

*Integrating content and language
in English language teaching
in secondary education:
Models, benefits, and challenges*

Darío Luis Banegas

University of Warwick, UK

Ministerio de Educación del Chubut, Argentina

d.l.banegas@warwick.ac.uk

Abstract

In the last decade, there has been a major interest in content-based instruction (CBI) and content and language integrated learning (CLIL). These are similar approaches which integrate content and foreign/second language learning through various methodologies and models as a result of different implementations around the world. In this paper, I first offer a sociocultural view of CBI-CLIL. Secondly, I define language and content as vital components in CBI-CLIL. Thirdly, I review the origins of CBI and the continuum perspective, and CLIL definitions and models featured in the literature. Fourth, I summarise current aspects around research in programme evaluation. Last, I review the benefits and challenges of this innovative approach so as to encourage critically context-responsive endeavours.

Keywords: CBI, CLIL, CBI continuum, CLIL models

Over the last two decades the integration of English language learning together with subject-matter content in formal education has received great interest in Europe and other parts of the world (Banegas, 2011; Coyle, Hood, & Marsh, 2010, p. 1; Dalton-Puffer, 2007, p. 1; Lyster & Ballinger, 2011; Moate, 2010, 2011; Navés, 2009, p. 22-23). This integration has given rise to two

broad approaches: (a) CBI (content-based instruction), and (b) CLIL (content and language integrated learning) (Dalton-Puffer & Smit, 2007, p. 7-24).

In this paper, I examine the central features of CBI and CLIL by looking at their components, definitions, models, underpinning rationale and implementation outcomes found in the literature under the light of sociocultural theory. I review the benefits and challenges of this so-called innovative approach (Kiely, 2011) so as to encourage critically context-responsive endeavours.

Sociocultural underpinnings in CBI-CLIL

A sociocultural theory perspective is usually developed to understand the relationship between learning, language, and content. Language is *the* mediating tool through which content and language are co-constructed in a learning environment (Moate, 2010). This integration could also become more complex when learners focus on language-focused talk as well as content-focused talk. It is through these interrelations that learners begin to engage in tasks which require complex language derived from curricular complex relations (Kong, 2009, p. 239-248).

However, a word of caution is advanced by Pica (2002). In a well-grounded empirical research study, the author sought to identify ways in which teachers modified interaction about content. Although integration may become successful when it responds to learners' interests, Pica states that a strong focus on meaning and function, an activity which may presuppose the overlook of form, could deprive learners of improving their language proficiency. What Pica (2002) fears is that language learning will be incidental and errors may never be corrected. In turn, this may affect learners as they will acquire new curricular content without receiving language feedback and support so that both components of the integration benefit from each other. If this does not happen, at some point, poor language development will block content learning.

When considering the links between sociocultural theory and second language acquisition, authors such as Lantolf (2000), Lantolf and Thorne (2006), and Warford (2010) assert that the human mind is mediated through physical and symbolic tools, such as language, which mediate the relationship between us and the objects of our experience. One example of mediation is teacher talk in interaction (Kong, 2009; Moate, 2010, p. 40-41; Short, 2002; Tasker, Johnson, & Davis, 2010, p. 130), which scaffolds the appropriation of scientific concepts, cultural knowledge, and linguistic knowledge (Barranco Pérez, 2007; Mohan, 1986, p. 2; Mohan & Slater, 2005). Gibbons (2002, p. 10) defines scaffolding as a special kind of help by which the teacher temporarily assists learners while they perform different tasks so that, in the future, they

can become autonomous and work on their own. Scaffolding can take the form of asking questions, activating prior knowledge, creating a motivating context, encouraging participation, offering hints, and feedback. It may also include adapting materials to respond to learners' needs (Guerrini, 2009, p. 74; Reiss, 2005, p. 6-8) while fostering students' higher order mental capacities and cognitive content engagement (Hall, 2010, p. 213; Kong & Hoare, 2011, p. 310; Lyster & Ballinger, 2011, p. 283).

Within CBI-CLIL, for example, Llinares & Whittaker (2009, p. 78-85) suggest that content could be scaffolded when it is linked to students' personal experiences, previous content taught in their L1, or through skills work in tasks (Mehisto, Marsh, & Frigols, 2008, p. 139-140). Along these lines, CLIL and CBI are examples of reversing the focus on language to urging teachers to attend to the role of content in scaffolding second language learning (Bailey, Burkett, & Freeman, 2010, p. 615). This assistance occurs in what is known as the zone of proximal development or ZPD (de Guerrero & Villamil, 2000, pp. 51-52; Mehisto, 2008, p. 109; Ohta, 2005, pp. 505-506). However, I believe that teachers need to ensure that scaffolding only acts as a safe net for the introduction of new content (Coyle, Hood, & Marsh, 2010). If the CLIL lesson is only reduced to the repetition of the L1 curriculum in another language, motivation and cognitive engagement may be threatened.

Last, Richards and Rodgers (2001, p. 204-215) agree with Larsen-Freeman (2000, p. 140) on the fact that people learn another language more successfully when they acquire information through it. Richards and Rodgers (2001, p. 215) also point out that CBI has two major goals: autonomous learning (cf. Wolff, 2003, p. 211-215), and the adoption of different roles by learners such as interpreter, explorer, source of content, and joint participant in content and activity selection. By advancing these aims, the idea that learning and teaching content and language should be seen as collaborative work between educators and learners is once again established on solid ground.

Defining Language in CBI-CLIL

In this section I outline what is usually meant by *language* and *content*, an enterprise which could be rather difficult (Davidson, 2005, pp. 220-221; Hermann, 2008). On the language side and illuminated by sociocultural theory, most researchers (Cammarata, 2009, p. 561-562; Coyle, Hood, & Marsh, 2010, p. 37; Creese, 2005, p. 190; Kong, 2009, p. 234; Mohan & Slater, 2005, pp. 153-155) agree that language plays a functional role in CBI-CLIL because it serves as a medium to learn a school subject embedded in formal education. In effect, language is seen as a conduit for communication and for learning (Coyle,

Hood, & Marsh, 2010, p. 54). This functional view of language is associated with the concept of communicative competence (Hymes, 1972), which has been further developed in relation to CLIL by several authors (Brown, 2007, p. 218-222; Dalton-Puffer, 2009; Davidson, 2005, p. 220; Lotherington, 2004, p. 707; Nunan, 2004, p. 212; Savignon, 2007). It entails the learning of new discourses, such as mathematical discourse (Hofmannová, Novotná, & Pípalová, 2008, p. 23). Bentley (2010, p. 11) proposes that learners should know content-obligatory language and content-compatible language to cater for the difference between subject-specific and general discourse. In my view, such a suggestion seems to respond to content-driven approaches (see pp. 119-121) as students' content knowledge will be prioritised in their assessment.

In connection with discourses and a functional view of language, Coyle (2007b, p. 53) developed a Language Triptych to represent how language may be progressively learnt and used through interrelated perspectives. One perspective is *language of learning*, that is, the learning of key words and phrases to access content. Secondly, *language for learning* focuses on the language students will need to carry out classroom tasks such as debating, or organising and presenting information. Last, *language through learning* makes room for unpredictable language learning as it is concerned with new language emerging from the cognitive process students are engaged in. All in all, the triptych offers both a focus on form (cf. Spada, 2010) and a focus on meaning. This means that a lesson can be enriched if students not only identify tenses and how grammar patterns work but, simultaneously, put those grammatical items to meaningful use by learning content about other school subjects, for instance. Grammar may still be taught incidentally and explicitly depending on contextual circumstances and also recycled and assigned true meaning by inviting students to embed content into words. However, teachers and students sometimes suspect that language learning may only benefit those students who have received EFL instruction or private lessons through a more grammar-oriented or coursebook-driven approach (Banegas, in press). In this sense, CLIL may be seen as elitist as it only benefits those who already know the language to some extent.

Defining Content in CBI-CLIL

Content may be identified with nonlanguage subjects or scientific disciplines (Wolff, 2010, p. 103) "packaged in some way" (Morton, 2010, p. 98). Such a feature, however, may be hard to achieve. For example, Rogers (2000) criticises content-basics adherents for not defining the type and quantity of content to be explored. This position demands active and independent in-

volvement of teachers and school authorities interested in developing an adaptable curriculum for the integration of content and language (Wolff, 2010, p. 104-107). After all, the essential feature of CBI-CLIL should be that the content addressed truly emerges from students' L1 school curriculum.

Barwell (2005, pp. 143-144) suggests the use of *subject area* instead of content since the latter could be merely seen as the product of contextualised teacher-learner interaction. His view is that content may be perceived as an external entity detached from the language which may lead to no language exploration. He also argues that if language is only the medium of instruction, not only is its status diminished in the integration, but also a rather false message can be conveyed: That language is devoid of content. If this view is strengthened, then language learning will be merely incidental (Langman, 2003, p. 4). Paz and Quintero (2009, p. 28) assert that language *is* content and its content is grammar, phonology, semantics, and skills development. Perhaps these fears could be minimised by the discursification of language in the sense that language, even when it plays a functional role, could be taught by looking at how specific discourses are constructed.

In a similar vein, Mohan and Slater (2005, p. 155) admit that defining content and language from the point of view of integration is debatable. They solve this intricacy by resorting to a functional view of language as it offers a broader perspective where meaning, functions and context are considered. The authors add that while content is the meaning of a discourse, such as science discourse, language is the wording of a discourse. This view requires that learners need to understand what is being meant, a school subject or curricular content, and on the other hand, how that meaning is worded in language, thus offering learners the possibility of paying close attention to how a language works.

Last, Coyle, Hood, & Marsh (2010, p. 42, 53) stress that language learning with its focus on form and meaning should not be reduced to incidental or unplanned grammar. With this position in mind they stress that content, initially related to a discrete curriculum discipline, needs to be seen as beyond knowledge acquisition. For these authors, content is related to cognition, thus, we should also see it as skills development and understanding which leads to student-generated knowledge.

In sum, language may be viewed as a scaffolding tool, with its own content as a system, which can be used to express functional meanings, such as narrating, describing a process, comparing sources, expressing opinions, or exchanging information. Conversely, content is an abbreviation of curricular content from subjects such as History, Geography, Biology, or Economics among others. However, content should also include language as a system of subsystems, as an object of study positioned in systemic functional linguistics. CBI and

CLIL feature different combinations of these two components. What may link both language and content is discourse in the sense that this latter will dictate what will be learnt and through which specific subject-related discourse. However, what specific contents may be used is not clear-cut (see pp. 123-126).

Content-Based Instruction

CBI is distinguished by its dual commitment to language and content learning objectives (Stoller, 2004, p. 261). In general terms, the roots of this dual commitment to language and curricular content take us back to the Canadian immersion programmes in the 1960s (Ramos, 2009, p. 172). At the time and even during the 1970s and 1980s, Canada implemented a French immersion project throughout schooling so that English-speaking learners could learn French by studying curricular subjects in French. Stryke & Leaver (1997, p. 270) define CBI as an approach in which language proficiency is achieved by focusing on learning curricular subject-matter through the language to be learnt. Following this same stance but broadening the scope, Brinton, Snow, and Wesche (2003, p. ix) view CBI as the concurrent study of both language and subject matter, where the content material will dictate how language will be sequenced and therefore presented.

In countries such as Canada and the USA, CBI has gained popularity as the demographics of second language student populations are changing dramatically due to the arrival of non-English-speaking migrants into English-speaking communities thus putting pressure on educational systems (Dalton-Puffer, 2007, pp. 1-2). This phenomenon of transnationalism is impinged upon by socio-political circumstances such as the seeking of job opportunities, political asylum, or living standards (Ramos, 2009, pp. 169-170). Therefore, these new learners are placed in mainstream classrooms where subject-matter is instructed in English so that they learn both simultaneously (Cammarata, 2009, p. 561; Crandall, 1993; Stoller, 2004, p. 262; Wesche, 2001). CBI has been implemented throughout the whole Canadian educational system as newcomers are found in primary, secondary, as well as university education (Swain & Johnson, 1997, p. 1).

Content and Language Integrated Learning

Originated and developed in Europe, (Dafouz & Guerrini, 2009; Lorenzo, Casal, & Moore, 2010, p. 436; Wolff, 2007, p. 15-16), CLIL can be traced to the German-Franco programmes' interest in bilingualism and supranational education (Lorenzo, Casal, & Moore, 2010, p. 419). In 1994 David Marsh intro-

duced the acronym CLIL (Eurydice 2006, p. 8; Lucietto, 2008, p. 29). CLIL is an approach in which various methodologies are used to achieve a dual-focused form of instruction in language and content. Furthermore, CLIL researchers use the term *umbrella* and several definitions (Costa & D'Angelo, 2011; Haataja, 2007a, p. 9) to refer to the curricular variations prescribed in Europe (Bentley, 2010, p. 5-7; Dalton-Puffer, Nikula, & Smit, 2010; Lorenzo, Casal, & Moore, 2010, p. 419; Marsh & Wolff, 2007).

Marsh's generic concept was welcomed by the European Union. The Council of Europe has included CLIL projects in its medium-term programmes due to the interest in developing the plurilingual competence of their citizens (Dalton-Puffer, 2007, pp. 1-2; Marsh, 2002) through intercomprehension, interculturalism, and plurilingualism (de Carlo, 2009; Sudhoff, 2010). This plurilingual competence may be developed through a framework which facilitates the interrelationship between subject-matter knowledge and language knowledge through communication, culture and cognition (Coyle, 2006; Pérez-Vidal, 2009, pp. 8-9); or as Coyle (2007a, p. 551, 2007b, p. 51) puts it, through a philosophical stance which has given rise to her practical and overarching 4Cs framework integrated by content, communication, cognition and culture where these four are holistically considered in various models. However, Dalton-Puffer (2011) argues that most international implementations are in English and therefore it would be better to speak of CEIL (content and English integrated learning) instead of CLIL.

CBI-CLIL as a Continuum of Models

Both CBI and CLIL offer multiple models and approaches which could be seen as a continuum which goes from a focus on foreign or second language learning, at one end, to a greater interest in curricular instruction through an L2, at the other end. The proposal of a continuum (Table 1) was initially suggested by Met (1999) and then expanded by Brinton, Snow, and Wesche (2003; see also Hernández Herrero, 2005; Wesche & Skehan, 2002, pp. 207-228).

The CBI-CLIL continuum signals that there is no single pedagogy or model for integrating content and language (Coyle, Hood, & Marsh, 2010, p. 86; Ruiz-Garrido & Fortanet-Gómez, 2009, pp. 180-181). Coyle, Hood, and Marsh (2010, p. 14-26), for example, paint a clear and concise picture of general curricular models across educational levels and countries. In secondary education in particular, these authors suggest five models: dual-school education, bilingual education, interdisciplinary module approach, language based projects, and specific-domain vocational CLIL. While the former models stress the content side, language-based projects are different as it is the language teacher

who teaches new content in the EFL lesson. They all testify that we may shape CLIL according to contextual needs, resources and aims (Marsh, 2008, p. 236). Furthermore, they all confirm that to expect an approach to deal with content and language on equal terms is simply an illusion.

Table 1 Continuum of language-content integration (adapted from Met, 1999)

Content-driven	Language-driven
Content is taught in L2.	Content is used to learn L2.
Content learning is priority.	Language learning is priority.
Language learning is secondary.	Content learning is incidental.
Content objectives determined by course goals or curriculum.	Language objectives determined by L2 course goals or curriculum.
Teachers must select language objectives.	Students evaluated on content to be integrated.
Students evaluated on content mastery.	Students evaluated on language skills/proficiency.

This continuum has proved useful as it covers all the different curricular models used for language-content integration in countries such as Canada, China, England, Japan, Spain, or the USA (Ballman, 1997, p. 174-175; Butler, 2005, p. 229; Cammarata, 2009, p. 561; Johnson, 2008, p. 172-173; Kong, 2009, p. 234; Rodgers, 2006; Ruiz de Zarobe, 2008, p. 61-62). Met's continuum has been used to describe the range of settings that CBI, CLIL or CBLT (content-based language teaching) entail (Lyster & Ballinger, 2011, p. 280). This encompassing view has impacted on several countries due to the fact that its broadening scope has attracted an international interest (Banegas, 2011; Bebenroth & Redfield, 2004; Stoller, 2004, p. 293) in implementing content-language integration projects such as GLOBE (Kennedy, 2006) at all educational levels.

Following a sociocultural perspective, it may be suggested that in language-driven approaches, content may be seen as a mediating tool for language learning. Brinton, Snow, and Wesche (2003, pp. 14-15) place theme-based instruction as one curricular model which could be implemented in educational contexts where nonlanguage teachers are not in a position to teach in the L2. Theme-based instruction then occurs within the ESL/EFL or any other target language course and though the context is given by specific content areas, the focus of assessment is on language skills and functions (Lorenzo, Casal, & Moore, 2010, p. 421; Navés, 2009; Yassin, Tek, Alimon, Baharom, & Ying, 2010, pp. 47-48). A theme-based course is structured around unrelated topics which provide the context for language instruction. This model bears some resemblances to cross-curricular projects (Harris, 2008; Savage, 2011, pp. 404-442) and also to *English across the curriculum*, where language teachers may work together with a content teacher on a particular topic. In East

Asia and South America, for example, the purpose of theme-based instruction is to provide students with meaningful input so that they can develop a more encompassing use of their English through cognitive engagement (Banegas, 2011; Butler, 2005, p. 234; Kong & Hoare, 2011). Nevertheless, one of its drawbacks is that teachers do not generally follow a set of themes derived from one curricular subject. Instead, they address themes from Biology, History, Culture, and Geography among others, thus offering small content blocks (Rogers, 2000). Furthermore, this may create confusion as the boundaries between a traditional topic-based approach and a CLIL approach appear unclear and teachers may believe that CLIL is another buzz term for something they have done before (Banegas, in press).

Other language-driven approaches may include the adjunct model and language for specific purposes. The adjunct model (Met, 1999) combines a language course with a content course. Both courses share the same content base and the aim is to help learners at university level master academic content, materials, as well as language skills. A similar stance is evidenced in the language for specific purposes models (Ruiz-Garrido & Fortanet-Gómez, 2009).

Conversely, content-driven approaches may be said to utilise language as a mediating tool for content learning. Content-driven approaches may include single or dual, semi or total immersion (Dalton-Puffer, 2007; Grabe & Stoller, 1997, p. 80), bilingual education, and translanguaging, that is, the ability of multilingual students to shuttle between languages while treating them as an integrated system (Canagarajah, 2011, p. 401; Creese & Blackledge, 2010). The sheltered-content approach also belongs to this group as it consists of a content course taught by a content area specialist in the target language using authentic materials (Rodgers, 2006, p. 373-375).

Secondary schools in the Basque country have implemented CLIL in order to promote bilingual education, a content-driven approach, par excellence. As part of a longitudinal project seeking to investigate whether CLIL leads to faster foreign language learning among teenage learners in secondary education in the Basque country, Ruiz de Zarobe (2008, p. 63) describes three linguistic models to ensure that Spanish and/or Basque are learnt in those schools which adopt CLIL:

1. Model A: All subjects, apart from the Basque language and literature and modern languages, are taught in Spanish.
2. Model B: Both Spanish and Basque are used to teach all subjects.
3. Model C: All subjects, except Spanish language and literature and modern languages, are taught in Basque.

The models outlined by Ruiz de Zarobe (2008, p. 63; also Lasagabaster & Ruiz de Zarobe, 2010) could be compared to three models proposed in Poland

which may be instantiations of the interdisciplinary and language-based project models. According to Łuczywek (2009, pp. 45-47), schools can choose from:

1. A monodisciplinary model: Teachers work together to choose a topic to be addressed by the foreign language teacher in her class. Even though all teachers cooperate, the language teacher explicitly integrates foreign language and subject-matter.
2. A multidisciplinary model: Teachers choose a topic which will be addressed by each subject teacher including the foreign language teacher. Although this model provides a broader view of the content chosen, it requires good team teaching work.
3. An interdisciplinary model: It requires more planning as it is thought as a set of lessons started by one subject which introduces the chosen topic. As lessons progress, each teacher builds up on what learners already know to provide them with a holistic understanding of the topic in focus.

Conversely, Vázquez (2007, pp. 99-100) seems to blur the boundaries between bilingual education and CLIL and outlines five different bilingual/CLIL models currently found in German secondary schools. First, the classic model or full CLIL is a continuing bilingual programme through subjects such as History and Geography which are taught in English. Its aim is related to the job market and bilingualism through an emphasis on subject-matter instruction. This model may be compared to its counterpart in the Netherlands where a maximum of 50% of the total number of lessons may be taught in English or any other target language (Roza, 2009, p. 130). The short-term CLIL model, on the other hand, is carried out during a specific period of time through certain subjects. Thirdly, the bilingual models and the bilingual projects models can be placed close to the language end of the continuum since language classes adopt theme-based units of work in which subjects and topics vary and, in fact, attempt to integrate more than two curriculum areas. Last, and perhaps the most innovative in terms of how languages are used, the foreign language integrated model seeks to integrate L1 and L2 through nonlanguage classes which are taught in German but whose preferably authentic texts and materials are in the foreign language.

One more explicit model which falls under the first model found in Germany is the three-directional model proposed by Ramos (2009, pp. 174-179). This model is closely linked to the German classic model as it is addressed to teachers who teach their nonlanguage subjects in English. Therefore it is curriculum-driven and text-based, which could be associated with bilingual education or interdisciplinary models (Coyle, Hood, & Marsh, 2010). The model suggests three directions: horizontality, verticality, and diagonality. The first direction is concerned with how the lesson is structured. Verticality, the second di-

rection, is realised by the task of including in each stage the vocabulary, grammatical patterns and learning strategies the teacher has set as objectives. In other words, the model emphasises the importance of cohesion as each aspect of the lesson is recaptured and revitalised in a dynamic process. The last direction Ramos' model proposes is that of diagonality. This direction is intimately linked with the teaching discourse of explicitly telling learners what goals have been achieved at the end of each stage and the goals to be pursued in the coming stage. In conclusion, this model may be similar to any other model or approach within the communicative language teaching realm.

While CLIL in the Basque Country and Germany appears to be closely attached to the school curriculum, Poland offers, on the other hand, models which aim at a more complex integration through projects. While the first two countries mentioned offer a more systematic and organised approach which favours the instruction of content *through* a foreign language, Poland, in contrast, presents a less structured approach which is more concerned with language, thus subtly implying that content is an excuse for collaboration and projects across the school curriculum. Whatever the model, they are all based on a sociocultural perspective as the view that content will motivate learners to learn another language is paramount.

However, this whole array of models which seem to stress the perception that CLIL is a suit for all seasons (Costa & D'Angelo, 2011) may also be a shortcoming for CBI-CLIL education. It may give the impression that anything that deals with a certain type of content may be called CLIL (Marsh, 2008, p. 244). This perception may be clarified if we agree that the content involved should match the students' L1 curriculum rather than a random selection of topics which may bear distant or false connections with curricular content in a given educational system.

CBI-CLIL Research in Programme Evaluation

CBI-CLIL multiple models have given rise to a growing interest which can be found across countries. According to the Eurydice Report (2006, p. 20), most countries offer CLIL in secondary education. This report shows that between the years 2004 and 2005, most countries offered CLIL in mainstream secondary and, in second place, primary education as a result of imposed educational policies. Dalton-Puffer and Nikula (2006) observe that CLIL has become a common practice in many European countries as primarily reported by practitioners describing or researching their own classroom experiences in an experimental quantitative paradigm in countries such as Austria (Dalton-Puffer, 2007; Dalton-Puffer, Hüttner, Schindelegger, & Smit, 2009; Gierlinger, 2007),

Finland (Haataja, 2007b; Nikula, 2007; Seikkula-Leino, 2007), Italy (Favilla, 2009; Lucietto, 2008), Belgium (Chohey-Paquet & Amory-Bya, 2007), Hungary (Várkuti, 2010), Poland (Loranc-Paszylk, 2009), Portugal (Costa & Godinho, 2007, p. 70), Spain (Halbach, 2009; Lasagabaster & Sierra, 2010; Lasagabaster & Ruiz de Zarobe, 2010; Llinares & Whittaker, 2009; Lorenzo, Casal, & Moore, 2010; Monte & Roza, 2007) and Sweden (Airey, 2009) among others.

In the year 2010, Lorenzo, Casal, and Moore (2010) published a large-scale evaluative study from a curriculum perspective which took place between 2007 and 2008. The authors were concerned with CLIL and its potential for positive cognitive gains, especially to what extent CLIL learners could increase their linguistic and competence levels compared to their mainstream peers, their use of L2, and the effects of CLIL in the wider educational context. Data were collected through questionnaires to given 2,300 participating learners and parents, recorded structured interviews of coordinators, and tests administered to bilingual and control learners so as to assess language competences. Results showed that the CLIL learners outperformed the control groups in all four language skills in the four foreign languages under consideration. According to the authors, this may also be due to the motivational processes behind CLIL classes as compared to the mainstream. As regards how input was made comprehensible, teacher questionnaires showed that while content teachers tended to use the L2 for content, language teachers would use it for feedback and evaluation. However, both types of teachers coincided in the use of the L1 when dealing with problems or for the telling of anecdotes.

Nonetheless, the study was criticised by Bruton (2011a, p. 240), who accused the authors of wanting “to demonstrate that CLIL is necessarily a positive route” to raise foreign language learning curriculum standards. According to Bruton (2011a), the study failed to provide valid results between CLIL and non-CLIL groups as pretests, extra CLIL support and differences in status were not disinterestedly addressed. This is not the first time that Bruton becomes critical of research articles on CLIL and suggests that CLIL programmes are elitist. In Bruton (2011b), the author also warns that CLIL research and results are presented in such a way that they appear positive and encouraging when, in fact, researchers may select only those data which demonstrate the hypothesis that CLIL is more effective than regular EFL lessons. In my view, Bruton’s observations are correct as Lorenzo, Casal, and Moore’s (2010) limited consideration of participants’ exposure to English, and student and teacher motivation in synergy as a result of advertised curriculum innovation may be the underlying drive. Despite these research shortcomings, Lorenzo, Casal, and Moore’s (2010) study could still be considered foundational since it provides a picture of what teachers do in their classrooms when policies are implemented.

Challenges behind CBI-CLIL

When CLIL models, for example, are the result of top-down policies and curriculum initiatives, we need to accept that they carry benefits as well as challenges which may emerge from research interested in CLIL programme evaluation. Based on Mehisto and Asser (2007), Mehisto (2008, pp. 99-100) notes that one of the issues to address is the lack of knowledge stakeholders have as regards aims. In order for administrators to implement CLIL programmes and multiple models, there must be serious needs analysis (Butler, 2005, pp. 233-236; Ruiz-Garrido & Fortanet-Gómez, 2009) to be carried out before all actions actually begin. In my view, all models need to be inductively implemented as it may be the best way to ensure that implementations are the product of contextual conditions. Context-responsive CLIL pedagogies entail that stakeholders are aware of the conditions offered and required in each educational setting.

Lack of awareness or knowledge among administrators can also be found among those who are in charge of implementing CLIL: teachers. Teachers sometimes do not know what is expected from them especially when CLIL means putting content and language teachers working together. In effect, teachers need to come to terms with the models outlined above but only as a framework from which they can develop their own initiatives depending on their level of institutional autonomy. For instance, Mehisto (2008) found out that those CLIL classes which were only taught by content teachers featured second language support mostly through unnecessary translation. This also led to the discovery that teachers saw themselves as either content or language teachers, a view which affected team teaching or a full integration of components. This reticence was found even in teachers' unwillingness to incorporate materials coming from content or language classes. Overall, the author suggests that team teaching is one of the major drawbacks in CLIL (see also Cammarata, 2009, pp. 569-574; Coonan, 2007; Coyle, 2007b; Coyle, Hood, & Marsh, 2010, p. 44; Feryok, 2008; Mehisto, Marsh, & Frigols, 2008; Yassin, Tek, Alimon, Baharom, & Ying, 2010). What I put forward is that in those situations where team teaching is still expected, this may occur between EFL teachers by strengthening collaborative planning and materials development within the EFL teaching staff.

More teacher-related concerns are reported in Pena Díaz & Porto Requejo (2008) as part of a research project following the implementation of bilingual-CLIL programmes in 150 primary schools in Madrid. In order to understand the factors which impinge on CLIL teachers' practices in this setting, an unspecified number of teachers were interviewed following structured questionnaires. Results showed that teachers believed their practices could be enhanced should they develop a more proficient command of English, a con-

cern also reported in Pavón Vázquez and Rubio (2010, p. 51) and in Butler's (2005, p. 236) study, which adds that teachers' lack of content and language knowledge affects CLIL success. In other words, teachers may equate CLIL success with their own level of English and curricular content understanding. Surprisingly, given the fact that the participants in Pena Díaz and Porto Requejo (2008) lacked formal training on bilingual education methodologies, they considered they did not need that type of theoretical training. They expressed their reliance on working with content teachers and the practical knowledge, not defined in the article, of their subjects. Put simply, another concern which is recurrent across contexts is how to organise pre-service and in-service teacher education programmes which could also contemplate CLIL settings as possible sources of employment for future teachers.

Mehisto's (2008) article also includes a review of interviews with teachers who were asked about what factors helped achieve CLIL programme success. Among the factors mentioned, training opportunities, support by immersion centres, and teaching materials were ranked in that order as regards their central importance in CLIL programmes. Addressing such factors is paramount for quality assurance in CLIL (Coyle, 2007). However, when school managers were interviewed, they admitted that these factors were rarely met. Such inaction caused distress as well as further resistance to innovation among teachers. This fact should remind us of what happens when implementations occur from the centre to the periphery where the implementers, that is, the teachers, are not fully equipped by adopters and suppliers (Waters, 2009, p. 437). Nor is there development of CLIL teacher training programmes, content materials or instructional resources (Ruiz de Zarobe, 2008, p. 62; Lyster & Ballinger, 2011, p. 286). However, in Germany, universities have started to offer an additional CLIL teaching qualification, a trend which could be imitated by other countries (Vázquez, 2007, pp. 102-103).

Nonetheless, I sense that most of the concerns outlined above stem from the fact that it may not be clear what CBI-CLIL models entail and how they differ from task-based learning, a topic-based syllabus, or international coursebooks which usually feature reading topics or sections about general knowledge or culture. As I have suggested above, it is my view that the broad scope of CBI-CLIL models may act to the detriment of the models themselves as teachers may come to the conclusion that as long as there is 'some content' involved, they can call whatever they do CBI or CLIL within a language-driven perspective. Thus, it may be necessary for CBI-CLIL proponents to redefine what contents are expected to be used. In my own opinion, I suggest that the content component of CBI-CLIL should be closely connected to the school curriculum whatever the model.

With reference to materials, Ballman (1997, p. 183-184) claims that publishers need to produce coursebooks which are related to learners' lives in their contexts. Nonetheless, this suggestion is incompatible with CBI-CLIL spirit as contents should match the context and curriculum of implementation and, therefore, I suspect that publishers, especially in this era of the global coursebook, may not be interested to localise their international coursebooks to match the national curricula in every setting. This would call for an extreme diversification which implies huge investment and little profits. It has also been suggested that teachers engaged in content-driven models may use textbooks for native speakers to teach subjects such as History. The drawback of these materials is that they will not match other curricula than those of the native student. It cannot be expected that a History book produced for British students could possibly respond to the Argentinian school curriculum, for example. British History is studied by British students. Argentinian History is studied by Argentinian students.

This lack of CBI-CLIL materials implies greater workload for teachers (Alonso, Grisaleña, & Campo 2008, p. 46; Cammarata, 2009, p. 562; Coonan, 2007, p. 628; Maley, 2011, p. 391; Moore & Lorenzo, 2007, pp. 28-35; Mehisto, Marsh, & Frigols, 2008, p. 22; Ricci Garotti, 2007, pp. 134-135; Vázquez, 2007, p. 103). However, it is teachers in Argentina, Spain, or Poland who truly know what their school curricula contain and, therefore, they are in the best position to develop curriculum-responsive materials which could supplement other international materials. What I observe is that this challenge is, in fact, an opportunity for teachers to become autonomous, less market-dependent, and developers of their own CBI-CLIL materials. I suggest that teachers may produce their own materials in collaboration even with their students to ensure that topics, sources, and activities are relevant and motivating in both students (Huang, 2011) and teachers' eyes and in response to the L1 curriculum.

Another cause of disjuncture among teachers is the issue of examinations (Serragiotto, 2007). While CLIL, in theory, looks at language and content holistically, national exams are solely focused on content, creating a fracture in the system. In other words, while the educational process has one set of aims, examinations are guided by a different agenda, as it were. With reference to this concern, to my knowledge, there are no research studies which investigate complete teaching and learning processes so as to see what principles and decisions are to be found in classrooms. The point I am advancing here is that there is a timely need to investigate classroom practices which evidence what teachers do from introducing new content and language topics until assessment is carried out and what materials scaffold these processes.

Lack of knowledge of what CBI-CLIL entails can also be found among students. For example, Mehisto (2008) observed that out of 37 classes only a few featured what the aims, outcomes and themes were, thus affecting learners' achievement as they did not know what was really expected from them and how this programme actually differed from a more traditional approach. However, this side of CLIL has not been further explored. In fact, International CLIL Research Journal has several examples of reports and quasi-experiments in which learners voice their happiness but seldom their less happy experiences. Another negative aspect or, as Vázquez (2007, p. 106) puts it, less positive point, is parents' resistance to accept English as the first language. Given its dominance in the CLIL scene, this feeling may be provoked by the tendency to explore CLIL through English only (Dalton-Puffer, 2007, p. 1), which in turn reveals that all the so-called plurilingual initiatives have been nothing but plans and intentions.

From a research perspective, the lack of rigor may affect how CLIL is overall evaluated. Because of the design of some research, CLIL education may be perceived as elitist since, sometimes, the best learners from mainstream classes are placed in CLIL classes. This, needless to say, may skew possible research results, for learners have achieved good levels of performance both content and language-wise before starting CLIL. This fact also reveals a need to study classrooms in which learners have not been placed according to their foreign language performance or overall academic grades.

As Mehisto (2008) rightly claims above, stakeholders, especially school managers, must exercise a prominent role when CLIL is adopted as a result of a top-down process. In that case, one of the challenges which school managers are not ready to explore is faculty development which assists both subject and language teachers so that they collaboratively teach subject-matter they have not been initially trained for. If this is not achieved, content teachers, who usually lack linguistic expertise (Vázquez, 2007, p. 106), may tend to stress content and neglect both language learning and the language teacher (Kong, 2009, p. 236; Creese, 2005, p. 194). In these situations, a CLIL coordinator can act as a liaison among learners, parents and content and language teachers (Pavón Vázquez & Rubio, 2010, p. 54). I believe that a CBI-CLIL coordinator may be in charge of ensuring the proper balance in content and language supported by methodologies and materials which help construct this integration, especially when teachers may find it difficult to team teach.

Conclusion

Approaches which promote the integration of curricular content and foreign/second language learning offer a sound theoretical background com-

ing from varied disciplines and academic spheres. In addition, CBI-CLIL offers models, curricular variations and a continuum which highlights the fact that institutions may opt for content-driven as well as language-driven implementations. However, we should stress that several of the implementations and innovative explorations within CBI-CLIL tend to be imposed on teachers as part of large-scale educational policies. Reports, in addition, solely focus on the benefits of these approaches thus creating a rather incomplete picture of how these realisations operate in practice without deeply voicing all stakeholders' views. This calls for an agenda which truly integrates policy and curriculum perspectives as well as top-down and bottom-up explorations.

These aspects appear to point towards the need for contextualised practices. Although CBI and CLIL were originally the result of context-responsive answers to emerging situations in Canada, the USA or Europe, other countries have started to embrace CBI-CLIL as an innovative approach in their quest for a revitalisation of the communicative approach. What is needed then is the creation of spaces in which CBI-CLIL is examined within a particular context of culture where teachers play a significant role as they are crucial in any educational change. CBI-CLIL offers new avenues for exploration, but these avenues have to be based on thorough needs analysis in which all stakeholders are involved and in strict response to students' L1 curriculum.

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