

# Translation is not Enough - the Need for Pedagogical Adaptation in CLIL Textbook Development

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Received: 15 November 2015 / Accepted: 28 March 2016

ISSN: 1697-7467

**ABSTRACT:** Built on the Canadian immersion model, Content and language integrated learning (CLIL) has been an immensely popular approach to education in Europe. Despite the fact that this approach has been adopted in many systems of education, there is an acute shortage of textbooks supporting full integration of objectives related to both content and language. In some contexts, publishers offer translated versions of regular textbooks written in learners' first language (L1), in which no adjustment is made to meet the requirements of the new mode of instruction. On the basis of the 4Cs (content, communication, cognition and culture) Framework of CLIL, the aim of this article is to indicate why translated CLIL textbooks fail to support learners in acquiring the subject matter in a foreign language. Additionally, to assist textbook designers, teachers and textbook evaluators, a few practical principles of high-quality CLIL learning materials will be provided.

**Keywords:** Content and language integrated learning, CLIL textbook, 4Cs Framework, learning resources.

## **Una traducción no es suficiente - principios de adaptación pedagógica en la elaboración de material didáctico adaptado al método AICLE**

**RESUMEN:** A pesar de que el Aprendizaje Integrado de Contenidos y Lengua (AICLE) ya se haya implantado en muchos sistemas educativos, el mercado carece de material didáctico que pudiera apoyar una plena integración de los objetivos centrados en contenidos y lengua. Algunas editoriales ofrecen los llamados manuales de AICLE, aunque en realidad no son más que réplicas de manuales locales de contenidos traducidos a otro idioma. En este artículo explicaremos, con base en el modelo de 4Cs de D. Coyle (contenido, comunicación, cognición y cultura), por qué este tipo de manuales no respetan la metodología AICLE. Además, exponemos una serie de rasgos necesarios para construir un buen manual que respete la integración de contenidos y lengua, con la confianza de que resulten útiles para los autores y evaluadores de los manuales, además de los profesores.

**Palabras clave:** Aprendizaje Integrado de Contenidos y Lengua, manuales AICLE, modelo de 4Cs, material didáctico.

## **1. INTRODUCTION**

One of the means of promoting plurilingualism in the European context is introducing educational approaches that integrate the teaching of content through a foreign language. Over time, such new modes of classroom instruction have been given numerous names, for instance Content-Based-Instruction, Dual Language Programs, English Across the Curricu-

lum – to name a few. In an attempt to establish common ground for approaches sharing similar objectives, the term CLIL (Content and language integrated learning) was coined and indicates “a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language” (Coyle, Hood and Marsh, 2010:1). Being an umbrella term, CLIL refers to a wide variety of pedagogical approaches involving dual focus on both linguistic and content elements.

CLIL provision varies in particular countries and depends on sociocultural traditions and curricular regulations (Nikula, 1997), administrative decisions taken on a national level (Wolff and Otwinowska-Kasztelanica, 2010) or CLIL teachers’ individual beliefs, teaching qualifications and professional experience (Czura and Papaja, 2013; Mehisto, Marsh and Frigols, 2008; Coyle, Hood and Marsh, 2010; Marsh, Maljers and Hartiala, 2001). So far no uniform CLIL methodology has been developed and, consequently, there is a shortage of textbooks designed to integrate the teaching of content and a FL language (Lucietto, 2009; Meyer, 2011; Sudhoff 2010). What is more, the principles of material development and evaluation in this form of education have been heavily neglected in the subject literature (Tomlinson, 2012). Some general theoretical and practical guidelines concerning teaching resources in the CLIL classroom are provided in Coyle, Hood, and Marsh (2010). More practical and inquisitive implications are offered by Filardo Llamas, Jime’nez and Canduela (2011), who, on the basis of a comparative analysis of six texts used in the primary science classroom using English as a medium of instruction, established criteria which may help teachers select resources and textbooks that match their learners’ needs. Moore and Lorenzo (2007), having analysed strategies CLIL teachers employ when adapting authentic texts, concluded that only one type of adaptation, out of the three types observed, involves techniques reaching beyond purely linguistic text modification (e.g. inclusion of glossaries, visuals, supplementary comments).

According to the Eurydice report (2006), the limited availability of appropriate teaching materials that comply with the national curricula and, at the same time, suit the needs of content and language integrated learning is voiced as one of the major problems CLIL teachers face. In search of teaching resources, some teachers resort to content subject textbooks used in target language countries, which, due to their linguistic complexity, may appear too difficult for CLIL learners and, accordingly, should not be readily applied in a foreign language context (Iluk, 2002; Pawlak, 2010). Vocabulary and grammar structures that significantly exceed the CLIL learners’ current level of proficiency may impose a substantial burden on them and result in poorer acquisition of the subject matter (Vazquez, 2007). Despite being age-appropriate, such authentic resources contain numerous references to a target language country and, as a result, lack contextualization that would help CLIL learners find meaningful links between the new knowledge and their own lives. Additionally, in their analysis of mathematics coursebooks, Novotná, Moraová and Hofmannová (2003) observed that authentic resources contain some culture-specific differences (for instance, punctuation of decimals, distinctive measurement units or monetary systems) that may cause confusion and, thus, impede the learning process. Unless considerable modifications are introduced, the use of such textbooks can become demotivating for learners, who struggle with the content, linguistic demands and cultural complexity of the text. Finally, it should be noted that resources designed to be used in a distinctive school system frequently fail to fulfil curricular requirements of the new context (cf. Marsh et al., 2008).

In recent years a number of learning and teaching resources designed for the purposes of CLIL have emerged in different educational contexts. However, most of the 'so-called' CLIL textbooks available to date tend to focus on the content matter, while the language objectives appear to be severely neglected (Martín del Pozo and Rascón Estébanez, 2015). In some contexts yet another approach to CLIL textbook design has been adopted: to compensate for insufficient teaching resources, local textbooks are sometimes translated into the second language. It creates a situation in which two versions of the same subject textbook are available: the original written in learners' first language (L1) and its translation into a FL. Even though occasionally an effort is made to add a bilingual glossary in the appendix or to simplify the language, such translated textbooks are frequently produced as foreign-language replicas of the texts written in the learners' mother tongue (for instance the *Earth and People* series for lower- and upper-secondary education in Poland). Moreover, in some publications both language versions are put together – in this way one volume includes two textbooks containing the same texts, tasks and illustrations, with the language of instruction being the only difference (e.g. Hartmann, 2007). It is by no means my intention to undermine the value of these publications. Being in its formative years, CLIL still lacks sound theoretical grounding and such learning resources should be treated as attempts to accommodate the requirements of this unique methodology. It should be also appreciated that some of such resources are designed by practising teachers willing to share their expertise and experience with others.

To my best knowledge, to date no attention has been paid to CLIL resources that are based on direct translation of content subject textbooks written in learners' L1. The apparent inconsistency in designing CLIL textbooks and other learning resources calls for a synthesis of CLIL principles and practices that underlie the process of material development. Through the presentation of characteristic features of CLIL on the basis of the 4Cs Conceptual Framework, which focuses on the content, communication, cognition and culture, arguments will be provided to explain why CLIL textbooks translated from the learners' first language, even when some linguistic simplification is offered, do not address the needs of the classroom in which the integration of content and language is at the heart of teaching methodology. CLIL is a dual-focused approach and this duality needs to be reflected in the teaching and learning resources. A CLIL textbook needs to be designed in such a way as to facilitate the learners' acquisition of both the subject-specific and linguistic elements. In an attempt to assist textbook authors, teachers and textbook evaluators, this article concludes with a few practical principles of high-quality CLIL resources.

## 2. CLIL – THEORETICAL PERSPECTIVES

What differentiates CLIL from other bilingual approaches is the fact that content and language teaching are not seen as two separate phenomena; on the contrary, these two elements are closely interlinked and depend on each other. Effective CLIL instruction takes place when learners understand the content that is being taught, are actively engaged in the thinking process and, since these processes involve a kind of interaction in a communicative context, enhance their foreign language skills. In developing the rationale for a CLIL textbook, it is worth analysing the four dimensions of this type of instruction presented in the 4Cs

Conceptual Framework proposed by Do Coyle (1999, 2006a). The Framework consists of four general parameters for CLIL – content, communication, cognition and culture – which constitute the basis of curriculum design as well as textbook development and instructional planning in CLIL pedagogy. The four elements imply that the introduction of CLIL leads to important changes in the process of learning and teaching a non-linguistic content subject – changes that necessitate far-reaching pedagogical adaptation in learning materials. This article points out why direct translations of non-CLIL textbooks into a FL used to teach non-linguistic content subjects fail to conform with the four general parameters for CLIL and, thus, should not be treated as fully-fledged CLIL learning resources.

### 2.1. Content

The first element, the *content* of the subject learning, refers to the “acquisition of knowledge, skills and understanding” (Coyle, Hood and Marsh, 2010: 53) necessary to accomplish learning objectives and outcomes delineated in the national curricula. As Coyle (2006a: 13–14) notes, “the symbiotic relationship between language and subject understanding demands a focus on how subjects are taught whilst working with and through another language rather than in another language”. Thus, to achieve true integration of content and language in the CLIL classroom, all stages of instructional planning should combine the subject-specific and linguistic teaching objectives. Coyle, Hood and Marsh (2010) underline that bilingual modules should not be treated merely as means of increasing the amount of exposure to foreign language or as additional lessons devoted to reteaching familiar content. On the contrary, they should be seen more as opportunities of giving the learners new insights into the subject matter and facilitating more efficient integration of the new knowledge. To support learners’ comprehension of the discussed topics, CLIL teachers often apply a variety of techniques and interactive strategies, use both verbal and non-verbal means of presentation, frequently check for comprehension and readily provide feedback (Novotná and Hofmannová, 2000). It is worth underlining that teaching content through a FL may help learners acquire more in-depth understanding of the underlying concepts discussed in the classroom (Tejkalova, 2013).

When we take the content dimension into account, we can observe one fundamental disparity between content textbooks translated from learners’ L1 and the ones that truly support CLIL instruction: the former tend to focus on developing only the subject matter, whereas the later are dualistically oriented by definition they aim at enhancing learners’ knowledge of the content as well as their competence in the foreign language. It does not mean here that either element should be given more prominent role; however, both objectives need to be accounted for in instructional planning. In the meantime, direct translations of content coursebooks from the learners’ native language are unlikely to provide activities that help to solve ongoing language problems and promote the development of language skills. One of the criteria of foreign language coursebook evaluation is recycling (Mukundan and Ahour, 2010), which is understood as the opportunity for revising the new material in different contexts. Recycling is also indispensable in the CLIL classroom; however, here, due to the dual focus of CLIL, such recycling should address both principal instructional objectives: the content and the foreign language. For obvious reasons, content coursebooks that focus solely on the subject matter are deprived of language-related revision exercises and contain insufficient number of illustrations or comprehension checks to ease understanding and retention of the material.

## 2.2. Communication

The second “C” stands for *communication* and refers to the use of language and the role of CLIL in developing language skills and communicative competence. Coyle, Hood and Marsh (2010: 54) underline that CLIL promotes the integration of language form and function, which enables learners to “*use language to learn and learn to use language*”. As mentioned before, CLIL teachers facilitate the learners’ accurate understanding of the content taught in a FL by using more interactive strategies and diverse forms of presentation. Since learners receive more extensive exposure to the foreign language, they have more opportunities to practise it in different interaction patterns and communicative contexts (Dalton-Puffer, 2007). At the same time, the language used to present and practise the subject matter in a FL and to negotiate the meaning in discussions or other collaborative tasks is more authentic and, therefore, interaction in the CLIL classroom is more likely to imitate real-life communication (Dalton-Puffer and Smit, 2007). Additionally, the available research studies point out that CLIL has a positive impact on vocabulary and morphology development as well as such aspects of speaking skills as fluency, creativity, risk-taking (Dalton-Puffer, 2006), negotiation of meaning and the use of conversational adjustments (García Mayo and Lázaro Ibarrola, 2015).

The question is what conditions need to be created by learning materials to encourage authentic communication and accelerate effective foreign language acquisition. One of the fundamental prerequisites of language acquisition is providing the learners with comprehensible input slightly above the learners’ current level of competence (Ellis, 2008; Krashen, 1985). It goes without saying that CLIL learners are exposed to a considerable amount of input, both oral and written, but can the language in the CLIL textbooks translated directly from the learners’ mother tongue be called comprehensible? It is rather unlikely. Such materials are undoubtedly consonant with the learners’ age and cognitive development, but the lexical and grammatical complexity of the translation itself goes far beyond the learners’ present level of communicative competence. In her list of CLIL principles, Coyle (2006b: 9) underlines that “language needs to be transparent and accessible.” Mukundan and Ahour (2010) underscore that evaluation of foreign language resources should include, among other criteria, a computer analysis of vocabulary load, which serves as an indicator of the difficulty and density of new lexical items in the texts. If such a criterion is recommended in materials used in language education, it seems natural that every attempt should be made to adjust the level of FL in CLIL resources to the present capabilities of the learners.

## 2.3. Cognition

*Cognition*, which is listed as the third element of the Framework, refers to the changes in the thinking and learning processes triggered by CLIL-type instruction. Unlike in the traditional models of teaching, in which the learner is more often than not viewed as a passive recipient of knowledge, CLIL methodology advocates learners’ active engagement, rich and meaningful input and maximized interactivity. To achieve this, the teacher’s and learners’ dynamic involvement and collaborative construction of meaning are vital. In essence,

CLIL lessons should be cognitively challenging for learners; thus, they should involve both lower-order (remembering, understanding and applying) and higher-order thinking processes (analysing, evaluating and creating) (Coyle, Hood and Marsh, 2010). The traditional mode of instruction that favours passive transmission of knowledge from the teacher to the learners should be replaced with more collaborative and task-based approaches in which, with the teacher's support and guidance, learners can construct their own meaning in cooperation with others. As Vollmer et al. (2006) suggest, since CLIL learners constantly strive to overcome their limited language resource, they engage in mental activities more intensely and, as a result, are more task-oriented, become more tolerant of novel situations and have higher procedural competence.

In lessons based on conventional content textbooks, which are predominantly input-based and contain longish texts followed by a few comprehension or discussion questions, the learners' role is limited to reading texts and memorising facts. Direct translations of such resources into a FL are hardly likely to engage learners in creative, inquiry-oriented and collaborative activities that would enable them to manipulate the new information, use it in different contexts and, in this way, activate their higher-order cognitive processing. The objective of CLIL is not to reteach the same content in the second language, but to assist learners in constructing their own knowledge by means of such techniques as identification, categorisation, association and comparison (García-Mayo, 2009, in Pavón and Rubio, 2010). Kong and Hoare (2011) discovered that since content and language processing are interrelated, cognitively engaging tasks in CLIL materials facilitate the development of both content and language. According to Novotná and Hoffmannová (2000), a rich variety of teaching techniques and resources used in the CLIL classroom helps to adjust the instruction to learners' different learning styles, foster positive attitudes towards the subject and increase motivation.

#### 2.4. Culture

As Coyle underlines, '[c]ulture(s) permeates the whole' (2007: 550) and, accordingly, the last element of Coyle's Framework focuses on *culture* and refers to intercultural awareness of one's own and other cultures. Since the acquisition of any foreign language involves gaining insights into a new culture, in order to adapt the content and the resources to their own context, CLIL teachers need to be aware of certain conceptual, culture-specific differences that may affect teaching through a FL in different cultural settings. Therefore, in the process of material design and lesson planning it is essential that the teachers analyse the corresponding concepts in both languages and cultures and, subsequently, sensitise the learners to the observed differences.

A textbook directly translated from learners' mother tongue undeniably fits in with the local curriculum and the educational context; however, it fails to incorporate the "culture" dimension of CLIL, which assumes that one of the objectives of teaching is raising the learners' awareness of other cultures, including the target culture, and culture-specific differences. Given that the translated textbooks are developed for the purposes of one, frequently monolingual and monocultural, context, they are unlikely to contain references to the target language culture and other cultural settings.

### 3. GUIDELINES ON CLIL LEARNING MATERIAL DEVELOPMENT

The multi-faceted objectives of CLIL outlined in the 4Cs Framework suggest that the processes of developing CLIL curricula and teaching resources needs to include four main parameters: content, communication, cognition and culture. Translated textbooks may be closely related to the objectives of the curriculum and the syllabus used in a given educational context, but they fail to yield to the cognitive, pedagogical and linguistic demands of CLIL education, which requires an instructional approach that facilitates learners' understanding of the new content presented in a FL. Taking into account CLIL parameters delineated in the 4Cs Framework, it can be concluded that neither authentic materials nor textbooks translated from L1 into the language of instruction suffice to facilitate the process of learning the content through a foreign language. It appears that a pedagogical adaptation is necessary. Whereas FL material developers ask themselves: "how do we think people learn languages?" (Hall, 1995: 8), the process of designing CLIL learning materials needs to be supplemented with yet another crucial question: "how do we learn a particular subject, be it mathematics, history, geography, IT, etc.?" To facilitate both processes, high-quality textbooks need to be custom-made to embrace cognitive, linguistic and cultural dimensions of this mode of instruction. The list below puts forward some guiding principles that may assist teachers and textbook writers in developing CLIL learning resources.

1. **Integration of content and language.** According to Marsh's definition (2002: 58), CLIL refers to any educational approach in which "a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint role." In other words, CLIL-type instruction has two corresponding objectives: content knowledge and communicative competence. With this in mind, the role of CLIL textbooks is to integrate the content matter and the development of language skills (reading, listening, writing and speaking) and aspects of language (grammar, vocabulary and pronunciation). For instance, a reading text can be accompanied with comprehension questions, the new content can be introduced or revised by means of a listening comprehension task or, if necessary, some relevant grammar structures can be practised (e.g. comparison of adjectives to talk about physical geography or narrative tenses in a history lesson).
2. **Focus on productive skills and communication.** CLIL learners are exposed to significant amounts of input; however, the research conducted by Dalton Puffer (2007) posits that, contrary to popular belief, in practice productive skills (mainly speaking) and academic discourse competence are not adequately developed. It suggests that CLIL textbooks should pay more attention to these two areas, for instance by offering a variety of tools, such as project work, case studies, debates and discussion topics with a clear goal, real-life interaction and negotiation of meaning.
3. **Extensive vocabulary practice.** Learning a content subject through a foreign language entails the need to acquire a wide range of vocabulary and specialist terminology. It seems necessary that such textbooks contain a variety of aids that facilitate presentation, practice and retention of new terminology (for instance, glossaries, picture-dictionaries, phonetic transcription of new words as well as practical vocabulary activities).

4. **Judicious use of the learners' mother tongue.** CLIL entails developing proficiency in both languages: the language of instruction and the learners' mother tongue. What is more, in some educational contexts (Czura and Papaja, 2013), due to the curricular requirements and the necessity of taking the school leaving examinations, learners attending CLIL classes need to learn the same content material both in their mother tongue and the language of instruction. Bearing this in mind, there is no reason why L1 should not be judiciously used in the CLIL classrooms. Lasagabaster (2013: 17) rightly asserts that "a principled use of L1" may help to develop learners' metalinguistic awareness and broaden their lexical repertoire. Such systematic use of L1 in a CLIL lesson may not only facilitate the understanding of the new material, but also help learners acquire the content terminology in both languages.
5. **Enhanced visualization of meaning.** Since acquisition of the subject matter in a foreign language is cognitively demanding, every attempt to explain the meaning by way of diverse visual aids is recommended. The use of timelines, illustrations and diagrams in CLIL textbooks might appear motivating as it caters for learners with different learning styles and facilitates deeper understanding of the content.
6. **The development of language learning strategies and study skills.** Mehisto, Marsh and Frigols (2008: 12) list three goals of CLIL: "content, language, learning skills." On a daily basis CLIL learners use such study skills as looking for information in different resources, taking notes in a FL, writing diverse types of texts, using efficient vocabulary learning strategies, etc. CLIL learning resources may help learners cope with learning a subject in a FL by providing some learning tips and practical exercises that focus on the development of language learning strategies and academic study skills. Being acquainted with a wide repertoire of such study skills, learners work more efficiently, assume responsibility for their own work and, in the long-term perspective, become more autonomous.
7. **Control over cognitive processes.** In order to activate both lower- and higher-level thinking, all textbooks, irrespective of the mode of instruction, should promote inquiry-based activities encouraging learners to use other resources, analyse data, look for analogies and solve problems. It is advisable that textbooks, in line with the social constructivist theory, actively engage learners in the process of knowledge construction in cooperation with their peers. Learners' active cognitive involvement may be additionally reinforced through reflection, which can be tapped by a variety of self- and peer-assessment activities in which learners analyse their progress, focus on the problems they face and set their own learning goals.
8. **Raising intercultural awareness.** It is useful when CLIL textbooks draw the learners' attention to similarities and differences between the culture of origin, the target culture and other cultural backgrounds. Such an approach may help learners discover their own cultural identity and build their intercultural awareness.
9. **Humanising CLIL resources.** According to the humanistic and constructivist approaches to education, learning materials need to create favourable learning conditions. In the case of CLIL textbooks it accounts for conditions in which a learner does not feel intimidated by the constraints of being taught a non-linguistic subject in a foreign



language. It can be achieved not only by offering instruction on a comprehensible level, but also by encouraging learner-centeredness, cooperative tasks and inquiry-based teaching, which, in turn, may prompt learners to be more autonomous and take responsibility for their own learning. Learning materials that are linguistically understandable and appropriate on the cognitive level are more likely to strengthen learners' self-esteem, boost their confidence and, in the long run, develop more positive attitudes to this form of instruction.

The list presented above is by no means exhaustive and, depending on the specificity of the educational context, other criteria may emerge. It was intended to outline how a set of principles fundamental to the CLIL-type instruction can be harnessed to support full integration of content and foreign language learning. The nine points evidence that CLIL methodology is to a large extent based on the constructivist idea of scaffolding, which consists in breaking down activities into smaller manageable steps, activating learners' prior knowledge, promoting critical thinking and demonstrating study skills. Such a scaffolded approach to both content and language teaching assists learners in developing new understandings of the ideas presented in the foreign language and, thus, facilitates the process of constructing the new knowledge. Undeniably, creating a supportive atmosphere and effective scaffolding in the classroom essentially depend on the teacher's skills and experience. However, a careful design of the content subject textbooks and other learning materials cannot be it should be a dash: "undermined – for many teachers textbooks serve as lists of obligatory topics to discuss and the basis of lesson planning. Consequently, a well-designed textbook, may have a positive impact on the processes of lesson planning, ongoing instruction and classroom assessment.

The process of material development is very complex and to a large extent it depends on a unique blend of educational, historical, political and financial circumstances. Given the methodological and curricular disparities in CLIL provision in Europe, it is hardly possible to design a pan-European CLIL textbook that could be applied in an unaltered form in all systems of education. However, to support CLIL teachers, who at the moment shoulder the heaviest burden of material development on their backs, certain top-down decisions concerning curricular and administrative standardisation of CLIL in particular educational contexts need to be made. Purpose-designed CLIL textbooks, congruent with the local curriculum and educational traditions, are not only time-efficient and reduce teachers' time and workload, but also, provided they are written by acknowledged authors and specialist in the field, they may help introduce a more consistent CLIL methodology in a given context.

CLIL learning resources include some objectives that are inherently linked to FL teaching: presentation and practice of linguistic knowledge and skills, learning strategy training and development of intercultural competence. No matter how good a CLIL textbook is, its full potential may not be realized unless subject teachers are trained in methodology of foreign language learning and teaching. It seems essential for CLIL teachers to possess at least rudimentary knowledge of the FL acquisition process and techniques of FL teaching so that – in the dearth of purpose-designed CLIL textbooks – teachers are able to modify, adapt or design learning resources that integrate content and linguistic elements.

## 4. CONCLUSIONS

Any process of learning material development and adaptation should adhere to the rules and principles of the underlying teaching approach. And CLIL is no exception to this rule. Material designers' understanding of the essence and the intricate nature of CLIL is a prerequisite for developing learning and teaching resources that facilitate the integration of content and foreign language at both linguistic and pedagogical levels. CLIL is not a synonym of bilingual education and in contrast to the learners attending bilingual schools, CLIL learners do not have a direct access to the target language culture, demonstrate lower levels of FL proficiency and are less likely to use the language of instruction outside the classroom. It is evident that there is a need for locally designed textbooks, which would enable the learners to personalise the new knowledge, relate it to their immediate environment and, finally, integrate it into their internal cognitive structure. Despite meeting this condition, content textbooks translated literally from learners' L1 cannot be treated as learning materials in the CLIL classroom. It may give an impression that such resources reduce the teachers' time and workload but, in fact, they fail to support the process of learning content through a non-native language. The use of such materials may be demotivating and frustrating for the learners, which is likely to produce a distorted picture of this mode of instruction. The guidelines outlined in this article present how the underlying principles of the 4Cs Conceptual Framework can be used to support textbook development and adaptation in different educational contexts. Unless textbook writers apply appropriate linguistic and functional tools that facilitate integration of content and language, they run the risk of developing learning resources suitable for fully bilingual, rather than CLIL learners. In countries in which CLIL is introduced, every attempt should be made to develop curricula and custom-made textbooks that help to integrate the four parameters: content, communication, cognition and culture.

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