |
| --- | --- | --- |

**Figure 4.** Additional Needs Analysis building blocks for networked learners (Gaballo 2014)

The information gathered from the NA is used to define program goals and help harmonize "CLIL's dual emphasis on disciplinary learning outcomes along with language learning" (Airey 2016); however, the definition of specific teaching objectives that also include translation and not only language learning can be better achieved by referring to the following CLIL/translation competence model (Figure 5) originally developed (Gaballo 2009) to fully describe the difference between language and translation competence.

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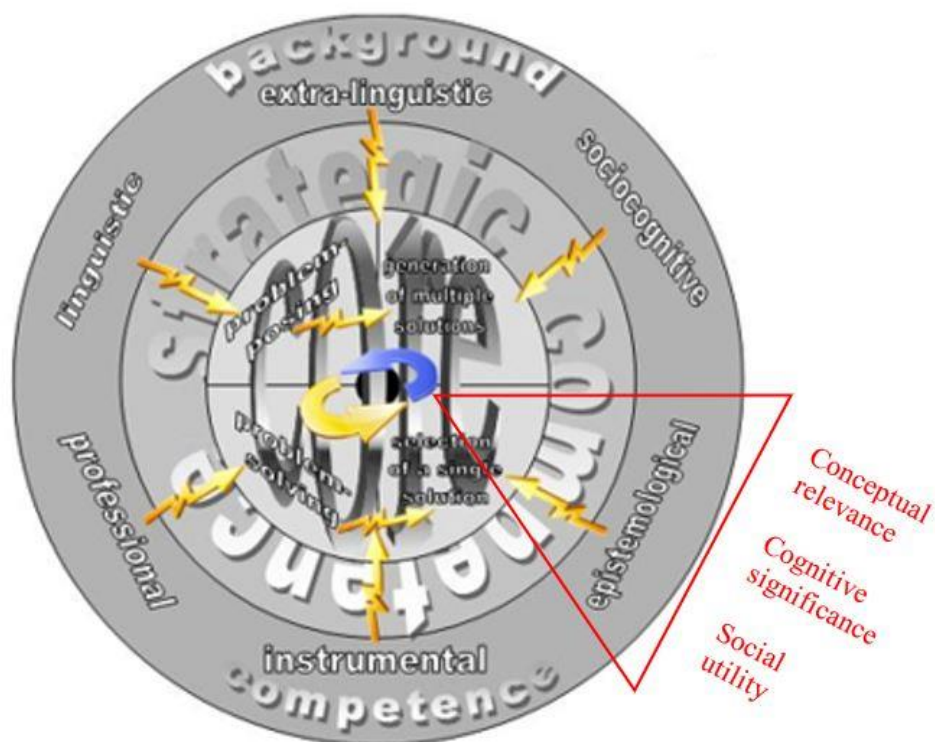
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**Figure 5.** CLIL/translation competence model (Gaballo 2009, 55) [Red signs added]

The model aims at creating a synergetic interaction of LGP competence, which is more likely to be targeted in the upper part of the background competences (i.e., the linguistic, extralinguistic, and socio-cognitive competences), and LSP/CLIL/translation competences which are more likely to address the lower part of the background competences (specifically, the epistemological, instrumental and professional competences). Attention is not focused on any of the elements in particular, but on the network of interrelationships that come into play.

To the purpose of this study, we will zoom in on the area of the competence model that will best offer food for thought, i.e., the epistemological competence.

Within the systemic-functional model above, the **epistemological competence** is a point of entry which provides the framework that explains how the subject is organized. It provides insight into its **conceptual relevance** (i.e., the facts, concepts, rules and methods typical of the subject), into its **cognitive significance** (i.e., the mental processes, motivations and attitudes developed through learning that specific subject), and into its **social utility** (i.e., the external relations, and contexts of use), and it informs the whole system. In CLIL, we need to analyze both subjects together, i.e., both the language and the content, in order to point out common features that might facilitate learning.

The analysis of the conceptual relevance will suggest how to organize the objects of teaching for both language and content, how to order them in their mutually useful logical sequence, and how to control the complexity of the ensuing system.

## 5. Pedagogical framework

CLIL pedagogy is most effective and engaging when based on interdisciplinary, real-world, open-ended problems that require cooperation between content and language lecturers, and between learners in small groups. Improving one's personal knowledge and competence is a task that can benefit from participation in collaborative knowledge building. And this applies to both lecturers and learners. A collaborative learning context is a complex learning environment in which "the shared goal, agenda and accountability, together with the need for achieving consensus through social negotiation when making

decisions, and the total interdependence of community/group members are all necessary conditions for the process of joint creation of knowledge to take place" (Gaballo 2017, 102).

An important part of mastering any intellectual discipline is grasping the relations among ideas (Bereiter 2002a); in CLIL, the content and language 'experts' are required not only to master their own intellectual discipline, but also to come to terms with their colleague's discipline using conceptual artifacts[11] to negotiate the shared goal and learning objectives in terms of conceptual relevance, cognitive significance and social utility, as mentioned in the previous section.

An example is drawn from the Master's Degree programme in Law and Innovation that was initiated last year[12]. The analysis of the conceptual relevance and cognitive significance of the broad subject/s 'law' and 'language' brought to the forefront one of the shared nodes for MA students in Law: 'contract law' and the 'language of contracts', whose social utility was apparent, as contracts pervade our entire life, as individuals, as groups, as countries.

The next step reflected how to organize the teaching and learning activities according to a CLIL pedagogy that incorporated translation as well. First of all, based on the individual syllabi of the modules in Contract Law and in Advanced English for Legal Studies (and their shared contents), the items of the individual competences (Figure 6)

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[11] "Conceptual artifacts […] are not limited as to subject matter and they include plans, problem formulations, proposals […], interpretations, and criticisms" (Bereiter 2002b).
[12] Reference is made to the Master's Degree programme in Law and Innovation first offered at the University of Macerata in 2019-20, which was attended by 10 students.

that were best for the law students to target were selected, with reference to the node «language & contracts».

Starting from the epistemological competence, the teaching contents were determined (in terms of concepts and methods of contract law and legal language) so that they could be most relevant and significant to learners in both systems, the linguistic and the legal system. Guided by the model, the facts, rules, and principles to be treated were selected; any non-equivalences between the systems were highlighted; finally, the methods of the integrated subjects were derived and the appropriate tools to be used were selected so as to deal with some conceptual issues, also by means of 'workshops for the production of knowledge' based on the idea of 'collective cognitive responsibility' advanced by Scardamalia (2002).

One of the main learning goals was the achievement of **epistemic fluency**, i.e., the ability to recognize and practice a culture's epistemic forms[13] to understand the different forms of expression and evaluation, and to take the perspective of interlocutors who are operating within epistemic frameworks. Here, the idea of epistemic forms by Collins and Ferguson (1993), coupled with Bereiter's (2002b) notion of conceptual artifacts, could be used to help students understand how they should be representing new knowledge within a professional culture.

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INSERT FIG 6 HERE

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[13] Epistemic forms are the target structures that humans use to construct knowledge and guide inquiry (Collins and Ferguson 1993).
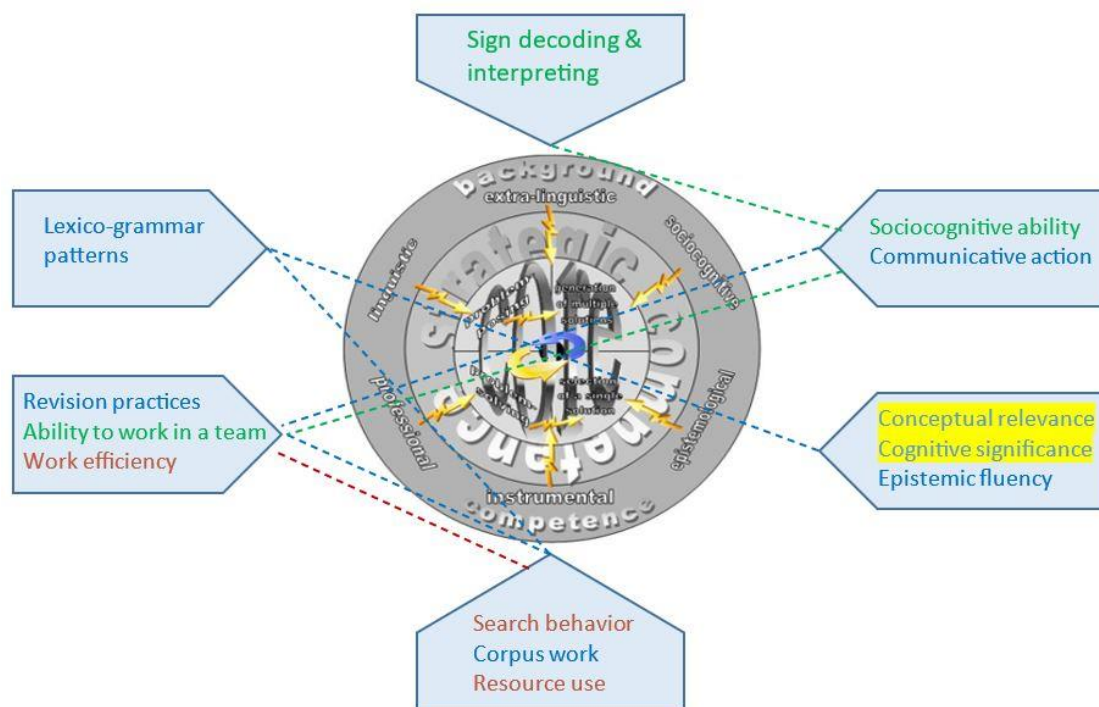
**Figure 6.** Language-&-content-focused skills for the nodes "language" and "contracts"

mapped on the CLIL/translation competence model (Gaballo 2009b)

So, for instance, the nature of contracts and their different types were studied from the

legal point of view, in both legal systems (civil and common law), and from the intra- and

interlinguistic perspective of both languages (own language and additional language).

Lexical-grammar patterns (such as collocations, colligations, semantic preference and

semantic prosody, or the study of modality) were examined and compared by working on

LSP comparable or parallel corpora (Biel 2010) that students learned to investigate, in

order to complete their translation tasks, which they revised individually, in small groups

and in the larger class group according to professional practices. The aim for learners was

to learn the semiotic artifacts typical of the legal cultures involved (Šarčević, 2000) and achieve competent communicative action (Gaballo 2009b), i.e., the ability for the self-reflective subject to justify action to those affected by it.

The integration of content and language involves learning to use language appropriately while using language to learn effectively. In this case, the former concerned the nature, concept, formation, variation, content and breach of contracts, while the latter focused on such linguistic functions as evidencing key concepts, using appropriate terminology, rephrasing, summarizing, and translating.

Language and translation are practiced seamlessly in this context. After identifying knowledge gaps and analyzing the collocational profile of the source language (SL) words involved, salient lexical patterns were revealed that guided learners to hypothesize possible equivalents in the target language (TL), whose collocational profiles were analyzed in turn in order to exclude any mismatch and choose the final match between the source and target languages and cultures (Katan and Taibi 2021; Tomozeiu, Koshinen and D'Arcangelo 2018).

Equally seamless with language and translation was also the study of the legal systems involved and application of digital technology to the legal contexts, used to enhance professional communication. Learners set forth their ideas and negotiated a fit with the ideas of others, using contrasts to spark and sustain motivation that led to deep rather than superficial learning, and knowledge advancement rather than depending on others to chart that course for them (epistemic agency). The online activities of document sharing, collaborative search and knowledge co-construction helped learners contribute to the

decision-making process and the completion of the task assigned (collective responsibility). While guiding and scaffolding the learning process, content and language lecturers provided support for theory construction and refinement, which was reflected in learners' improved epistemic fluency, and in the corresponding growth in conceptual content.

## 6. Final remarks

One of the major claims of CLIL proponents is its equal focus on content and language, and its providing positive language-learning outcomes with no negative effects on content learning. However, although the positive effect of CLIL on language learning outcomes has been confirmed in various empirical studies (e.g., Dalton-Puffer 2018), the training of content lecturers in educational methodologies in some countries is still being questioned. Higher education is still characterized by transactional modes of educational delivery (with the lecturer imparting information, in the traditional one-to-many communication model), rather than the interactional modes typical of CLIL (with the lecturer using process-oriented strategies, guiding learners as active participants and scaffolding learning, in a many-to-many communication model) (Coyle, Hood and Marsh 2010, 24). This might be one of the reasons why most of the courses taught in a foreign language (mainly English) actually fall within the category of English Medium Instruction (EMI) rather than CLIL, since language learning in such courses is often viewed as either a secondary goal or incidental (Airey 2016, 77-78). The problem is that

content lecturers not only tend to underestimate the role of languages and other semiotic resources in the teaching and learning of their discipline, they will also keep on failing to see the breadth and depth of their colleagues' discipline, if they keep on seeing it as boiling down to the four basic skills (reading, writing, listening and speaking).

The scales for mediation developed and validated by the Common European Framework of Reference for Languages (CEFR 2018)[14] can also apply to a CLIL setting. They include not only activities connected with the mediation of a text (in speech and in writing), but also activities that mediate concepts and communication when collaborating in a group or when there is an intercultural element involved. "The plurality, fluidity and in-betweenness of CLIL is what enables not only the production of creative learning solutions but also the collaboration of individuals from different fields and the convergence of diverse forms of knowledge" (Darvin, Lin and Lo 2020, 107). The discrete indicators provided for the individual activities can nicely complement those already in place for the assessment of learning outcomes and for the analysis of learning and tutoring processes (Gaballo 2014).

While CEFR 2018 only hints at the concept of 'translanguaging', framing it within the macro-category of plurilingualism ("Translanguaging is an action undertaken by plurilingual persons, where more than one language may be involved. A host of similar

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[14] CEFR 2018 – Mediation: In mediation, the user/learner acts as a social agent who creates bridges and helps to construct or convey meaning, sometimes within the same language, sometimes from one language to another (cross-linguistic mediation). The focus is on the role of language in processes like creating the space and conditions for communicating and/or learning, collaborating to construct new meaning, encouraging others to construct or understand new meaning, and passing on new information in an appropriate form. The context can be social, pedagogic, cultural, linguistic or professional.

expressions now exist, but all are encompassed in the term plurilingualism."), in CLIL, in spite of the initial 'entrenched monolingualism' (Hall and Cook 2012) where the L2 played the double role of language of communication and language of instruction, the use of 'translanguaging' is increasingly being observed in CLIL classes, with the same two distinct goals: to aid continuity in social interaction (i.e., as language of communication), and to scaffold meaning-making processes (i.e., as language of instruction). Translanguaging focuses on what Li Wei (2018) has called 'linguistics of participation,' as teachers and students participate in the co-construction of knowledge.

However, it is with collaborative translation that the process of shared creation best takes place: via a shared artifact, i.e., the target text that is being gradually completed out of a source text through peer negotiations, students can learn to relativize and look at issues from different perspectives, examining ideas that they may not have seen on their own (Gaballo 2009a).

Based on the considerations above, a wider, more inclusive definition of CLIL can be formulated: "Content and Language Integrated Learning (CLIL) is an educational approach aiming at the integration and harmonization of intra-/interlinguistic, digital and subject competences in order to develop both disciplinary and interdisciplinary knowledge."

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