

Research Article

CLIL and materials for learning: a rubric for analysis

Los materiales para el aprendizaje en AICLE: una lista de verificación para el análisis

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Abstract

Introduction: The development of tools for the analysis and evaluation of teaching materials used in bilingual contexts (CLIL) is still scarce. This paper reflects on the methodological principles that CLIL materials should comply with, with a triple objective: content and language learning and the development of literacy and presents a checklist for the analysis of materials. **Methodology:** the development of this checklist has considered the methodological principles for CLIL, especially the so-called "dimensions of literacy support". **Results and discussion:** The proposed checklist contains the dimensions based on the type of workplan (tasks, activities and academic questions), cognitive discourse functions (CDFs), text genres, communicative language activities (CLAs) and interaction. **Conclusions:** The scarce tools available to teachers in CLIL contexts to carry out the analysis of materials in these contexts make it necessary to carry out proposals that can be useful in a process that is often laborious, the checklist presented in this paper aims to be useful to teachers and contribute to a field, still under-studied.

Keywords: CLIL; CLIL materials; CLIL teaching materials; CLIL methodological principles; Analysis of CLIL materials; checklists of materials; CLIL checklists; evaluation of bilingual materials.





Resumen

Introducción: El desarrollo de herramientas para el análisis y evaluación de los materiales docentes utilizados en contextos bilingües (CLIL) es aún escaso. Este trabajo reflexiona acerca de los principios metodológicos que deben de cumplir los materiales CLIL con un triple objetivo: el aprendizaje del contenido y de la lengua y el desarrollo de la literacidad y presenta una *checklist* para el análisis de materiales. **Metodología:** para el desarrollo de esta *checklist* se han tomado en cuenta los principios metodológicos para CLIL, especialmente las llamadas "dimensiones de apoyo a la literacidad". **Resultados y discusión:** La checklist que se presenta contiene las dimensiones basadas en el tipo *workplan* (tareas, actividades y preguntas académicas), las funciones del discurso cognitivo (CDFs), los géneros textuales, las actividades del lenguaje comunicativo (CLAs) y la interacción. **Conclusiones:** Las escasas herramientas con las que cuenta el profesorado en contextos CLIL para llevar a cabo el análisis de materiales en estos contextos hacen que sea necesario llevar a cabo propuestas que puedan ser de utilidad en un proceso que suele ser laborioso, la checklist que se presenta en este trabajo tiene como objetivo ser de utilidad al profesorado y hacer una aportación a un campo, aún poco estudiado.

Palabras clave: CLIL; materiales AICLE; materiales docentes CLIL; principios metodológicos AICLE; análisis de materiales; checklists de materiales; listas de verificación CLIL; evaluación de materiales bilingües.

1. Introduction

The implementation of educational programs based on a CLIL approach (Content and Language Integrated Learning) has had a rapid development and implementation in recent decades in Spain as a result of the growing awareness of the need to learn an additional language (foreign language/L2) to ensure the competitiveness of its citizens, who have traditionally found it difficult to speak a foreign language fluently, in fact, the 2012 Eurobarometer revealed that 54% of respondents were still unable to speak a foreign language. Hence, CLIL programs, also called "bilingual programs" for learning an L2, were embraced at the beginning with great optimism (Pérez-Cañado, 2017), although unevenly in the different autonomous communities (regions).

CLIL, a term coined in 1994, is defined as an "umbrella term" 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 curricular role" (Marsh, 2002, p. 58), thus it enables learners to master both the contents of curricular subjects (i.e. history, maths, science, etc.) and also an additional language (Karabassova & Oralbayeva, 2024).

The implementation of these programs, as is to be expected, has not been without its challenges for both students and teachers.

The challenge we address here has to do with the development, selection and adaptation of teaching-learning materials to be used in CLIL classrooms in secondary education.

The importance of teaching materials for CLIL has been highlighted by several authors as a fundamental element in the classroom, therefore, it is of special relevance to reflect on the methodological principles that should be taken into account for their elaboration and development, since in CLIL contexts these materials must guarantee the learning of three fundamental aspects: language, content and literacy (Morton, 2020).



Several authors have pointed out the need for more research on the characteristics of CLIL materials and their consistency with the methodological principles of this approach.

Therefore, the aim of this paper is two-fold: first, reflecting on these basic methodological principles, especially the inclusion of cognitive discourse functions, the textual genres in the materials, the types of tasks, activities and academic questions as literacy-supporting dimensions that the materials should include, and presenting a checklist proposal with different dimensions that can be useful for secondary education teachers in the analysis of both teacher-produced and ready-made teaching and learning materials for CLIL contexts, the area of analysis of CLIL materials is still in its infancy, thus this paper aims to contribute to this field.

Some of the advantages of a checklist for materials evaluation and analysis have been widely discussed and include the fact that it is a systematic tool, since the evaluator ensures that all the important elements for analysis appear; it is explicit for all evaluators; it has a comfortable and convenient format for the evaluator; and it is economical from the point of view of the time spent by the evaluator (Mcgrath, 2013).

2. Literature Review

2.1. CLIL and Materials for Learning

The term "materials for learning" refers to any resources used by teachers and students both inside and outside the classroom during the teaching and learning process. In literature, this concept is also known as teaching resources, pedagogical or educational materials; teachers' materials, teaching materials, or instructional materials.

These materials might have been chosen for their educational purpose, but they are not always originally designed for it. Moreover, effective materials should:

- Offer students essential input;
- Encourage various types of responses (such as spoken, written, physical, or multimodal);
- Align with the goals and standards of a particular curriculum (Mehisto, 2012).

The label "materials for learning" is preferred in this context because it aligns with the terminology used by Tomlinson and Masuhara (2018), prominent experts in the field of materials for English Language Teaching and Learning.

Materials can be of different types (Mcgrath, 2013): the most commonly used around the world are textbooks, produced by a commercial publisher; there are other commercial materials separately provided from the textbook package (i.e grammar books) and also teacher-prepared materials (i.e. worksheets, powerpoint presentations, games, etc.).

Using materials in the classroom can offer several benefits, as Richards (2001) pointed out: they can cognitively stimulate and motivate learners by presenting achievable challenges and supporting their learning both inside and outside the classroom. However, published materials (as opposed to "homemade" or teacher-produced materials) are not without criticism.



For example, Thornbury (2000) argued that they might interfere with learners' progress by driving the lesson rather than supporting it, leading him to advocate for a materials-free approach (Mishan & Timmis, 2015), while this approach may be useful in certain ESL/ELT contexts, we do not believe that this type of approach might be appropriate in CLIL contexts, especially at the beginning of CLIL implementation, because the teacher needs to attract a lot of interest from the students to get them involved in the classroom and providing learners with quality materials could help teachers ease this task.

In the early years of CLIL, finding appropriate materials was a very challenging task for teachers (López-Pérez & Galván-Malagón, 2017; Mehisto et al., 2008), as they needed to ensure that the language input was accessible to students to facilitate comprehension while also being cognitively demanding and content-rich to engage students' interest. In contexts where commercially available materials, including textbooks, are scarce, teachers have several options for providing suitable resources to learners, as Moore & Lorenzo (2007, p.28) have stated:

- Create their own materials from scratch.
- Use "undiluted" authentic materials.
- Adapt authentic materials to align with teaching goals.

Adapting materials has been considered the ideal approach because it allows materials to be tailored to learners' needs and made context specific. However, this can place significant pressure on teachers due to the workload it entails, and the expertise required (Morton, 2013). Despite this, a study conducted by Morton (2010) revealed that 90% of teachers favored developing their own materials from scratch.

Currently, it appears that ICTs and the Internet have facilitated the challenging process of creating and adapting educational materials. Teachers now have access to a diverse array of online resources and specialized websites for materials creation (López-Pérez & Galván-Malagón, 2017). Additionally, there are websites that compile various resources, offering a valuable repository of materials that teachers can utilize or adapt for their lessons. A study conducted by Barrios and Milla Lara (2020) further indicated that, beyond the increased availability of online materials, teachers have also observed a growth in initiatives by educational authorities aimed at developing educational resources, particularly those for English language instruction.

Moreover, contexts, such as Spain, teachers have textbooks specially created for CLIL contexts (López-Medina, 2016). The expanded availability of materials for CLIL has been acknowledged as advantageous for both teachers and students, as it can increase learners' exposure to both general and content-specific language in additional language. However, it has been observed that some students may not have access to these materials outside of school (Barrios and Milla Lara, 2020), which limits their exposure to the target language to primarily within the classroom setting.

Additionally, the study by Barrios and Milla Lara (2020) indicated that teachers were becoming increasingly dependent on Internet resources. This reliance could have a detrimental effect on their CLIL programs, as an unstable internet connection might compel them to rely more on text-based materials than desired, thereby reducing students' exposure to spoken language. Another drawback which was noted was the extra cost associated with CLIL program materials, which may deter some parents from enrolling their children in these programs.



Both in the process of creating the materials and in the adaptation and selection process, teachers have to think about what is best for their students according to their context and their needs and in this sense they also have to consider a series of basic principles or recommendations that these materials must comply with in order to fulfill their role in CLIL, this call for more principles-based materials for CLIL has been made by several researchers, such as Pérez-Cañado (2018), we address some of these principles in the following section.

2.2. Literacy-supporting recommendations for CLIL Materials

The point of departure for the recommendations on what CLIL materials should include was Coyle (1999) who provided a theoretical framework containing the four pillars of CLIL: content (subject matter), communication (language), cognition (thinking skills) and culture (intercultural understanding), which were referred to as the 4Cs framework; Coyle et al. (2010) also established that the 4Cs framework could be applied for the development of context-specific materials and they determined that the learning process in which learners get involved in should include tasks and activities with cognitive processes ranging from less demanding to more complex and demanding actions (from LOTS- lower-order thinking skills- to HOTS or higher- order thinking skills) and that these tasks should progress from being less linguistically challenging to more linguistically demanding, following Cummins' (2000) quadrants, ranging from Quadrant A to Quadrant D, referred to as the CLIL matrix (Coyle et al., 2010, p. 43).

Tasks in Quadrant A are the least challenging as they are cognitively undemanding, imposing minimal cognitive load on learners for successful completion. These tasks are typically already automated by learners, require lower-order thinking skills, and necessitate the processing of less information. Furthermore, they are context-embedded, meaning that participants rely on interpersonal or situational cues to understand the language or message. On the other hand, tasks in Quadrant D are likely more difficult for learners, as they require higher-order thinking skills (Dale et al., 2010) and involve processing a greater amount of information. Additionally, these tasks are context-reduced, providing no contextual support.

Cummins advocated for the use of tasks where "students are challenged cognitively but provided with the contextual and linguistic supports or scaffolds required for successful task completion" (Cummins, 2007, p. 125).

Literature on suggesting further pedagogical principles for CLIL materials abounds (Banegas, 2014) and they include authors such as Mehisto (2012), Morton (2013), Ball et al. (2016), among others. However, the recommendations suggested below are based on the ideas of the Pluriliteracies approach to CLIL (Meyer et al., 2015; Meyer & Coyle, 2017; Coyle & Meyer, 2021). In the Pluriliteracies approach, "culture", a key component of the 4Cs framework, is placed at the center, with the other CLIL elements – content, cognition, and communication – revolving around it. Within this context, "culture" pertains specific subject culture or the academic discourse within a particular subject, which includes a distinct method of articulation or "languaging" (Swain, 2006, p. 96) unique to each academic discipline (Meyer et al., 2015). This notion of languaging influences how cognition is applied to conceptualize content and how communication is used to "(co) construct knowledge" (Meyer et al., 2015, p. 51).

Consequently, in the Pluriliteracies approach advancing in different subjects requires proficiency in disciplinary discourses as semiotic systems (Mohan, Leung, and Slater, 2010), which play a role in the formation of knowledge.



This idea is consistent with Gee's (1989) definition of "literacy" as the mastery of secondary discourses, referring to the use of language beyond the family context, such as in educational, professional, or governmental settings (Gee, 1989). Accordingly, Meyer et al. (2015) contend that being "pluriliterate" entails the capacity to critically think and analyze texts, master sophisticated language, effectively convey relevant content, and comprehend how meanings are constructed across diverse texts and discourse communities (Crane, 2002, p. 67).

This model posits two continuums: the conceptual continuum, which encompasses the conceptual, factual, procedural, and strategical knowledge that learners acquire, and the communication continuum, which involves the various genres, styles, modes, and purposes for expressing conceptual knowledge specific to a subject. These ideas are also in line with Veel (1997), for whom advancing along the knowledge pathway necessitates mastering subject-specific discourses, which include the unique genres associated with each discipline, along with their respective stages and the requisite content for each stage.

These discourses are essential tools for meaning-making and knowledge construction (Coffin, 1997; Veel, 1997), as well as the language proficiency at the levels of discourse, sentence structure, and lexico-grammar appropriate for each genre.

Therefore, based on these ideas, we present here, the so-called *literacy-supporting recommendations* that CLIL materials need to comply with, they are the following:

2.2.1. Focus on workplans

A workplan is a defined proposal with its objectives, contents and procedures (Breen, 1989, p. 188) that learners could perform in a classroom and that may be present in CLIL materials. This typology is composed of: "tasks", "activities" and "academic questions". A task is a workplan that requires learners to process language pragmatically to achieve an outcome that can be evaluated in terms of whether the correct or appropriate propositional content has been conveyed. A task requires learners to concentrate primarily on meaning and draw upon their own linguistic abilities. The centrality of tasks for CLIL lessons was stated by Coyle et al. (2010) and also by Meyer (2010), who situated tasks as one of the core elements of his CLIL pyramid for materials development.

We acknowledge that for literacy development a task in CLIL should be oriented towards content-related cognitive operations or CDFs specified by Dalton-Puffer (2013) and be aimed at the production of extended output (i.e. texts vs simple output, i.e. phrases). Activities are another type of workplans (different from tasks) that learners can be asked to perform (Richards, 2001), they are aimed at the manipulation of language forms, and the procedures present in them are cognitively and linguistically undemanding- the language that learners must manipulate is at word level, for example: a fill-in-the -gaps activity, choosing the correct option/ answer, searching for words in a puzzle, etc. Finally, academic questions, which are commonly present in the teacher-learner interactions in a classroom, might also be present in CLIL materials and they can be of different types.

Dalton-Puffer (2007) distinguished between "questions for facts", which ask for objective events, something which is known to have happened or to exist; "questions for explanations", which seek to understand "how something happened or an elaboration of facts" (Llinares & Pascual Peña, 2015, p. 18); "questions for reasons", which seek for reasons, arguments or causes of an event or situation; "questions for opinions", which seek for learner's personal opinion about an event or fact and finally, "meta-cognitive questions", in which students are required to "reason their own point of view or way of thinking" (Dalton-Puffer, 2007, p. 98).



Dalton-Puffer's study revealed that the majority of the academic questions teachers ask are about facts.

2.2.2. Focus on subject-specific genres (text types)

Learners need to work with different types of texts typical of the subjects being studied, in different types of modes as they need to progress from the "grammar of speaking" to the "grammar of writing" (Coyle & Meyer, 2021, p. 71) and with appropriate scaffolding strategies construct texts independently. Being able to understand, interpret and produce different types of texts will allow learners to progress on their (pluri-) literacies development (Coyle & Meyer, 2021).

Each of these genres has a social purpose, a set of varieties or sub-types and they will be carried out in a series of stages. Each school teacher needs to know and be aware of the textual genres of each of their school subjects, so that they can consider the type of texts that their students must know, decipher and learn to produce; knowing the genres implies knowing what the requirements are in terms of the structure of each one, its linguistic requirements (grammar and lexis), the purpose of each text and to whom it is addressed; different maps of the textual genres used in school have been developed that may ease the teacher become familiar with the genres of their subjects, such as Martin and Rose (2008)' map of school genres, Derewianka and Jones (2016); CLIL-specific map of genres at school include Llinares et al. (2012); Lorenzo's (2013) map of genres which distinguished between "input" and "output" genres in secondary education and Polias (2016), whom distinguished science genres according to the purpose they meet: genres for "doing science" as causal explanations and genres for "arguing and challenging science" such as expositions and discussions (Meyer et al., 2015, p. 46).

2.2.3. Focus on the Cognitive Discourse Functions (CDFs)

Dalton-Puffer (2013) developed the framework of the Cognitive Discourse Functions (CDFs), which are defined as cognitive processes that can independently serve as learning objectives within a lesson and act as "building blocks for larger texts or genres" or micro-genres. Morton (2020) acknowledged the value of this construct for task design as well, noting that CDFs represent action verbs that learners can perform. In CLIL contexts the cognitive discourse functions or CDFs "lie at the interface between thinking and language" (Meyer et al., 2015, p. 44) as learners must use a set of subject-specific cognitive discourse functions to conceptualise content together with a range of strategies and skills, which are fundamental elements. The CDFs were sorted into seven main categories- each one includes some other processes which are of the same type, mainly (Dalton-Puffer, 2013, pp. 234-235):

- 1. Classify: when a learner classifies they are telling how the world can be cut up according to certain ideas. This type includes verbs such as to classify, compare, contrast, match, structure, categorize, subsume.
- 2. Define: when a learner defines they "tell about the extension of this object of specialist knowledge" (Dalton-Puffer, 2013, p. 234). This category includes: to define, identify and characterize.
- 3. Describe: describing implies telling the details of what can be seen and observed and metaphorically speaking. This category is composed of verbs such as to describe, label, identify, name and specify.



- 4. Evaluate: when a learner evaluates something, they talk about what their position is regarding a particular issue. Other verbs such as evaluating, judging, arguing, justifying, taking a stance, critiquing, recommending, commenting, reflecting and appreciating belong to this category.
- 5. Explain: explaining involves providing reasons and justifications for something, including its causes. In this category, the following verbs are included: to explain, reason, express cause/effect, draw conclusions and deduce.
- 6. Explore: exploring implies telling what is potential. The verbs which belong to this category are to explore, hypothesize, speculate, predict, guess, estimate, simulate, and take other perspectives.
- 7. Report: when a learner reports on a topic, they discuss an external subject about which they have legitimate knowledge. This category encompasses actions such as reporting, informing, recounting, narrating, presenting, summarizing, and relating.

2.2.4. Focus on Communicative Language Activities (CLAs)

Recently, the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2020) has redefined the traditional productive (speaking and writing) and receptive skills (listening and reading) into "communicative language activities" (CLAs), involved when a learning uses an additional language. According to the CEFR, these activities are now categorized into four types: reception, production, interaction, and mediation (p. 32).

The communicative language activities are defined here as follows:

- 1. Oral comprehension (OC): this activity entails understanding spoken texts, whether through direct interaction, recorded media, or remote communication, and is analogous to the listening skill.
- 2. Reading comprehension (RC): this refers to the activity of understanding written texts in specific genres and corresponds to the reading skill.
- 3. Oral production (OP): This activity involves the production of spoken texts, either as a monologue or through interactive formats like discussions. It aligns with the speaking skill.
- 4. Written production (WP): This involves creating written texts, which may or may not require interaction, and is equivalent to the writing skill.
- 5. Integrated (I): This occurs when two or more communicative language activities are involved in a task or activity, meaning they are not used in isolation but rather in combination.

The inclusion of communicative language activities, or simply language activities, is a fundamental principle for developing CLIL materials as outlined by Coyle et al. (2010), Czura (2017), and Mehisto et al. (2008). Consequently, they are regarded as a crucial component in materials design.



2.2.5. Focus on Interaction

Interaction involves two or more parties co-constructing discourse" (Council of Europe, 2020, p. 72), thus it can be between teacher-student and student-student, here it concerns direct student-student oral interaction. The importance of interaction in CLIL contexts has also been highlighted consistently (i.e Coyle et al., 2010; Pavón-Vázquez, 2018; Pavón Vázquez, Prieto Molina, and Ávila López, 2015) because in these contexts it can contribute to increasing learner participation, linguistic competence and negotiation of meaning (Guazzieri, 2008), which refers to the modifying and recasting of unclear utterances" (Tomlinson, 2013, p. 263). Successful negotiation of meaning ensures that learners receive comprehensible input (Krashen, 1998) as speakers adjust the "interactional structure of conversations" (Ellis, 1991, p. 6) when they are experiencing a communication problem (Ellis, 1991), for example, when there is negotiation of meaning, interlocutors might use confirmation checks" (Long, 1983) that is, one speaker seeks confirmation of the other s immediately preceding utterance by means of repetition of part or all the speaker s utterance; they might also use comprehension checks", that is, utterances with which one speaker tries to confirm if the other speaker has understood or heard a previous message.

Furthermore, promoting interaction is a key feature of more student-centered methodologies, such as the task-based approach, which offer learners purposeful opportunities to use the L2 (García Mayo & Lázaro Ibarrola, 2015). In CLIL contexts, student-student interaction has been systematically encouraged, unlike in traditional (non-CLIL) settings (García Mayo & Basterre-chea, 2017) and is considered essential for the success of CLIL programs. Therefore, materials should be designed to facilitate interaction among learners.

2.3. Checklists for analyzing CLIL Materials

The field of research on CLIL materials in general is a recent area and thus it is still in its infancy (Banegas & Tavella, 2021).

Not surprisingly, the analysis and evaluation of materials is also an under-explored area of CLIL materials research (Banegas & Tavella, 2021; Noriega et al., 2024). An analysis involves "an objective and verifiable description of materials" (Mcgrath, 2002, p. 22) or "materials as they are" (Littlejohn, 2011, p. 181), in contrast, an "evaluation" centers on the material users and the impact they have on them, that is, "materials- in-action" (Littlejohn, 2011, p. 181).

For Harwood (2014) materials analysis could be performed at different levels which he identified as "content", "consumption" and "production" levels. "Content" analysis involves examining what the materials include or exclude; "consumption" refers to the practical utilization of materials by both teachers and students, whether in the classroom or beyond, while "production" involves analyzing the processes associated with designing, writing, or distributing materials by their creators, including professional material writers, publishers, or teachers.

Most of the existing studies of CLIL materials deal with content analysis (Noriega et al., 2024), for instance, Banegas (2014), who studied the CLIL sections present in four coursebooks for foreign language learning in Argentina and concluded that they mostly fostered the development of lower-order thinking skills; other studies analyzing the presence of thinking skills in coursebooks for primary education include Romeu Peyró et al. (2020), who concluded that most of the six coursebooks analyzed were unbalanced in terms of the cognitive skills they were promoting as 66 % of the activities were promoting the LOTS and not HOTS; Menegale (2020) focused on the learning strategies present in teacher- made materials and textbooks and



she found that while some strategies are present in the materials, such as "pushed output" others such as "taking notes or "asking for clarification" are still underdeveloped and Porcar Saravia (2018) who conducted research on the types of input genres found in history and geography textbooks used in primary education.

In this paper we present a tentative checklist that can serve teachers of secondary education in the analysis of their CLIL materials, both the ones that they design and the ones already-made for them. Although numerous checklists for ESL/ELT materials evaluation have been designed in the last few years (for a comprehensive compilation of ESL/ELT checklists see Mukundan & Ahour, 2010) not many have been developed for CLIL materials, thus this paper intends to contribute to them.

Checklists are instruments containing a set of criteria which are ticked when they are identified (López-Medina, 2016); following a checklist-method for materials evaluation and analysis (Mcgrath, 2002) might be useful for teachers, especially for novice teachers, because it is a systematic process, meaning that all the important elements are present in the checklist; it is cost-effective because it enables evaluation within a short timeframe. The checklist is conveniently formatted for easier comparison of materials and is explicit, facilitating quick decision-making. The limitations of checklists arise from their potential inapplicability to diverse contexts and materials without prior customization. Furthermore, checklists often embody the era in which they were created and the perspectives of their designers, making them dynamic rather than fixed. Mukundan (2010) also criticized some checklists for being highly abstract, meaning that that they would require expert knowledge for being correctly used and therefore this could pose challenges for evaluators who lack experience. Consequently, he argued that clarity should be an essential criterion for checklist design.

One of the first attempts for providing a checklist for the evaluation of CLIL coursebooks was developed by López-Medina (2016), which she redefined in 2021 incorporating suggestions from a focus group of CLIL teachers. The checklist is divided into five different sections: (I) general, here it includes criteria dealing with (a) structure, (b) supplementary materials and (c) physical and utilitarian features; (II) content; (III) cognition; (IV) communication; (V) culture, (VI) language and (VII) integration. The checklist items are developed in the form of affirmative sentences; however, some of these items may be obscure to the evaluator, for example, in the section on supplementary materials, one of the items says "it provides support for language assistants" (p. 172), but it is not specified what type of "support" is intended to be found in the coursebooks and in the section on integration, it states whether the coursebooks comply with the principles for CLIL, without stating which principles exactly, in addition, it is important to consider that the materials may comply with these principles on a scale from never to always, and such a scale is not provided in this checklist.

A more recent CLIL textbook evaluation rubric for primary education has been developed by Noriega et al. (2024). It is divided into three different sections containing a total of 54 items, because we do not have access to the entire rubric, it is not possible to know the 54 items it contains; only one example of one of such items is provided (pp. 263), 2.1 "Integrates the 4C's (Content, Communication, Cognition, and Culture) in each unit," this item contains the following descriptors (pp. 263-264):

- 1. The 4Cs are not integrated, and only one of the Cs is developed.
- 2. Only two of the Cs (generally content and communication) are developed, but in an isolated manner.



- 3. Three Cs are developed, but in an isolated manner. They are only integrated in a few activities.
- 4. The 4Cs are integrated in each unit. However, one of the Cs is usually left behind
- 5. The 4Cs are integrated in each unit, and Content, Communication, Cognition, and Culture have the same level of importance.

This rubric appears to be more detailed in terms of item specificity, which will likely result in a longer completion time for the evaluator.

3. Methodology

For the development of the checklist presented here (see table 1), the following areas were considered:

- 1. Established principles for CLIL materials development.
- 2. Available checklists for CLIL materials analysis.

The review of principles for CLIL materials development was first required in order to identify well-established criteria. Afterwards, it was determined that the literacy-supporting recommendations presented in section 2, should be the items of the checklist, in line with Meyer (2010), Meyer et al., 2015; Meyer & Coyle, 2017; Coyle & Meyer, 2021. Afterwards, available checklists for the analysis of CLIL materials were also reviewed. It was determined that the tentative checklist needed to systematize the following steps for analysis:

- 1. To identify the type of work plan according to task, activity, or question (see the "kind of WP" section of the checklist).
- 2. To note the presence of CDFs (see the "CDFs" section of the checklist). The criterion for categorizing a process as a type of CDF was initially its alignment with any of the CDF types or their components, which were considered "keywords". Following Dalton-Puffer and Bauer-Marschallinger (2019), the "underlying communicative intention" of the CDF should be analyzed to ensure it accurately matches the category.
- 3. To determine whether the task, activity, or question addresses any of the CLAs. If so, identify which one(s) (see the "CLAs" section of the tool).
- 4. To determine if the instructions clearly mandate students to generate a particular type of textual genre. If not directly stated, deduce whether a specific genre is anticipated or suggested by the phrasing in the instructions (see the "genres" section of the checklist).
- 5. To ascertain whether the workplan explicitly mandates interaction.

To ensure the internal validity of the checklist, it has been tested in two different contexts: one for the analysis of CLIL biology and geology textbooks in secondary education and the other in relation to teacher- developed materials used in a particular classroom.



4. Results and discussion

Regarding the structure of the tentative checklist, it includes the following dimensions, which match the above-described steps for analysis:

- 1. Kind of workplan: determine whether it is categorized as a task, activity, or question. If it is a question, classify it according to Dalton-Puffer's (2007) taxonomy.
- 2. Kind of CDF, if applicable, present in each task, activity, and question.
- 3. Kind of text genre specified in the prompts for tasks, activities, and questions. If not directly stated, infer the genre that is implicitly anticipated (Llinares et al., 2012).
- 4. Kind of communicative language activity (CLA) addressed in each workplan.
- 5. Whether the workplan explicitly requires interaction among learners.

The differentiation between task and activity was determined by the criteria specified in section 2. Each dimension—such as the type of CDF, text genre, communicative language activity, and the requirement for interaction—is classified based on the phrasing of the instructions provided in each workplan; the checklist allows for the analysis and classification of each workplan according to its specific type (task, activity, or question), the CDFs included, the genres expected (whether explicitly stated or implied), the communicative language activities prompted in each case, and whether the workplan explicitly mandates student interaction. The checklist allows the inclusion of as many columns as necessary according to the number of workplans and genres present, here a limited number of columns is set for space reasons.

Therefore, once a workplan is identified in the materials, its wording should be analyzed for action verbs telling learners what to do in the workplans. Afterwards, they are classified according to the above-mentioned items or categories, for example, a workplan taken from a coursebook of secondary education is "Using your own words, describe what a hybrid organism is" (Quijada Sánchez, Castellano Sánchez, and Fernández Aguilar, 2016): in this case, this workplan belongs to the category question for facts, the CLA is unspecified, the CDF corresponds to define (although the verb that appears is describe, a definition is implied); the implicit genre of the question is a definition.

The checklist has been specially developed for materials for secondary education, although there is no impediment to its use in the analysis of primary education materials, since all the dimensions of the checklist should also be present in these materials.

The different types of textual genres have not been specified because they will change according to the subject to which the materials to be analyzed belong (i.e. the genres of science will not be the same as those of history or geography). Therefore, each teacher or materials evaluator must include the textual genre that appears in each of the workplans.

The tentative checklist is presented in table 1 below.



Table 1.

Tentative checklist for analysis of CLIL materials



Source: Own elaboration (2024)

5. Conclusions

There remains a significant gap in research on materials development, particularly in the area of CLIL materials analysis and evaluation. The checklist presented here aims to address this gap by providing teachers with a valuable tool for analyzing materials specifically designed for CLIL contexts. This is a challenging task, as teachers must ensure their students achieve three main objectives: learning the content, acquiring the additional language (L2), and developing literacy.

This checklist has been developed in alignment with the principles of the Pluriliteracies



approach to teaching and learning (Meyer et al., 2015; Meyer & Coyle, 2017; Coyle & Meyer, 2021).

The significance of these dimensions for CLIL materials has been detailed in section 2 of this paper. It is essential for learners to be exposed to a broad range of tasks and academic questions that encourage the manipulation and production of various multimodal texts, enabling them to master subject-specific literacies. To achieve this, students should be able to produce different types of texts or subject-specific genres and engage with a variety of cognitive discourse functions. Therefore, these elements should be included in both teacher-developed and commercially available materials.

Ultimately, this checklist will assist teachers in the challenging task of analyzing whether these dimensions are present and will help them identify when to supplement their materials with the missing elements. The checklist also simplifies this process by allowing for quick completion, and its clear layout ensures that teachers and other evaluators can easily identify the relevant dimensions. However, the checklist has some limitations. To strengthen its internal validity, it needs to be tested and reviewed by the teachers who will use it, gathering their feedback to make any necessary adjustments. This will be considered in future research.

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