CLIL and SIOP: An effective partnership?

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This case study examines the use of the Sheltered Instruction Observation Protocol (SIOP®) Model as a framework in the design of an in-service training to answer CLIL teachers' methodological needs to integrate content and language. The study also analyzes teachers' receptiveness of the use of SIOP in a CLIL bilingual program to facilitate the integration of content and language. It follows case study methodology (Merriam & Tisdell, 2015) and draws on thematic analysis to examine data collected from teacher interviews, observations of the training workshop and questionnaires. Findings showed that one of teachers' main difficulties was their lack of academic language awareness, and it is concluded that extensive professional development training in SIOP could assist CLIL teachers to integrate language in content classes. Teachers' receptiveness of using the SIOP concludes its suitability as a PD training to help non-language specialist teachers systematically plan for language in their content classes. However, adaptations of the Model are suggested to adjust to CLIL contexts and teachers' needs.

Keywords: SIOP; CLIL; integration; teaching strategies

Introduction

Content and Language Integrated Learning (CLIL), which has experienced an exponential growth in Spain in the last decades, is the "European approach to bilingual education" (Pérez Cañado, 2018, p. 212) with an "explicit dual focus on subject-specific content and language" (Van Kampen et al, 2020, p. 856). An implication for teachers is that they have to take on the role of content and language teacher (Author, 2020), facing the additional challenge of designing tasks with attention to academic language in content areas (Lyster, 2019).

While bilingual programs were rapidly growing across Spain, provision of CLIL teacher education fell behind (Pérez Cañado, 2016). The requirements for teaching CLIL in Spain focus on a minimum proficiency level in the foreign language, but so far, there are no additional methodological requirements, which makes it difficult for CLIL teachers to know what their role is (Pavón Vázquez & Ellison, 2013). Educators can teach in a bilingual CLIL program with little or no knowledge of the theoretical tenets of the approach or the practical ways in which to carry out integration in the classrooms (Pérez-Cañado, 2014). This is more evident in secondary education, where teachers are area specialists, and they are faced with the task of teaching content concepts in a language which is neither theirs nor the students' first language (Nikula et al., 2016). Teachers need to know not only the understanding of how integration is achieved, but also the tools for achieving it (Lucero, 2015). Until now, those tools have been eminently theoretical, capturing "the *what* rather than the *how* of CLIL" (Coyle et al., 2018, p. 350).

It is critical to consider bilingual teachers' training needs (Durán-Martínez & Beltrán-Llavador, 2020) and design in-service training to close the gap between researchers' understanding of CLIL pedagogies and the actual application of what teachers understand as CLIL in their classes (Van Kampen et al, 2020). To that aim, in-service training should be designed around CLIL teachers' methodological needs to deliver bilingual lessons (Custodio-Espinar & García-Ramos, 2020). Providing teachers with strategies, techniques and practical resources to integrate language becomes a necessity to ease their task of delivering quality CLIL instruction, without losing on either language or content.

A focal concern of CLIL research is the difference between CLIL methodological approaches and other forms of bilingual education research. Studies that

have examined the similarities between CLIL and other content-based learning approaches to bilingual education call on further research to enhance and promote CLIL practice (Cenoz et al, 2014). The present case study responds to these calls by examining the potential use of the Sheltered Instruction Observation Protocol (SIOP®) Model as a framework to design in-service training to address CLIL teachers' methodological needs to integrate content and language, based on the similarities between the theoretical foundations of both approaches (see Table 1). The main aim of this research is to consider the suitability of SIOP as a framework for the design of adequate professional development (PD) training for non-language specialists in a CLIL context. Additionally, the study examines teachers' receptiveness of the use of SIOP to integrate content and language in CLIL classes.

The CLIL teacher: profile, needs and training

Several studies have depicted the necessary competences of a CLIL teacher to deliver quality bilingual education (see Bertaux et al, 2010; Marsh et al, 2010). Pérez Cañado (2018) outlined the following CLIL teacher competences: pedagogical (methodologies and strategies to integrate language and content), linguistic (proficiency in the FL and academic language awareness), scientific (pedagogical principles of CLIL), organizational (management skills to provide opportunities for meaningful interaction), collaborative (collaboration between content and language teachers and between CLIL teachers), and personal development (improve through lifelong learning).

Despite recent efforts for improving teacher education, teacher needs remain high (Cabezuelo Gutiérez & Fernández Fernández, 2014), particularly in terms of pedagogical and linguistic competences, but also in terms of scientific and organizational competences (Pérez Cañado, 2018; Custodio-Espinar & García-Ramos,

2020). These needs are the result of inadequate initial teacher training (Jover et al, 2016), which could be met with systematic in-service training (Karabassova, 2018). Yet, studies examining the effectiveness of PD initiatives for CLIL teachers are still scarce. Lo (2019) analyzed the implementation of a CLIL PD training in Hong Kong and reported a positive change in the participants' beliefs and language awareness, leading to a more advantageous integration of language and content in CLIL lessons. In content-based instruction context, Song's study (2016) concluded the positive effects that PD training sessions in SIOP had on teachers' integrating practices and on their understanding of language learners' needs.

SIOP and CLIL compared

In CLIL, integration helps dealing with the lack of parity between students' cognitive levels and their proficiency level in the L2 (Coyle et al., 2010). The grammatical pedagogical order that usually happens in language classes, does not happen in CLIL, so CLIL teachers should be facilitators of opportunities for language learning in the content classroom.

The concept of integration in CBI programs, including CLIL, draws on different theoretical foundations that come from cognitive theories, learning theories and theories of language learning. The importance of integration in CLIL is two-fold. First, the lack of parity between students' cognitive level and their L2 proficiency, make it essential for teachers to adapt their pedagogies in a way that they are able to cater for the particular needs of this group of students. Second, language learning follows a progressive pattern that in CLIL contexts is sometimes difficult to follow, due to the demands of the content subject. Still, and particularly at secondary schools, CLIL teachers are content area specialists with no or little language awareness (Hansen-

Thomas et al, 2018). Language awareness concerns three areas of knowledge: knowledge of L2 learning pedagogies and theories; knowledge of the language forms and functions; and knowledge of the use of language and language proficiency (Cammarata and Tedick, 2012). Conversely, CLIL teachers focus on key vocabulary (Koopman et al, 2014) whereas other areas, such as grammar and discourse, are overlooked.

In addition to CLIL teachers' lack of language awareness, the lack of an integrated curriculum for bilingual programs makes it difficult for teachers to plan for language and integrate it in their lessons (Cammarata and Tedick 2012). In this sense, we should keep in mind that, if true integration of content and language is to be achieved, it is paramount to find pedagogies that have integration at its core. Otherwise, bilingual programs are simply teaching subjects in another language, and that is not what CLIL is about. Based on this rationale, this study examines SIOP as a pedagogy that has been proven to be effective in providing useful PD training (see Kareva & Echevarria, 2013; Franco-Fuenmayor et al, 2015)—and that shares many features with CLIL (see Table 1).

[Insert Table 1 about here]

The SIOP, an instructional model that has been used in North America for years now, is based on empirical classroom research in bilingual schools. According to Echevarria et al. (2013), sheltered instruction is an "approach for teaching [grade-level] content to English language learners in strategic ways that make the subject matter concepts comprehensible while promoting the students' English language development" (p.5). From this definition it is drawn that sheltered instruction and CLIL are very similar approaches. In fact, integration is highlighted in SIOP in its emphasis on the interrelation of language and content objectives in every lesson of the content subject.

Like CLIL, the sheltered instruction approach is strongly rooted in the premise that language learning happens in interaction and through meaningful use (Echevarria et al., 2013). It draws on research in the field of ESL teaching, demonstrating that English language learners need both general English, i.e. grammar and vocabulary, and academic English in order to succeed academically (Echevarria et al., 2013). Following Cummins' distinction (2000), content-based instruction must account for basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). The term BICS refers to the language that students need to communicate with others in the school context and to interact in everyday situations. However, this language alone is not enough for nonnative speakers to be successful in the L2 academic context. Learners also need the language that allows them to compare, classify, debate or summarize the content of a particular subject area.

Both SIOP and CLIL address cognitively demanding tasks, which trigger language learning. Teachers are, therefore, encouraged to use a taxonomy—e.g. Anderson and Krathwhols's (2001)— in the design of tasks, and to plan for questions that elicit higher-order thinking. The long tradition of empirical research in North America and their years of empirically testing the instructional practices of the SIOP could be a springboard for empirical research in CLIL and provide a rationale behind the adaptation of SIOP in a foreign language setting such as CLIL.

Methodology

Drawing on qualitative case study methodology (Merriam & Tisdell, 2015), the present study uses questionnaires, observations and interviews to analyze teachers' receptiveness of the use of the SIOP Model to integrate content and language in content classes and its suitability as a PD training tool in CLIL contexts.

Description of the case

The unit of analysis of this case study is an integrated bilingual program of English and French in a high school in the North of Spain, which follows the CLIL approach to teaching content subjects in an additional language. In this case study, Carlos (pseudonym), the coordinator of the bilingual program, was in charge of designing the sessions in collaboration with the researcher, who was also a teacher in the bilingual program. Through his nine years of experience as both teacher and coordinator of the bilingual program, Carlos had informally assembled information about the program's needs. Both the researcher and Carlos were in charge of designing and delivering the training workshop.

Carlos established a detailed schedule for the coordination of all teachers participating in the bilingual program, which consisted in a three-week rotating system for a complete school year including coordination between teachers, and training. One week, content teachers met with their corresponding language specialist; the following week, all course-level content teachers and language specialists met with the coordinator for a briefing; and in the third week, all teachers participating in the program attended a training session. The previous year, Carlos gave some training on CLIL and on its principles.

[Insert Table 2 about here]

The idea behind the workshop emerged from the necessity to unify teaching methodologies in the program. Carlos wanted to standardize the program and give it a sense of uniformity across disciplines and languages, because new teachers were incorporated to the program every year, some of them without any teaching experience or knowledge of teaching content in another language. Being part of the school's teaching staff, and considering my expertise as a CLIL researcher, Carlos asked me to contribute to the design and delivery of the workshop (see Table 2). We considered the

possibility of adapting the SIOP to the program's needs. Given the time constraints and teachers' workload, the workshop needed to be as practical and concise as possible, but it was also important to provide teachers with some fundamental notions about integration. It is important to underscore that this was not a structured SIOP training, but that the SIOP Model was used to inform the design of a PD workshop contextualized in a CLIL setting.

Participants

There were 14 bilingual teachers who participated in the training sessions and completed the questionnaires at the end. Considering the scope of this study, two participant teachers were selected from this group for interviews, based on their experience teaching in the school's bilingual program, and they provided an extensive description of their experiences in the workshop and how it could impact their teaching. The following is an account of each of the participants individually (all names are pseudonyms).

Maria taught Physics and Chemistry in L2 English to a group in year 3 ESO. She had been teaching in the school's program for the last five years. The extensive training in CLIL she had received came from the early stages of the program being implemented in the region. She had passed the *TKT* (Teaching Knowledge Test) Cambridge on CLIL. Silvia taught Geography and History in French to 4 different groups in years 3 and 4 ESO. Given the shortage of certified teachers to teach CLIL in L2 French, she had assumed the responsibility of teaching several groups and levels. She had been teaching in this bilingual program for seven years. Regarding her training in CLIL, she voluntarily signed up for some training courses offered by the regional department of education when she started working in the bilingual program.

Data collection instruments

In order to meet the aims of this study, the collection of data was carried out through the use of three instruments: observation of training sessions, semi-structured interviews, and a questionnaire.

Observation of the training sessions

Training sessions took place once every three weeks and were designed based on the need to provide CLIL teachers with practical tools that would allow them to put the theoretical tenets of the approach into practice in their everyday-lessons (Pérez-Cañado, 2016). SIOP was used as a compass for informing the design of the sessions and the type of activities and strategies suggested by Echevarria et al (2013).

This training took place in the 50-minute period that teachers in the program had allocated in their schedule for collaboration with their L2 counterparts. Carlos wanted the sessions to include brief brushstrokes of the theoretical basis of integration of content and L2 activities and strategies, which were taken from SIOP (Echevarria et al, 2013). During the sessions, teachers participated by doing the activities or strategies presented, or asking and answering questions. Data were collected in an observation log kept by the researcher. Observations helped reinforce the themes and provide insights into the suitability of SIOP strategies in CLIL and into teachers' receptiveness.

Interview

The interview was conducted after the training had been completed. It was a semi-structured interview and the questions dealt with the participants' previous training and teaching experience in the CLIL program, and how they structured their classes. The second part of the interview asked about the teachers' impressions with the training workshop received, their experience putting into practice the strategies suggested, and their pedagogical and training needs. Finally, the interviewer showed the participants a copy of the SIOP Observation Protocol—previously translated into Spanish—and asked

for the respondents' receptiveness to use this tool and the aim to which they would use it.

Questionnaire

The questionnaire was administered after the training had been completed. It was paper-based and anonymous and contained ten multiple-choice and Likert-scale questions from 1 to 5. There were three groups of questions: previous experience and training; satisfaction with the sessions and their usefulness; and training needs and change of views about the program. The questionnaire was taken by all 14 CLIL teachers participating in the workshop.

Data Analysis

Data from interviews and observations were analyzed using inductive thematic analysis for "identifying, analyzing, and reporting patterns (themes)" (Braun & Clarke, 2006, p. 82). The sets of data from interviews, questionnaires and observations of training were initially coded following descriptive coding (Saldana, 2013) to identify topics in the data. The thematic analysis of data consisted of six stages, according to Braun & Clarke (2006): 1) verbatim transcription of interviews and translation from Spanish to English, and familiarization with all sets of data; 2) generation of initial codes; 3) search for themes; 4) revision of themes; 5) naming of themes; and 6) the final production of the report.

Results

This section addresses the difficulties participants find in their lessons and the appropriateness of SIOP to address them in PD training. Additionally, it includes participants' response to the training sessions and their receptiveness to the SIOP.

SIOP training and teachers' receptiveness of using the Protocol.

In their answers to the questionnaires, all participant teachers agreed that the sessions of the workshop were useful to a high degree and that they all had put into practice some of the strategies learned. The qualitative analysis of the answers also generated an overview of the results of the training sessions.

The sessions that the majority of participants acknowledged benefitting from were those about the use of different strategies to teach academic language (sessions 1 and 3. See Table 2). These sessions taught teachers how to adapt content to the students' levels of language proficiency (Lesson Preparation); how to emphasize key language and use strategies to help students learn new vocabulary (Building Background); provide opportunities for interactions (interaction); and examples of activities in which learners can apply content and language (Practice & Application). Teachers showed interest in the difference between every day and academic language and the role of the latter in learning content. The role of academic language and how it should be taught together with content emerged as a revelation for the participant teachers, who appeared to be very interested in the examples of tasks and strategies that they could use in their classes.

The other sessions that most teachers valued were sessions 5 and 6 (see Table 2) on identifying linguistic content and designing content and language objectives. In this part of the workshop, teachers were introduced to the importance of identifying the language that needs to be taught, beyond the key vocabulary that is usually highlighted in all units. Data from observations showed that working with their L2 counterpart-teachers allowed them to focus on those aspects of the language that we had previously discussed in the sessions about academic language, such as functional language. When asked about this session, Silvia answered:

I worked with the other History teacher, who teaches the same course in English. We ... worked individually and then we discussed the contents we were going to teach and established a joint work plan, so we would teach the same in English and in French. Then, with the French teacher, we translated it into French and then, she worked with our History book and identified what [students] had to use.

Identifying linguistic content and sharing objectives with students was encouraging for the participant teachers, as they realized the potential benefits of this practice for the learning process. As an example of the positive response of students to the exercise of sharing content and language objectives with them, Maria said: "My students participated in the activity, understood the objectives and used them to assess their learning. It was very positive."

These sessions focused, mainly, on the role of language in content classes, and showed teachers how to use strategies that cater for both content and language. The fact that teachers found these sessions the most useful suggests that teachers are still unaware of the role of language in CLIL and they consider it a separate component, believing that they need to create additional tasks that focus only in language. Consequently, teachers believe they have no time to teach the L1 curriculum in another language because adding language-focused tasks to their sessions takes up a lot of time.

The response of both interviewed teachers when presented with a translated copy of the SIOP was positive. After reading the SIOP Observation Protocol, both teachers admitted that the document would be useful as a guide to plan their lessons. Silvia, for example, said "I would use this as a reference, a guide ... for self-evaluation and ... at least once a week or every two weeks." Maria, on the other hand, would also use it as a lesson-preparation document:

I recognize things that I would need to improve.... Based on this document, the
main mistakes I see in my teaching are language objectives. There is a lot to
improve in that area. In general, in all the [features] referring to language, there
is a lot to improve in my classes ... I think we should do it.

Despite classroom observations not being a common practice in Spain, teachers were
not opposed to the idea of being observed by a colleague or an administrator with the
SIOP Protocol. For example, Maria was very open to being observed and, in fact, found
it very helpful to improve her own practice:

I totally agree with the idea of having other [teachers] come to my classes ... I
think it's a very useful tool ... The educational inspection services should
observe all of us....seeking improvement not judgement.

Applicability of SIOP as PD training tool in the CLIL program

Concerns regarding time constraints to include linguistic-focused tasks in CLIL lessons
were a recurrent theme amongst interviewees. They had a shared vision of language as a
separate entity from content rather than an integrated element in their lessons, so
teachers considered they had to design specific tasks that focused on linguistic aspects.
This misconception about the role of language led teachers to believe they had less time
to cover the curriculum than mainstream content counterparts, because they had to
include language-specific tasks. Lack of time was a recurrent theme in the interviews.
As an example, Maria claimed that "we should include more linguistic activities. But
every time I tried, I backed down because it takes up a lot of time," while Silvia added
"the curriculum is so vast and I only have three [teaching] hours. So it's a challenge
with the language."

The PD training based on SIOP presented strategies to design tasks that integrate content and language (see Table 2), such as jigsaws (session 2), or language frames (session 3), and introduced other methods like the use of TPR and realia (session 2). Findings show that the majority of teachers (13) found session 3 to be the most useful for them (see Table 3). These findings suggest that teachers could benefit from training on ready-to-use SIOP-based strategies as a way of integrating language to CLIL lessons, partially addressing the lack of time to carry out linguistic tasks.

Another aspect that emerged was teachers' strong beliefs regarding their role as content teachers and in the bilingual program. In spite of the years working in bilingual schools and their involvement with the program, both teachers still displayed a content-teacher identity, distancing themselves from language specialists and, consequently, from language teaching. For example, Silvia said:

> First, I want them to really understand [the content] in Spanish and [express it] fluently. Then, in French [I demand] a minimum, because their level of French is very poor... Sometimes a lot of content knowledge is lost if only the foreign language is used.... they learn more language but they miss on content ... Students are not bilingual and teachers have limited proficiency ... I'm experienced in my [field].

There was a sense amongst interviewees that their role was to teach content, but not necessarily making adjustments to deliver such content in another language. It should be the case that, as Maria said, "teachers are very resistant to changing methodologies." Instead of designing tasks that integrated language and content, their unfamiliarity with the role of language integration led teachers to consider language an additional load taking up teaching time. For example, Maria commented: "I designed an 'attempt' of a

mini-workbook with linguistic activities and I gave it up, because ... there's no time for [doing] it all."

A similar pattern was obtained in the questionnaire results (see Figure 1), which showed that the most experienced CLIL teachers wanted to learn more about identifying and adapting linguistic contents in their subjects. Novice CLIL teachers, on the other hand, reported a need to foster students' motivation and classroom management. So, it is presumed that teachers became aware of the importance of integration of language and content as they became more familiar with this approach, and more aware of the role of academic language in their classes.

These are important findings in the possibilities of the use of SIOP for PD training design. As observed in the workshop, participants were not aware of the role of language in CLIL and were receptive to learn strategies to teach academic language beyond key vocabulary (see Table 2 for examples of strategies). The workshop also focused on the importance of identifying linguistic content and formulating language-related learning objectives, a focal point of SIOP. Participants' interest in the workshop was reported not only in the sessions, but also in the questionnaire, as the majority of respondents confirmed their knowledge about the program somehow changed after the workshop (see Table 3), and wished to receive more practical training with examples of tasks and strategies (see Figure 2).

This result aligns with teachers' reported lack of time to prepare their CLIL lessons, and their reliance on a textbook. As an example of how some teachers consider that already-made materials would save them some lesson preparation time, Silvia explained "I translated all the resources we taught in Spanish into French....The main problem is the lack resources. If I had a textbook ... or an e-book with already-made activities [it would be easier]."

Together, these findings suggest that teachers' lack of language awareness and their self-perceived role as content teachers could be hindering the integration of language in CLIL lessons. Despite previous training and teaching experience, teachers need to understand the importance of teaching academic language in their classes, and they could benefit from PD training based on SIOP, which provided practical strategies to identify linguistic content, to devise language learning objectives, and to design tasks that integrate content and language.

Discussion

This case study showed that SIOP could be a valuable tool to adopt in the CLIL bilingual program to ease teachers' task of integrating language into content lessons, something that teachers struggle with or, simply, do not know how to carry out.

The study revealed that participants had difficulties incorporating linguistic content in their classes. Those difficulties stemmed from teachers' lack of awareness about the role of academic language in content classes beyond key vocabulary, something very common in content specialists who are not trained in language teaching, in accordance with findings from previous studies (Hansen-Thomas et al, 2018; Lo, 2019). Teachers in this study, had to design specific tasks to focus on language learning, which was time consuming. As a result, language took a secondary role, being used as the language of communication, but adopting an incidental role in learning. However, this could be the result of teachers' lack of linguistic awareness, so their knowledge of language learning and teaching is replaced by the teachers' previous experiences as language learners. Their conceptualization of language still resembles more that of EFL teaching (Morton, 2018). The role of academic language is undeniably important in learning, but it is usually overlooked in CLIL content classes, as a consequence of

teachers' lack of language awareness and the absence of pedagogic tools for integration (Coyle et al, 2018). This lack of language awareness in CLIL teachers can be detrimental for the successful implementation of different programs and students' learning (Dalton-Puffer, 2013). Participant teachers continued to display a strong identity as content specialist, something that could also affect their choice of content-led teaching practices (Lo, 2019).

The results suggest that teachers were receptive of the use of SIOP and their response to the workshop (based on SIOP) was positive. Additionally, six out of 14 participants had received previous PD training on CLIL. However, both teachers revealed that they still had difficulties to integrate language in their classes in a systematic way, despite their years of teaching experience and PD training in CLIL. This could be due to the fact that "one-shot workshops" are not enough to change teacher practice (Short, 2013, p. 121). Instead, PD programs should be designed according to the needs of language learners who have to learn academic language and content simultaneously and, therefore, those programs should include effective pedagogical strategies (Short, 2013) that teachers can learn to use in "tailored courses" that address their needs (Pérez-Cañado, 2018, p. 218). This type of integrated PD should be extensive and systematic, thereby allowing teachers to focus more on content and language in an integrated manner (Coral et al, 2020), rather than designing separate tasks to address language learning. Considering these factors as well as the participants' positive receptiveness in adopting SIOP and their positive attitudes towards PD, we can conclude that SIOP could be an important tool to design effective PD as a response to the difficulties that CLIL teachers experience for the integration of language in content classes.

Receiving intensive training in SIOP could help teachers incorporate new practices and strategies that integrate academic language in their content instruction (Echevarria et al, 2011), not through additional tasks but through the systematic adaptation and integration of the L2 into their everyday CLIL lessons. There is evidence to support that comprehensive professional training which incorporates effective pedagogical strategies combined with an explanation of the theories of language learning behind them (Short, 2013) has an ensuing effect on teacher's academic language awareness (Hansen-Thomas et al, 2018; Lo, 2019) and on their attitudes towards learning content and language in an integrated way (Song, 2016). Based on the results of this study, training at schools should be supported by coordinators and the administration, who should work hand in hand to assure that CLIL teachers' training is viable and permanent (Short, 2013). Collaboration of language teachers in PD training is also highly recommended to help content teachers in the identification of language content (Meskill & Oliveira, 2019; Pavón Vázquez et al, 2015). It is important to acknowledge the realities of teachers and the fact that those realities evolve throughout the years, the same as their needs. It is unrealistic to expect teachers to achieve all the skills they need to teach a content subject in L2 without well-informed, continuous training.

While the results of this study are based on a case study of a particular school, given its context and characteristics of the program, similar to those of other bilingual schools in Spain with a focus on CLIL, it is believed that findings here are important for further research in the area of PD in CLIL teachers. It is acknowledged that the limited number of participant teachers may not be representative of other teachers' realities, including less experienced teachers in the field of teaching content in another language, and that is why these are tentative conclusions that should be researched in depth.

Further studies with a larger number of participants, including the use of the SIOP for planning lessons are advised. Similarly, if the recommendations for practice of this study are followed, a longitudinal study about the effectiveness of extensive and systematic training in SIOP for CLIL teachers is expected, as well as the observation of lessons with the SIOP protocol. However, training should always be tailored to the group of teachers and the SIOP could be adapted accordingly, focusing on those features that cater to their needs.

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Table 1.

SIOP and CLIL compared (Author, 2020)

Main Features	SIOP	CLIL
Definition	- Approach for teaching [grade-level] content to ELLs in strategic ways that make the subject matter concepts comprehensible while promoting the students' English language development (Echevarria & Short, 2000, p. 2) - Implemented in bilingual, ESL, two-way and sheltered instruction programs in United States	- Dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language (Coyle *et al.*, 2010, p. 1) - Implemented mostly in foreign language contexts to improve competence in FL (e.g. Spanish CLIL in UK), but also in second language contexts (e.g. Basque in Spain or Gaelic in Ireland)
Language learning	- Learners must acquire BICS and CALP	
	- Focus on teaching academic language.	- Framework for language learning: Language Triptych (Coyle, 2002) devises language *of, for,* and *through* learning
	- Both use strategies to make input comprehensible to all learners, such as scaffolding, use of visuals, models, hands-on materials.	

Cognition	- Both facilitate the use of learning strategies, exposure to appropriate cognitively demanding content and language, and provides opportunities for interaction

Table 2.

PD training sessions

Timeline and topic	Activities
Session 1: Language in CLIL (I)	Principles: - social vs academic language - academic language: content-specific language and general academic language Strategies: - explicit teaching: cognates, roots, prefixes and suffixes - flashcards with vocabulary and posters with signal words - 4 corners chart
Session 2: Cognition in CLIL	Principles: - Cognitive engagement to learn: plan tasks and questions LOTS to HOTS (Bloom's Taxonomy) - Cognitive learning strategies: e.g. mnemonics, graphic organizers - Interaction Strategies: - KWHL - Think pair share - SQP2RS (Squeepers)

	- TPR and realia - Jigsaw reading
Session 3: Language in CLIL (II)	Principles: - Identifying academic language: content and general academic vocabulary, language skills and functions, grammar - Scaffolding Strategies: - Sentence starters, prompts, writing frames - Collaboration with language teacher
Session 4: Objectives	Principles: - Language objectives determined by content - Language objectives: consider proficiency, progression and skills Strategies: - Language contents to be considered: academic vocabulary, grammar, skills and functions. - Example of a lesson
Session 5: Identifying language and drafting objectives (I)	Workshop:

	- Content and language teachers work together to identify academic language and draft content and language objectives of a teaching unit.
Session 6: Identifying language and drafting objectives (II)	Presentations and discussion: - Teachers present the outline of the unit they devised. - Discussion
Session 7: Questionnaire	Teachers fill out the end-of-training questionnaire

Table 3.

Data from questionnaires with number of participant responses in parentheses.

	Year 1 (4 participants)	Year 2-4 (6 participants)	>5 years (4 participants)
To what extent do you think this workshop has been useful for your teaching practice? (average 0 to 5)	4,5	4,3	5
Have you used any of the strategies learned in your CLIL classes?	Yes (4)	Yes (6)	Yes (4)
Had you received any training in CLIL before this workshop?	Yes (2) No (2)	Yes (1) No (5)	Yes (3) No (1)
To what extent are you satisfied with the training you have received so far as a bilingual teacher? (average 0 to 5)	3,7	4,2	4,5
Did your view about the CLIL program change after the workshop?	Yes (3) Maybe(1)	Yes (5) Maybe (1)	Yes (3) No (1)
Which session(s) did you find the most useful?	Session 1 (2) Session 2 (3) Session 3 (4) Sessions 4-6 (3)	Session 1 (2) Session 2 (2) Session 3 (6) Sessions 4-6 (4)	Session 1 (1) Session 2 (2) Session 3 (3) Sessions 4-6 (3)