Can engaging L2 teachers as material designers contribute to their professional

development? Findings from Colombia

Darío Luis Banegas; Kathleen Corrales; Paige Poole

Abstract

There is a lack of research around the professional development of English (L2) teachers in

Colombia. As in other Latin American countries, higher education institutions have started

offering general English as a foreign language (EFL) courses as well as content courses

taught in English. In both types of course, EFL teachers are expected to integrate content and

English language learning with the aim of providing learners with meaningful and authentic

learning opportunities. However, such teachers often face the challenge of not having

appropriate materials to deliver such courses. The aim of this case study, which employed

mixed methods, is to describe the extent to which university EFL teachers from a Colombian

university developed professionally as they engaged in developing materials for content and

language integrated learning (CLIL) courses. The study consisted of two parts: (1) a CLIL

workshop attended by 16 participants, followed by (2) interviews with four of those

participants. Drawing on data from a survey, group discussions, and individual interviews,

the findings show that engaging the university EFL teachers as materials developers boosted

their professional knowledge (linguistic, content, and pedagogical knowledge), motivation,

identity, and agency as CLIL teachers and material designers.

Key words: CLIL; materials development; professional development; agency; professional

knowledge; motivation

1

1. Introduction

When educational institutions decide to implement a new context-responsive educational approach as a consequence of curriculum renewal, professional development is vital to secure the success and sustainability of this innovation over time (Connolly, 2015; Markee, 2013). It has been rightly argued that educational reforms rest on teachers' shoulders, together with other actors such as coordinators or teaching assistants. It has been stressed that educational changes need to be co-constructed and negotiated with teachers (Kesküla, Loogma, Kolka, & Sau-Ek, 2012).

For an educational system to mobilize innovation, the literature provides solid evidence in support of continuing professional development (CPD) to scaffold curriculum innovation change (Díaz Maggioli, 2012; Ferrer Ariza & Poole, 2018; Gurney & Liyanage, 2016). In this study, we understand CPD as any systematic form of situated professional learning that helps teachers maintain, improve, or change their professional knowledge and skills. CPD is multi-faceted, lifelong, and influenced by prior personal and professional experiences, motivations, and beliefs (Avidou-Ungar, 2016; Hayes, 2019; Kubanyiova, 2019). CPD can be teacher-initiated or mandated, and, according to Timperley (2011), it can take many forms (e.g., workshop). Whatever its form, CPD seeks to broaden and improve teachers' professional knowledge and skills and lead to sustained reflective practice, professional learning (Cirocki & Farrell, 2019; Darling-Hammond, Hyler, & Gardner, 2017; de Vries, Jansen, & van de Grift, 2013), and agency built on motivation, autonomy, and identity (Dikilitaş & Mumford, 2019).

In this study a workshop (Section 3.1) for university teachers of English as a foreign language (EFL) was facilitated by an external professional as a form of mandated CPD at a

private university in Barranquilla, Colombia. The university wished to improve the L2 teaching approach used to integrate subject-specific content and English language learning in English-medium courses. The university had selected content and language integrated learning (CLIL) as a language teaching approach because of its dual focus on content and language learning (Coyle, Hood, & Marsh, 2010). Over time, the university noted that the EFL teachers needed support in understanding CLIL's underpinnings, particularly in relation to teaching materials, since it was believed that in order to respond fully to the courses' and learners' aims, the materials had to be produced by the teachers.

The literature in English language education (e.g., Bao, 2018; Garton & Graves, 2014; Tomlinson & Masuhara, 2018) offers robust discussions on the interconnections between language learning and (teacher) materials development. Notwithstanding, it remains unclear how supporting teachers in designing and implementing their own materials for a specific approach, in this case CLIL, can become a potent source of continuing professional development. In this regard, in a review of *System*'s contributions to language teacher education research, Guo, Tao, and Gao (2019) suggest that research is needed in the area of CLIL and language teacher education, among others. As a response to this gap, we, the authors of this study, believe that by taking a bottom-up approach to professional development that is aided by external support, teachers may develop a firm grasp of CLIL as they work to make CLIL principles transparent in their teaching materials (Morton, 2019). Therefore, the purpose of this case study is to examine the ways in which teacher CLIL material development can act as a meaningful CPD opportunity.

We now describe the architecture of this contribution. In the following section we present the theoretical framework concentrating on CLIL and CLIL materials. Next, the research framework is described. We then discuss the findings in the light of the theoretical

framework, and put forward implications and concluding remarks which may resonate with other contexts. We also believe that this article may contribute to mitigating the underrepresentation of South America in international journals.

2. Conceptual framework

Since its inception specifically for the European Union, CLIL has received international attention given its integration of curriculum content and additional language learning (Hemmi & Banegas, forthcoming; Coyle et al., 2010; Mehisto, Marsh, & Frigols, 2008). In practice, CLIL is usually represented as a continuum which moves between two ends: a focus on content and a focus on language. At the content end, CLIL is conceptualized as an educational or content-driven approach. At the language end, it is seen as a language teaching or language-driven approach (Cenoz, 2013; Ruiz de Zarobe & Cenoz, 2015).

As an educational or content-driven approach, CLIL entails the teaching of school subjects (e.g., mathematics or science) through an L2, with different degrees of linguistic support (e.g., Garzón Díaz, 2018; Mahan, Brevik, & Ødegaard, 2018; Martínez Agudo, 2019), usually in the hands of subject teachers with, if possible, the support of a language teacher. In contrast, as a language-driven approach, CLIL refers to the practice of using curriculum content as a vehicle for enhancing second language learning, usually English (Banegas, 2013; Genesee & Hamayan, 2016; Porto, 2018). Regardless of the model or its positioning on the continuum, CLIL initiatives are context-responsive as the content element comes from the L1 curriculum, and the L2 element is built on learners' prior knowledge.

Despite some theoretical and practical controversies (Pérez Cañado, 2018), CLIL is implemented as a curriculum innovation across educational levels (Ruiz de Zarobe & Lyster,

2018), given the following underpinnings and benefits: (1) it is based on sociocultural and cognitive theories of education (Banegas, 2020), (2) it aims at curriculum integration and multilingual education (Nikula, Dafouz, Moore, & Smit 2016), (3) it draws on second language acquisition, functional linguistics, discourse analysis, and sociolinguistic perspectives (Llinares & Morton, 2017), (4) it prioritizes authenticity and meaning in tasks, communication, and materials (Pinner, 2019), (5) it promotes awareness at the levels of language, interculturality, and citizenship education (Porto, 2018), and (6) it may enhance learners' motivation, thinking skills, and academic performance with varying degrees of attainment (Meyerhöffer & Dreesmann, 2019; Navarro Pablo & García Jiménez, 2018, but see Fernández-Sanjurjo, Fernández-Costales, & Arias Blanco, 2019).

While institutions around the world implement CLIL because of the benefits listed above, the literature is also clear about the challenges that the approach may pose. In the context of our study, these challenges may include, but are not limited to, three areas: (1) teachers' professional development, (2) learners' L2 proficiency, and (3) teaching and learning materials. In relation to professional development, it has been found (Morton, 2019; Pappa, Moate, Ruohotie-Lyhty, & Eteläpelto, 2017; Pérez Cañado, 2016) that teachers need to renegotiate their identity and professional knowledge as they may be asked to teach content they are not qualified to teach, teach such content in a second language they are not academically proficient in, and/or provide linguistic support without specialized pedagogical training in second language teaching. Concerning learners' L2 proficiency, Ball, Kelly, and Clegg (2015) note that CLIL is not for all. The authors assert that content complexity cannot be downgraded because of learners' low L2 proficiency. If language proficiency becomes the dominant criterion at the expense of content, student motivation may suffer as authenticity and subject matter may adopt reductive forms of instruction which are not compatible with L1 instruction.

We now concentrate on the third challenge, CLIL materials, as it lies at the heart of our research project. Since its origin, the lack of appropriate materials has been documented as a drawback for the successful and sustainable spread of CLIL (Ball, 2018; Morton, 2013). As a response to this gap, several authors have put forward guidelines, checklists, and comprehensive frameworks to provide a balanced approach to concepts, procedures, and language (Ball, 2018; Ball et al., 2015; Banegas, 2017; Coyle et al., 2010; Mehisto, 2012). They all agree that materials should include multimodal support, authentic texts and tasks, different genres, instances for developing subject-specific terminology and general language to be able to carry out the tasks suggested, integrated language skills, and tasks sequenced according to linguistic and cognitive demand. Although these guidelines are helpful and accessible, there is a dearth of studies which examine teachers' development with CLIL materials. Below, we review four studies which show connections and gaps between CLIL materials and professional development.

As part of a larger project, Moore and Lorenzo (2015) report on a study in Spain through which CLIL content teachers were supported in the process of designing their own CLIL materials in teams with a focus on tasks. This initiative was in response to teachers' frustration with a lack of commercially available CLIL materials. The teacher teams included primary and secondary school teachers of different subjects and with different L2s as vehicles for content teaching. Data collected through informal dialogues and materials drafts revealed the challenges the teams faced: balancing cognitive and linguistic demands, determining discourse functions, grading input, scaffolding output, and sequencing activities in line with learner needs. While the study provides insights into materials development and suggests a taxonomy for organizing teaching sequences, it does not examine how overcoming such challenges can contribute to teachers' professional development.

A second study of interest was set in Italy. In Grandinetti, Langellotti, and Ting's (2013) investigation, a group of content and language teachers worked together to succeed in CLIL implementation for teaching science with materials designed by the Italian educational authorities. The authors sought to understand how CLIL can help content teachers who are sub-fluent in L2 to move advanced-level content forward. To this end, peer collaboration was put in place for the design and implementation of the CLIL materials. The authors describe and discuss the activities and highlight that task completion became the main source of learning, with occasional instructional talk to scaffold learning. In their analysis, the authors propose a focus on tasks to ensure a balance between cognitive and linguistic demands and the use of L1 as another tool to scaffold learning. Although the study provides empirical evidence of learners' science understanding and improvement in academic English, there is no attention to how a focus on CLIL materials acted as a professional development opportunity for the teachers involved. The article does stress that the science teachers did develop professional autonomy despite their weak L2 command, but this is presented peripherally.

In an exploratory survey-based study of European CLIL teachers' practices and perceptions regarding the materials they used, Morton (2013) found that the use of commercial CLIL materials or textbooks written for students whose L1 is English was less common than adapting authentic sources or producing their own materials. According to the findings, the most recurrent reason for this was teachers' concerns with the appropriateness of language and content for learners, and its appropriateness for the prevailing educational and cultural context. The author stresses the need to engage teachers in materials design, as this enables educators to calibrate learning materials in ways that are contextually appropriate.

Finally, we review a content-analysis based study in Argentina (Banegas, 2016) that was the result of a workshop to support L2 teachers' implementation of language-driven CLIL. According to the content analysis of the lesson plans submitted by the teachers as part of the coursework, the author detected a tendency to provide instruction through audiovisual and written input, usually scaffolded with graphic organizers. The materials invited learners to work cooperatively; however, the materials limited themselves to focusing on lower-order thinking skills. The study did not examine teachers' views on their practices or the effects that the workshop may have had on their professional development.

While the articles reviewed above illustrate a bottom-up approach to CLIL materials in a variety of settings, they do not provide in-depth accounts of how teachers can benefit professionally by engaging in materials design, particularly in language-driven CLIL in higher education. Against this backdrop, we set out the following research question: In what ways does teachers' participation in CLIL materials development contribute to their professional development in higher education courses?

3. Methodology

The investigation is framed as a case study (Cohen, Manion, & Morrison, 2011; Duff, 2020) given the focus on a small number of EFL teachers attending in-house CPD at their university. The study consisted of two parts. Part 1 included the CLIL workshop mentioned above. Part 2 comprised the EFL teachers designing and implementing CLIL materials for their courses. Part 2 also included interviews in which the participating teachers reflected on the experience of developing and implementing their own CLIL materials.

Below we provide information about the research context, ethical considerations, the participating teachers, and the research instruments and procedures.

3.1. Context and workshop

This paper reports on data collected from the Foreign Language Department at a private university in Barranquilla, Colombia. Specifically, the materials designed and the tutors who designed them teach in CLIL courses in two different EFL programs: (1) the English Language Program (ELP), a general EFL program that is non-credit bearing and fulfils the foreign language graduation requirement for students, and (2) the English for International Relations English (IRE) program, a CLIL-based program for students majoring in International Relations where the English courses are credit-bearing and part of the students' plan of study.

The ELP program focuses on developing general English through eight courses. The last level of the program is a CLIL-based course focused on intercultural communication that combines the development of both communicative and intercultural competences as well as helping students reach the B2 level according to the Common European Framework of Reference (CEFR).

The IRE program is a CLIL and project-based learning program. In total, there are eight levels in the program with the final four levels having a CLIL emphasis. Each of these levels includes one semester-long project where students work on developing communicative, professional, and intercultural competences. The content covered relates to the following overarching topics such as culture, IR communication, current issues in IR, and career skills (i.e., writing a CV, carrying out an interview).

These courses had been offered for five years at the time this study was carried out, and rather than using commercial textbooks, the course materials had been designed in-house by the program teachers. Over time, the program coordinators realized that certain aspects of the materials needed to be strengthened and updated. The teachers in this study received these previously-designed materials and were tasked with adding to, deleting from, and modifying them in a way that made them more appropriate for the CLIL teaching-learning context and methodology.

The three-day workshop aimed at offering teachers an understanding of CLIL principles in relation to materials development. The workshop outcome was intended to provide teachers with frameworks that would enable them to adapt and create their CLIL materials. Prior to the workshop, the teachers were asked to read Banegas (2015, 2016) and Coyle et al. (2010) to identify CLIL features and recommendations for CLIL materials. In the workshop, the teachers were provided with PowerPoint-supported input on CLIL features, rationale, and models (Ball et al., 2015; Coyle et al., 2010; Genesee & Hamayan, 2016). In addition, they received input on principles for CLIL materials (Ball, 2018, Banegas, 2017). It should be highlighted that input was offered after engaging the teachers in individual, paired, or group work that elicited their beliefs, prior knowledge, and experience with CLIL and materials development. They discussed ways in which materials could be designed for effective language instruction. Finally, the teachers analyzed their own as well as colleagues' CLIL materials in the light of the input provided, and set out a plan to develop new materials for their courses.

3.2. Ethical considerations

The participants gave written consent to participate after they were briefed on the purpose of the study and research procedures. They were assured that confidentiality and anonymity would be preserved, and that taking part in the study would have no impact on their job. They also had the right to withdraw from the study at any time. They were given the opportunity to provide feedback on the manuscript, particularly on data analysis (member checking).

Pseudonyms have been used in this paper to name the participants.

3.3. Participants

Of the 16 university EFL teachers who attended the workshop, seven completed a questionnaire administered in Part 1, but only four (Table 1) agreed to become involved in Part 2 of this study. While this is a small sample, it is a representation of the challenges of asking teachers to participate in studies which may add pressure to their increasing workload and tight schedules.

The participants have experience in EFL teaching with either a Master's in the field or relevant teaching experience. In addition, the three teachers in the IRE program have also carried out academic studies related to International Relations. Likewise, they are level coordinators, meaning they are responsible for leading curriculum updating, assessment creation, and logistical-administrative tasks. Given the coordination responsibilities, the participants in this study were full-time teachers with a minimum of three years of experience in the EFL field. It should be clarified that out of 67 teachers of English in both programs, 49 are native speakers of Spanish (Spanish being the dominant language in Colombia), whereas 18 are native speakers of English. In both programs, Colombian and international teachers serve as coordinators, and coincidentally, the coordinators of the CLIL levels at that time

happened to be international. Thus, participants were not chosen based on their language background, rather on their role as materials designers.

Table 1. Participants' backgrounds

Name	Nationality	Degree	Program	Years teaching in program	Total years of teaching experience
Peter	British	BA French and Spanish Studies	ELP	2.5	10
		MA TESOL and Applied Linguistics			
Chris	Irish	BA History and Sociology	IRE	6	12
		MEd Applied Linguistics			
Mike	British	BA in International Relations and Spanish	IRE	1	3
		MSc Latin American Development			
Rose	American	BA in English	IRE	3	8
		MA in International Affairs			
		MA in ESL and Multicultural Education			

While at first glance, the teachers may seem to represent only an international perspective, none of the participants had any previous experience of teaching CLIL and began using this approach in Colombia. In this sense, these teachers embody the Colombian vision of CLIL, which is in line with the concept of CLIL as a continuum.

3.4. Data collection and analysis

Framed as a case study, a mixed-methods approach (Brown, 2014) was utilized for data collection. In Part 1, the workshop delivery, data were collected using an ecological perspective (Edwards & Burns, 2016), i.e., in the natural micro-context under investigation (the workshop) and through workshop tasks. In this case, three tasks acted as instruments:

- A group discussion about the benefits and challenges of CLIL, in which Darío
 Banegas took notes of the discussion and took pictures of the teachers' drafted ideas
 that surfaced in interaction.
- 2. A group discussion of the teachers' views on the materials they were working with.

 The teachers had to list (a) what they would like to keep, and (b) what they would like to change. Photos of the lists were taken. Darío Banegas took notes as the discussion unfolded. Group discussions were utilized as they can generate a wider range of responses (Cohen et al., 2011; Gibbs, 2017).
- 3. A post-workshop online survey distributed by email to the participating teachers to collect further individual insights (Cohen et al., 2011). The survey, previously piloted with EFL teachers based in another university, consisted of ten closed-ended items to be rated using a five-point Likert scale (Appendix 1).

In Part 2, data came from two further instruments:

- 4. Teacher-made materials employed as teaching artifacts. As an example of documentary research (Cohen et al., 2011), they were used to illustrate the themes identified in the interview analysis (Section 4).
- 5. One individual one-hour semi-structured interview carried out in English with each of the four participants described in Table 1. Conceived as conversations (Cohen et al., 2011), the interviews were held with each teacher with the presence of any two of the authors. The interviews revolved around the participants' experience of creating CLIL materials (including the challenges they faced, explanations of their decisions, and their reflections on changes made) and the effect (if any) this creation had on their professional development. While we acknowledge that the presence of two authors may have been intimidating, the participants did not exhibit anxiety or discomfort.

Whereas descriptive statistics (Cohen et al., 2011) were used to analyze the survey results given the limited number of responses (N=7), content analysis (Selvi, 2020) was used to analyze the teacher-made materials. Attention was given to the following features: (1) type of sources of input, (2) types of task procedures and focus on content and/or language, (3) opportunities for language awareness or learning salient language, and (4) use of multimodal resources to scaffold content and language learning. For reasons of space, some samples of the participating teachers' materials are used to support their reflections. On the other hand, the interviews were orthographically transcribed and subjected to thematic analysis procedures (Clarke & Braun, 2016). Each author analyzed all the transcriptions individually to identify codes and unifying categories. Then, we met to discuss them and reach consensus about the categories and unifying themes. With an agreed codebook, we re-analyzed the data that would allow us to answer the research question.

4. Findings

In this section, data are presented following the two parts in which the research project was organized.

4.1. Teachers' prior knowledge and experiences

Drawing on the data gathered from instruments 1 and 2, we sought to understand: (1) teachers' conceptions of content and language in CLIL, (2) the benefits and challenges of CLIL implementation in their context, and (3) their self-evaluation of their teaching materials. As described above, 16 teachers attended the workshops and provided insights.

Concerning conceptions of content and language in CLIL, the teachers equated content to that covered in the CLIL programs, with particular emphasis on concepts and the development of professional skills and general learning strategies. Conversely, language was equated to a wider range of responses, as shown: grammar (N=9), subject-specific terminology (N=7), language functions (N=4), language skills (N=4), collocations (N=3), writing processes (N=2), and pragmatic competence (N=2). The teachers reinforced the instrumental notion of language learning since English was 'a vehicle for learning subject-matter in the course' (Mike). In relation to CLIL benefits, the teachers stressed authenticity (N=8), motivation (N=6), and professional development (N=4). Conversely, the following challenges surfaced: lack of materials (N=9), learners' limited proficiency (N=5), and teacher preparation (N=3). Lastly, they expressed a desire to maintain the authenticity of topics and input sources in the course materials in addition to opportunities for developing learning strategies. Notwithstanding, they indicated the following changes were necessary: reducing

the number of activities and input, being more selective, offering more balance between content and language learning, and offering more balanced opportunities for developing speaking, reading, writing, and listening.

The online survey (Appendix 1) was distributed by email to the 16 teachers who had attended the workshop. Despite the limited responses (N=7), the teachers agreed that CLIL may enhance motivation. They also agreed that developing their own CLIL materials was an opportunity for professional development, but their responses highlighted that such materials should embed systematic and strong opportunities for developing language skills and for learning grammar and vocabulary through awareness-raising activities.

In line with the findings gathered through the group discussion, the survey shows that CLIL was associated with learner motivation and that, despite certain reservations, teaching new content was not a challenge for the teachers. The survey also reveals that teachers had an interest in developing professionally by designing their own materials, although they worried that this would be time-consuming. From our understanding, professional development would aid them in including more language awareness raising activities and activities with a stronger grammar focus.

4.2. Implementing and reflecting on change: themes and sample materials

When analyzing the data from the four teachers (Table 1) who agreed to be included in Part 2, we found a series of challenges that the teachers discussed in relation to their materials design process. Upon further analysis, these challenges were identified as catalysts for the professional development highlighted by teachers. Therefore, to provide a detailed view of their professional development and the reasons behind it, the following themes are discussed

below: (1) challenges of creating teacher-developed materials, (2) enhanced teacher motivation, (3) enhanced teacher identity, and (4) growth in professional knowledge.

Throughout the interviews, the four teachers highlighted elements that pushed them into finding solutions, thereby encouraging professional development. The most commonly recurring challenges cited were identifying suitable sources of input, bearing in mind the local context and specific needs of the students, and ensuring that there was an adequate balance between content and language:

[Finding readings can be] difficult because a lot of the courses ... you want it to be very much focused on the local which creates its own challenges. Recently, I've been kind of translating things and using those in the course because realistically, it doesn't take very long to translate an article if you think it's useful. Maybe trying to find listenings, trying to find more different forms of materials, audiovisual materials is obviously more complex. (Chris, Extract 1)

Even so, finding content with a more local context allowed the teachers to create material that they felt was meaningful and engaging for students. In this way, the challenge of emphasizing 'the local' (Figure 1) stimulated teachers' abilities to adapting to students' needs. As one teacher stated:

Now the materials are more engaging and authentic, and they focus on real problems.

They are more updated on what's going on in Colombia... I used the projects for the

level to decide on what materials were needed, and I included the language based on what students needed for the projects. (Rose, Extract 2)

Figure 1. Reading activity related to the killing of social leaders in Colombia

Context Read the article from the Atlantic and respond to the following questions:

- What is the article referring to?
- What is the most surprising thing you take from the article?
- What word would you choose to summarize your reaction to the article?
- What new words or phrases did you come across in the article?

Killing With Impunity, Every Three Days

May 30, 2018

Video by Tom Laffay, Emily Wright, and Daniel Bustos

"We made this film because no one, particularly the US media, seemed to care," Tom Laffay told *The Atlantic*. Laffay, a filmmaker and journalist based in Bogotá, is referring to the parlous situation in Colombia, where social leaders and community organizers are routinely assassinated with impunity. "The rate is now at one killing every three days," Laffay said.

"What is unusual isn't the assassinations per se, as we've long been normalized to violence here," said Daniel Bustos, who co-directed the documentary *They're Killing Us*, premiering on *The Atlantic* today, with Laffay and Emily Wright. "Rather, it was the systematic pattern of victims that emerged: all men and women that had been fighting for the rights of their communities."

The murders are the fallout of a peace accord signed in September 2016 between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC). The hope was that the deal would bring about the end of a violent 60-year civil war that killed a quarter-of-a-million Colombians and internally **displaced** more than six million. During the conflict, FARC, a Marxist rebel group, fought the longest-running armed insurgency in the Western Hemisphere. It controlled 170,000 acres of coca in the country, which produced 50% of the world's cocaine, yielding a profit of \$600 million annually.

The four participants also felt that the previous material was strongly focused on content. Hence, a priority in the design process was to include more language features, especially related to grammar, vocabulary, and the integration of the four language skills (reading, speaking, listening, and writing), in order to build a stronger balance between content and language. Expressing this, one teacher said:

For sure, one of the challenges was to balance content and language because the overriding goal of this course is not just learning about grammar points and specific language points, but it is also to develop the way that they are and the way that they see the world... [In the previous material, language] was very formulaic ... rather than just presenting vocabulary in a table, I tried to include it in the comprehension questions ... incorporating not just reading and then speaking, but then trying to incorporate some of the other skills within the article so that it was an integrated lesson. (Peter, Extract 3; see Figures 2 and 3)

Figure 2. Excerpt from course material before the workshop

Stereotypes and Generalizations

 generalization 	a. so, as a result
2stereotype	b. general statement based on fact
3othering	c. treatment to show that someone is not "one of us"
4originate	d. traits, descriptions
5ethnocentric	e. a generalization, often judgmental, based on incomplete evidence
6thus	f. the belief in the inherent superiority of one's own culture
7characteristics	g. to come from

When does a generalization become a stereotype? What are the differences between generalizations and stereotypes? Do they have different *origins*? Different *functions*? Different *effects*?

Generalizations:

All statements of fact or truth require **generalization**. A generalization is a statement based on a finite set of observations and experiences and yet which claims to hold true for the larger set, even for those cases that have not been seen or experienced. All generalizations, then, can be said to be theoretical. They offer a theory about how things are in general. **Thus** the statement "All trees have leaves" is a useful generalization, though no one person has ever been able to validate it by inspecting every tree on earth or every tree that has ever existed, and no one knows what trees will be like in the future. And of course most trees do not have leaves at various times of the year, and some trees are evergreens with needles instead of leaves. The generalization originates in a rational effort to categorize, not in an irrational effort to judge or to *other*. **Othering** means treating individuals and groups in a manner to show that they are "not one of us." The function of the generalization is to allow people to work better with trees, not to harm trees.

Stereotypes:

A **stereotype** is a particular kind of generalization, a subset of generalization. Stereotypes, according to sociologist Joel Charon, can be distinguished by several points:

- 1. stereotypes pass judgment
- 2. stereotypes leave little or no room for exceptions

Figure 3. Excerpt from course material after the workshop

Stereotypes and Generalizations

Before you begin, consider these statements:

- 1. Chinese people are so quiet.
- 2. All Koreans eat dog meat.
- 3. People from Africa are poorly educated.

Now complete the vocabulary section and fill the gaps with the correct term from the table.

Vocabulary: Match the word to its definition				
1generalization	a. so, as a result			
2stereotype	b. general statement based on fact			
3othering	c. treatment to show that someone is not "one of us"			
4originate	d. traits, descriptions			
5ethnocentric	e. a generalization, often judgmental, based on incomplete			
	evidence			
6thus	f. the belief in the inherent superiority of one's own culture			
7characteristics	g. to come from			

When does a generalization become a stereotype? What are the differences between generalizations and stereotypes? Do they have different origins? Different functions? Different effects?

Generalizations:

All statements of fact or truth require _______. A generalization is a statement based on a finite set of observations and experiences and yet which claims to hold true for the larger set, even for those cases that have not been seen or experienced. All generalizations, then, can be said to be theoretical. They offer a theory about how things are in general. _______, the statement "All trees have leaves" is a useful generalization, though no one person has ever been able to validate it by inspecting every tree on earth or every tree that has ever existed, and no one knows what trees will be like in the future. And of course most trees do not have leaves at various times of the year, and some trees are evergreens with needles instead of leaves. The generalization originates in a rational effort to categorize, not in an irrational effort to judge or to other. ______ means treating individuals and groups in a manner to show that they are "not one of us." The function of the generalization is to allow people to work better with trees, not to harm trees.

Stereotypes:

A ______ is a particular kind of generalization, a subset of generalization. According to sociologist Joel Charon, they can be distinguished by several points:

1. stereotypes pass judgment.

Overall, the decision-making process involved in finding appropriate input, relating it to the context, and balancing its content and language, all posed challenges for these teachers and led them to develop professionally as they worked to address those challenges.

A consistent theme that we identified was that of enhanced teacher motivation. The four teachers agreed that, while it was time-consuming, developing their own CLIL materials had been motivating as they could exercise agency and curriculum transformations through them. For example:

I really enjoyed creating the materials. It's rewarding when you create something from scratch or when you adapt something already pre-existing. It gave me the opportunity to tailor the course and to introduce changes that I think are necessary and meaningful. (Peter, Extract 4)

In addition, the teachers expressed that the authenticity element (authentic topics and sources of input) included in the materials and the awareness that the teaching and learning processes were organized and guided by teacher-made materials, energized them. On this aspect, Rose expressed:

I just loved changing the materials or creating new ones. I did that in a rush though, but it was enjoyable, particularly because the topics and resources were authentic, focused on real problems and input. (Rose, Extract 5; see Figure 4)

Figure 4. Excerpt from Rose's materials

Read the text "Colombia" from When Cultures Collide by Richard Lewis (2006), p. 556-561. As you read, compare the information to what you have written down in the chart, and mark any information you consider erroneous or biased.

When you have finished reading, discuss the following questions with your classmates:

- · What was the erroneous or biased information you found?
- · What was the true information you found?
- · Was there more erroneous or true information?
- · How did reading this information make you feel? Why?
- · Why do you think the author included erroneous information?
- · Where do you think it came from?

Now, in your group, propose changes to the text to make it more reliable and less erroneous.

Remember, the text is not written for Colombians, but rather for people who may come to visit, do business, or have political meetings in the country. Be prepared to present the changes to the class and justify your proposal.

Thinking about your culture guide: based on what we have read and discussed so far, what information do you think a person would need to understand the culture(s) of your chosen country? What perceptions of your country do you currently have?

Important information	Current Perceptions

Nonetheless, one teacher who celebrated the motivational effect of designing materials raised concerns about collaboration:

I enjoyed designing new materials and redesigning what I had already developed, but I wish it were more collaborative. Like, we may need more time to share our ideas with colleagues and receive input and feedback from them. (Chris, Extract 6)

Enhanced teacher motivation was understood and experienced in conjunction with teacher identity, as both interacted and influenced each other. Through this experience, teachers expanded their horizons and developed a new identity: that of CLIL teachers who can create their own CLIL materials. This expanded and enhanced identity proved to be transformative for all the teachers interviewed. For example, Mike said:

I feel that I'm not just an EFL teacher. I can be a CLIL teacher and I have the freedom and autonomy now to add to and change the course I teach, and this is because we engaged in developing materials. I've realized I can design materials. I think that I feel stronger now because I have now become more engaged in understanding pedagogical processes and the experience gives me more in-depth knowledge of language education. (Mike, Extract 7)

Mike's perceived relationship between identity and professional knowledge allows us to introduce the last theme: professional knowledge. This theme merges categories related to several aspects of what may constitute versions of knowledge or knowledge-generation (Freeman et al., 2019).

One of the effects of designing materials was improvements in the teachers' disciplinary knowledge, i.e., their knowledge about language. For example, one teacher commented:

As I had to work on language awareness and discourse, I started to read more about linguistics, particularly about pragmatics and vocabulary, areas such as collocations and word lists. (Rose, Extract 8, see Figure 5)

Figure 5. Excerpt from Rose's materials on language awareness

Building Vocabulary: Complete the chart with the different word forms of our vocabulary terms from the Hofstede reading plus some of the concepts from the dimensions. Some of the chart is completed for you.

hierarchical * assertive * equality * individualism * collectivism * orthodox * thrift * indulgence * restraint * masculinity * femininity * uncertainty

Noun	Verb	Adjective
hierarchy	X	
assertiveness		
		equal
individualism	Х	
		collectivist
	Х	
thrift		
	indulge	
	restrain	
		masculine
	X	
uncertainty		

Another effect was on the teachers' pedagogical knowledge related to teaching methodologies and approaches. All the teachers indicated that they had read not only about

CLIL principles, but also about other approaches such as project-based learning or task-based learning. On this aspect, a teacher said:

As I started including projects and other activities in the material, I read on project-based learning to have a clearer picture and guidance on what the outcome of the tasks should be. (Rose, Extract 9)

Teachers also expressed that engagement in materials development contributed to them becoming aware of their own theories about teaching and learning, i.e., their knowledge-in-person, based on their personal and professional experiences in context. Put differently, materials development triggered systematic teacher reflection and reflective practices, as the extract below shows:

By developing my own materials, I reflected more about what I believe works and what I've seen working in my lessons. I reflected on the tensions between what experts say and what I see with my students in the classroom. Somehow in my materials I have been able to reconcile these views taking them as complementary. (Chris, Extract 10)

Additionally, as materials creators, they understood the rationale behind ensuring a clearer and more coherent selection and organization of the material. Thus, they developed a better

understanding of the importance of sequencing activities to enhance student learning. This was expressed by one teacher, who said:

Everything is very evident why it's being done ... it feels logical ... It feels like the things that are there are there for a specific reason, and they're there to help students get to where we expect them to get. The balance between content and language is a never-ending battle, trying to get it right. (Chris, Extract 11)

With CLIL teachers, there is additional knowledge generation: knowledge of non-language content. Developing their own materials led the four teachers to become more knowledgeable about the topics they were expected to cover. The following quote illustrates this:

Looking for suitable videos or articles gave me the chance to deepen my knowledge about different topics connected to IR [International Relations]. I also became more critical of definitions and other faces of content learning. (Mike, Extract 12; see Figure 6)

Figure 6. Mike's material

2. Do you think there will be any hostility between the two mothers?

Exercise 5. Listen to a conversation of two mothers and take notes on what each one says regarding each of the areas in the table: the suicide bombing incident, peace in Israel and Palestine, and the Occupation.

Link to part one: https://www.youtube.com/watch?v=A-j2SPNhRcM
Link to part two: https://www.youtube.com/watch?v=RXjJr-1W1ao

Two Mothers: Israeli and Palestinian

	Opinion of the Levy Family	Opinion of the Al-Akhras Family
The Suicide Bombing Incident		
Peace in Israel and Palestine		
The Occupation		

The findings provide evidence that by engaging EFL teachers in developing course materials, they experienced professional development in a wide range of areas. Below, we discuss our research question, integrating the literature review and the data.

5. Discussion

This small-scale case study sought to explore whether university language teachers' engagement in CLIL materials development could contribute to their professional

development. Through the experience of materials development, the teachers developed CLIL materials which were not only context-responsive but also learner-centered, since the topics, sources of input, and tasks were calibrated according to the program the learners were taking and their level of English language proficiency.

The findings revealed two major themes connected to continuing professional development (Darling-Hammond et al., 2017): (1) agency development and (2) professional knowledge.

The first theme, agency development, can be recovered from the teachers' self-reported enhanced motivation and autonomy in CLIL materials development. Despite challenges associated with finding a balance between content and language learning and workload pressure, as already reported in the literature (Moore & Lorenzo, 2015), the teachers found the experience motivating because they could design CLIL materials that were engaging, authentic (Pinner, 2019), and context-responsive (Grandinetti et al., 2013, Morton, 2013, 2019). By exerting their autonomy to select sources and develop their own materials, the teachers simultaneously developed their motivation to design and implement their own materials as they realized that there were no major institutional constraints in the way of this. As Pinner (2019) suggests, agency and motivation may create a synergistic environment that continues to maintain teachers' interest and professional development because the overall experience is authentic and rewarding.

Like the participants in Dikilitaş and Mumford (2019), the teachers in this study developed their agency as they became aware of their capabilities for enacting autonomy informed by their own professionalism. The theme of agency development can also be extended to identity development, since the teachers' realization that they had the motivation, autonomy, and agency to engage in CLIL materials development enabled them to see

themselves as materials developers for CLIL. In other words, they moved from being EFL teachers using third-party materials to becoming CLIL teachers using their own context-responsive and learner-centered CLIL materials. Drawing on Morton's (2019) view of teacher-made CLIL materials, the teachers transitioned from being CLIL materials consumers to identifying themselves as CLIL materials producers.

In this regard, this study shows that a lack of appropriate CLIL materials (Ball, 2018; Mehisto, 2012) can be mitigated by teachers adapting or producing their own materials. While our study confirms Morton's (2013) assertion about secondary teachers' opportunities to enact agency as CLIL materials developers, our findings show that similar results can be obtained when university teachers develop principle-informed CLIL materials (Coyle et al., 2010; Moore & Lorenzo, 2015; Nikula et al., 2016) for higher education learners and courses.

The second theme, professional knowledge, can be divided into (a) disciplinary knowledge (knowledge of and about English), (b) content knowledge (knowledge of non-language content), and (c) pedagogical knowledge (how to teach through CLIL) (Freeman et al., 2019). The findings show that by engaging in materials development, the teachers reported a growth in content knowledge about the English language as a meaning-making system. Likewise, the findings evidenced that this knowledge was, in part, motivated by working to solve the challenges that emerged as the teachers engaged in the materials creation process. For language teachers, robust knowledge about the language is fundamental in the construction of their professional identity and professionalism, and therefore we associate this perceived growth in disciplinary knowledge with teachers' enhanced motivation and autonomy as they developed their professional resources to enact agency. According to the teachers' experiences, the expansion of their disciplinary knowledge grew out of their reflective thinking and learning (Cirocki & Farrell, 2019) about the processes of

materials development as support for learning. This reflective thinking, as we discuss below, not only entailed pedagogical decisions, but also metalinguistic reflection. The teachers developed a strong sense of language awareness as they realized how different linguistic concepts could support them in their understanding of language and language learning. This aspect of professional growth indicates that systematic language awareness-raising activities in CLIL do not only benefit learners (Porto, 2018; Ruiz de Zarobe, 2015) but also teachers as they design them.

Together with knowledge about the language, the teachers reported growth in their non-language or content knowledge. Teachers becoming aware of their content knowledge development may have contributed to their enhancement in motivation, autonomy, and, consequently, agency (Dikilitaş & Mumford, 2019; Kubanyiova, 2019). It is also important to note that for language and content teachers interested in developing a CLIL teacher identity, having knowledge about the language as well as about the content is central, as it makes the difference between language or content teachers and CLIL teachers.

Finally, the growth of teachers' pedagogical knowledge surfaced through a number of decisions. By pedagogical knowledge, we mean knowledge about how to teach, in this study within a CLIL approach. Pedagogical decisions may be associated with three foci:

• A focus on tasks (*task* used here to mean any learning activity in general): The teachers increased the number of tasks to maximize the sources of input included. They incorporated tasks that helped learners develop content and language learning, unlike the materials they had employed previous to the workshop. Through such tasks they sought to cater for a balanced approach to learning content and language (Coyle et al., 2010; Morton, 2013), an issue they had

identified prior to the workshop and which continued to be a source of concern as they developed and implemented their new materials.

- A focus on organization: The teachers could exercise more control over coherence, sequencing, and overall materials organization. Because they were in charge of materials development, they were able to arrange the tasks from less to more demanding in terms of their linguistic, content, and cognitive load. In addition, because they could translate CLIL principles into materials, they strived for content and language integration, although with varying degrees of success (Nikula et al., 2016).
- A focus on input: The teachers selected their sources of input considering
 linguistic demand and learners' English language proficiency. They also selected
 them according to possibilities for pedagogical exploitation (Ball, 2018). Teachers
 made further use of graphic organizers, visual support, and videos to introduce
 new content.

As suggested in the literature (Ball, 2018; Banegas, 2016, 2017; Grandinetti et al., 2013), these foci confirm that when teachers center their attention on tasks, CLIL materials development becomes meaningful, coherent, and easier to complete as learning objectives and outcomes become the guiding principles. By focusing on tasks, teachers incorporate a wider range of sources of input contextualized for a specific class and topic, thus achieving context-sensitive CLIL provision.

The teachers' pedagogical decisions reveal that when they engage in professional learning (Cirocki & Farrell, 2019) through reflection-on-practice (i.e., the teachers reflecting

on their materials after implementing them) (Schön, 1983) and reading professional literature (i.e., the CLIL literature shared in the workshop) in an enabling environment, their opportunities for developing their own teaching materials become a catalyst for continuing professional development. In this study, professional growth based on reflection and reading relevant literature led to both research-informed and experience-informed CLIL materials development. Put differently, teachers' first-hand participation in CLIL materials development contributed to their continuing professional development because they could establish informed and synergistic links between situated practice and theoretical underpinnings. Through these links the teachers contributed to supporting educational changes (Kesküla et al., 2012) at an institutional level because these were negotiated, materials-wise, with them.

6. Conclusion and implications

This case study showed that enabling university language teachers to develop and implement their own CLIL materials created space for motivation, identity, and an increase in professional knowledge derived from designing and implementing the CLIL materials. Notwithstanding, two limitations should be acknowledged. First, we only collected data from a small number of teachers, and we did not include their learners in the study. Therefore, benefits in terms of motivation, authenticity, and context-responsiveness may be either corroborated or challenged by the learners. Second, the study did not include systematic classroom observation, and therefore the teachers' claims of growth in professional development are based on self-reporting and materials analysis.

We believe this study carries CPD implications for context-responsive CLIL implementation. Regardless of educational level, institutions that are interested in adopting a

CLIL model may want to prioritize teachers' professional development and understanding of CLIL features in relation to the local context, curriculum, and the resources they will need. In this regard, supporting teachers' identity and agency as materials developers can provide them with opportunities for understanding and shaping CLIL according to learners' needs by concentrating on CLIL teaching and learning materials. In so doing, teachers may develop a firm grasp of CLIL, drawing on their own situated experiences within the dynamics of their institutional contexts. Also, they may move from adopting and adapting CLIL models found in the literature (usually developed within a European context) to creating indigenous CLIL models and deploying strategies that respect contextual particularities and affordances.

Although they may be time-consuming and problematic in terms of workload, similar institutional initiatives could contain a stronger element of mentorship so that language teachers can be systematically supported in the processes of CLIL materials adaptation and creation. If this cannot be provided, CPD opportunities could promote independent as well as collective initiatives. In the case reported in this paper, teachers were trusted to work independently and supported should they wish to receive feedback from a peer or an expert. In addition, the teachers were encouraged to introduce modifications and reflect on their practices without the need to report to the course coordinators. In this sense, a nascent professional community of teachers as materials developers was initiated without strict guidelines or procedures. Hence, CPD activities for teacher-made CLIL materials could include an experienced mentor or favor intra- and/or inter-institutional peer-peer support.

In terms of research implications, future studies could also include non-native teachers of English as materials designers for CLIL courses. Such studies may show whether differences in English language proficiency and background may have an impact on CLIL materials development and use. Finally, a study could be established to examine the criteria

and processes for materials (re)adaptation and (re)elaboration before and after implementation, involving a large group of participants over a long period of time.

References

- Avidou-Ungar, O. (2016). A model of professional development: Teachers' perceptions of their professional development. *Teachers and Teaching*, 22(6), 653-669. DOI: 10.1080/13540602.2016.1158955
- Ball, P. (2018). Innovations and challenges in CLIL materials design. *Theory into Practice*, 57(3), 222-231. DOI: 10.1080/00405841.2018.1484036
- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CLIL into practice*. Oxford: Oxford University Press.
- Banegas, D. L. (2013). The integration of content and language as a driving force in the EFL lesson. In E. Ushioda (Ed), *International perspectives on motivation: Language learning and professional challenges* (pp. 82-97). Basingstoke: Palgrave.
- Banegas, D. L. (2015). Banegas, D. L. (2015). Sharing views of CLIL lesson planning in language teacher education. Latin American Journal of Content and Language Integrated Learning, 8(2), 104-130. DOI:10.5294/laclil.2015.8.2.3
- Banegas, D. (2016). Teachers develop CLIL materials in Argentina: A workshop experience. *Latin American Journal of Content and Language Integrated Learning*, 9(1), 17-36. DOI: 10.5294/laclil.2016.9.1.2

- Banegas, D. L. (2017). Teacher-developed materials for CLIL: Frameworks, sources, and activities. *Asian EFL Journal*, *19*(3), 31-48.
- Banegas, D. L. (2020). Comprehensive sexual education and English language teaching: An endeavour from southern Argentina. *Innovation in Language Learning and Teaching*.
 DOI: 10.1080/17501229.2020.1737704
- Bao, D. (Ed.). (2018). Creativity and innovations in ELT materials development: Looking beyond the current design. Bristol: Multilingual Matters.
- Brown, J. (2014). *Mixed-methods research for TESOL*. Edinburgh: Edinburgh University Press.
- Cenoz, J. (2013). Discussion: Towards an educational perspective in CLIL language policy and pedagogical practice. *International Journal of Bilingual Education and Bilingualism*, *16*(3), 389-394. DOI: 10.1080/13670050.2013.777392
- Cirocki, A., & Farrell, T. S. C. (2019). Professional development of secondary school EFL teachers: Voices from Indonesia. *System*, 85(1), 102-111. DOI: 10.1016/j.system.2019.102111
- Clarke, V., & Braun, V. (2016). Thematic analysis. In E. Lyons & A. Coyle (Eds), *Analysing qualitative data in psychology* (2nd ed., pp. 84-103). London: Sage.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). Abingdon: Routledge.
- Connolly, M. (2015). Foreword. In G. Pickering & P. Gunashekar (Eds), *Innovation in English language teacher education: Selected papers from the Fourth International Teacher Educator Conference* (Hyderabad, India) (pp. 7-8). New Delhi: British Council.

- Coyle, D., Hood, P., & Marsh, D. (2010). *Content and language integrated learning*.

 Cambridge: Cambridge University Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- de Vries, S., Jansen, E., & van de Grift, W. (2013). Profiling teachers' continuing professional development and the relation with their beliefs about learning and teaching. *Teaching and Teacher Education*, *33*(1), 78-89. DOI: 10.1016/j.tate.2013.02.006
- Dikilitaş, K., & Mumford, S. (2019). Teacher autonomy development through reading teacher research: Agency, motivation and identity. *Innovation in Language Learning and Teaching*, 13(3), 253-266. DOI: 10.1080/17501229.2018.1442471
- Díaz Maggioli, G. (2012). *Teaching language teachers: Scaffolding professional learning*. Plymouth: Rowman & Littlefield.
- Duff, P. (2020). Case study research: Making language learning complexities visible. In J.McKinley & H. Rose (Eds), *The Routledge handbook of research methods in applied linguistics* (pp. 144-153). London: Routledge.
- Edwards, E., & Burns, A. (2016). Language teacher researcher identity negotiation: An ecological perspective. *TESOL Quarterly*, *50*(3), 735–745. DOI: 10.1002/tesq.2016.50.issue-3.
- Fernández-Sanjurjo, J., Fernández-Costales, A., & Arias Blanco, J. M. (2019). Analysing students' content-learning in science in CLIL vs. non-CLIL programmes: Empirical evidence from Spain. *International Journal of Bilingual Education and Bilingualism*, 22(6), 661-674. DOI: 10.1080/13670050.2017.1294142

- Ferrer Ariza, E., & Poole, P. (2018). Creating a teacher development program linked to curriculum renewal. *Profile: Issues in Teachers' Professional Development*, 20(2), 249-266. DOI: 10.15446/profile.v20n2.67937
- Freeman, D., Webre, A., & Epperson, M. (2019). What counts as knowledge in English language teaching. In S. Walsh & S. Mann (Eds), *The Routledge handbook of English language teacher education* (pp. 13-24). Abingdon: Routledge.
- Gallagher, F., & Colohan, G. (2017). T(w)o and fro: using the L1 as a language teaching tool in the CLIL classroom. *Language Learning Journal*, 45(4), 485-498. DOI: 10.1080/09571736.2014.947382
- Garton, S., & Graves, K. (Eds). (2014). *International perspectives on materials in ELT*. Basingstoke: Palgrave.
- Garzón-Díaz, E. (2018). From cultural awareness to scientific citizenship: Implementing content and language integrated learning projects to connect environmental science and English in a state school in Colombia. *International Journal of Bilingual Education and Bilingualism*. DOI: 10.1080/13670050.2018.1456512
- Genesee, F., & Hamayan, E. (2016). *CLIL in context: Practical guidance for educators*. Cambridge: Cambridge University Press.
- Gibbs, A. (2017). Focus groups and group interviews. In R. Coe, M. Warning, L. Hedges & J. Arthur (Eds), *Research methods and methodologies in education* (pp. 190-196). London: Sage.
- Grandinetti, M., Langellotti, M., & Ting, Y. L. T. (2013). How CLIL can provide a pragmatic means to renovate science education even in a sub-optimally bilingual context.

- *International Journal of Bilingual Education and Bilingualism, 16*(3), 354-374. DOI: 10.1080/13670050.2013.777390
- Guo, Q., Tao, J., & Gao, X. (2019). Language teacher education in System. *System*, 82(1), 132-139. DOI: 10.1016/j.system.2019.04.001
- Gurney, L., & Liyanage, I. (2016). EAL teacher agency: Implications for participation in professional development. *International Journal of Pedagogies and Learning*, 11(1), 49-59. DOI: 10.1080/22040552.2016.1187650
- Hayes, D. (2019). Continuing professional development/continuous professional learning for English language teachers. In S. Walsh & S. Mann (Eds), *The Routledge handbook of English language teacher education* (pp. 155-168). London: Routledge.
- Hemmi, C., & Banegas, D. L. (Eds). (forthcoming). *International perspectives on CLIL*. Cham: Palgrave.
- Kesküla, E., Loogma, K., Kolka, P., & Sau-Ek, K. (2012). Curriculum change in teachers' experience: The social innovation perspective. *Pedagogy, Culture & Society*, 20(3), 353-376. DOI: 10.1080/14681366.2012.712051
- Kubanyiova, M. (2019). Language teacher motivation research: Its ends, means and future commitments. In M. Lamb et al. (Eds), *The Palgrave handbook of motivation for language learning* (pp. 389-407). Champaign, IL: Palgrave Macmillan.
- Llinares, A., & Morton, T. (Eds). (2017). *Applied linguistics perspectives on CLIL*. Amsterdam: John Benjamins.

- Mahan, K. R., Brevik, L. M., & Ødegaard, M. (2018). Characterizing CLIL teaching: New insights from a lower secondary classroom. *International Journal of Bilingual Education and Bilingualism*. DOI: 10.1080/13670050.2018.1472206
- Markee, N. (2013). Contexts of change. In K. Hyland & L.L.C. Wong (Eds), *Innovation and change in English language education* (Kindle edition). Abingdon: Routledge.
- Martínez Agudo, J. (2019). The impact of CLIL on English language competence in monolingual context: A longitudinal perspective. *Language Learning Journal*. DOI: 10.1080/09571736.2019.1610030
- Mehisto, P. (2012). Criteria for producing CLIL learning material. *Encuentro*, 21(1), 15-33.
- Mehisto, P., Marsh, D., & Frigols, M. (2008). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Oxford: Macmillan.
- Meyerhöffer, N., & Dreesmann, D. C. (2019). English-bilingual biology for standard classes development, implementation and evaluation of an English-bilingual teaching unit in standard German high school classes. *International Journal of Science Education*, 41(10), 1366-1386. DOI: 10.1080/09500693.2019.1607620
- Moore, P., & Lorenzo, F. (2015). Task-based learning and content and language integrated learning materials design: Process and product. *Language Learning Journal*, 43(3), 334-357. DOI: 10.1080/09571736.2015.1053282
- Morton, T. (2013). Critically evaluating materials for CLIL: Practitioners' practices and perspectives. In J. Gray (Ed), *Critical perspectives on language teaching materials* (pp. 111-136). Basingstoke: Palgrave Macmillan.

- Morton, T. (2019). Teacher education in content-based language education. In S. Walsh & S. Mann (Eds), *The Routledge handbook of English language teacher education* (pp.169-184). London/New York: Routledge.
- Navarro Pablo, M., & García Jiménez, E. (2018). Are CLIL students more motivated? An analysis of affective factors and their relation to language attainment. *Porta Linguarum*, 29, 71-90.
- Nikula, T., Dafouz, E., Moore, P., & Smit, U. (Eds). (2016). *Conceptualising integration in CLIL and multilingual education*. Bristol: Multilingual Matters.
- Pappa, S., Moate, J., Ruohotie-Lyhty, M., & Eteläpelto, A. (2017). Teachers' pedagogical and relational identity negotiation in the Finnish CLIL context. *Teaching and Teacher Education*, 65(1), 61-70. DOI: 10.1016/j.tate.2017.03.008
- Pérez Cañado, M. L. (2016). Are teachers ready for CLIL? Evidence from a European study. *European Journal of Teacher Education*, 39(2), 202-221. DOI: 10.1080/02619768.2016.1138104
- Pérez Cañado, M. L. (2018). CLIL and pedagogical innovation: Fact or fiction? *International Journal of Applied Linguistics*, 28(3), 369-390. DOI: 10.1111/ijal.12208
- Pinner, R. (2019). Authenticity and teacher-student motivational synergy: A narrative of language teaching. London: Routledge.
- Pinner, R. (forthcoming). Authenticity in CLIL: Creating a meaningful purpose by experiencing the language in use. In C. Hemmi & D. L. Banegas (Eds), *International perspectives on CLIL*. Cham: Palgrave.

- Porto, M. (2018). Intercultural citizenship in foreign language education: An opportunity to broaden CLIL's theoretical outlook and pedagogy. *International Journal of Bilingual Education and Bilingualism*. DOI: 10.1080/13670050.2018.1526886
- Ruiz de Zarobe, Y. (2015). Language awareness and CLIL. In J. Cenoz (Ed), *Language awareness and multilingualism* (pp. 2-10). Cham: Springer.
- Ruiz de Zarobe, Y., & Cenoz, J. (2015). Way forward in the twenty-first century in content-based instruction: Moving towards integration. *Language, Culture and Curriculum, 28*(1), 90-96. DOI: 10.1080/07908318.2014.1000927
- Ruiz de Zarobe, Y., & Lyster, R. (2018). Content and language integration in higher education: Instructional practices and teacher development. *International Journal of Bilingual Education and Bilingualism*, 21(5), 523-526. DOI: 10.1080/13670050.2018.1491950
- Schön, D. (1983). The reflective practitioner. London: Ashgate.
- Selvi, A. F. (2020). Qualitative content analysis. In J. McKinley & H. Rose (Eds), *The Routledge handbook of research methods in applied linguistics* (pp. 440-452).London/New York: Routledge.
- Timperley, H. (2011). *Realising the power of professional learning*. London: McGraw-Hill Education.
- Tomlinson, B., & Masuhara, H. (2018). The complete guide to the theory and practice of materials development for language learning. Oxford: Wiley Blackwell.

Appendix 1. Survey results

Item	Totally agree	Agree	Disagree	Totally disagree	Not applicable to me
1 The integration of content and language may enhance motivation.	3	4	0	0	0
2 Teaching content I don't know is stressful sometimes.	0	2	4	0	1
3 I need to include more language-based activities.	1	3	2	1	0
4 The feedback I provide students tends to focus more on meaning than accuracy.	1	1	3	1	1
5 Language awareness could be more systematically included in my teaching.	5	1	1	0	0
6 Further practice on grammar and vocabulary should be included in my lessons.	1	4	2	0	0

	Jou	rnal Pre-prod	of		
7 Developing our own	2	5	0	0	0
materials is a great opportunity for professional development.	2	J	U	U	U
8 Developing our own materials could be time consuming.	3	4	0	0	0
9 It's not my job to produce all my teaching materials.	0	3	4	0	0
10 I could have fewer texts and maximize the language potential instead.	0	3	4	0	0

Highlights

- EFL teachers working within a CLIL approach in Colombia can experience professional development through materials development.
- Through developing CLIL materials, the teachers enhanced motivation, agency, and identity.
- Engaging teachers in materials development lead to increased linguistic, pedagogical and content knowledge.