CHAPTER 9

In the right frame of mind: core issues in professional development for CLIL in Portugal

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Abstract

In order for a new educational approach to be successful, those on the frontline responsible for administering it, i.e., the teachers, must be readily equipped with appropriate knowledge, understanding and attitudes which allow them to confidently embrace the new professional challenge. In Portugal, Content and Language Integrated Learning (CLIL), a dual focused approach to the teaching and learning of subject content and an additional language, is a growing phenomenon. Like many national contexts in which CLIL is implemented, Portugal has its own idiosyncrasies regarding the preparation of teachers. This chapter focuses on professional development for CLIL in this country. It presents the core constituents of knowledge and the mindsets required of teachers for CLIL. It identifies their credits (what they bring to a scenario), their needs (what they should receive from teacher education) as well as the benefits of CLIL to teaching and learning. The chapter draws on the author's experience and best practices from pre- and in-service teacher education at the Faculty of Arts and Humanities of the University of Porto. It ends with a set of recommendations on professional development for policy makers, school directors, project coordinators and teachers.

Keywords

Professional development; CLIL scenarios; academic language; teacher credits; teacher needs; teacher benefits; whole school approach.

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Resumo

O sucesso de qualquer nova abordagem educativa depende de quem se encontra na linha da frente e é responsável pela sua implementação, ou seja, os professores, que precisam estar equipados com os conhecimentos, a compreensão e as atitudes mais adequadas que lhes permitam abraçar com confiança o novo desafio profissional. Em Portugal, a Aprendizagem Integrada de Conteúdos e de Língua (AICL), uma abordagem duplamente orientada para o ensino e aprendizagem de conteúdos temáticos e de uma língua adicional é um fenómeno crescente. Tal como em muitos contextos nacionais em que se implementou AICL, Portugal tem as suas próprias idiossincrasias no que diz respeito à formação de professores. Este capítulo centra-se na formação profissional contínua em AICL no país, apresentando os conhecimentos essenciais e as mentalidades exigidas aos professores, e identificando os créditos, as necessidades e os benefícios de quatro perfis base de professores, a partir da experiência da autora e de boas práticas da formação inicial e contínua de professores na Faculdade de Letras e Humanidades da Universidade do Porto. O capítulo termina com um conjunto de recomendações sobre desenvolvimento profissional para decisores políticos, diretores de escolas, coordenadores de projetos e professores.

Palayras-chave

Formação inicial e contínua de professores; cenários CLIL; linguagem académica; *teacher credits*; necessidades de formação docente; vantagens para professores; abordagem de escola.

1. Introduction

Content and Language Integrated Learning (CLIL) is a dual focused educational approach in which curricular content and an additional language are taught and learned simultaneously (Coyle *et al.*, 2010). The additional language may be a second, foreign or minority language (Eurydice, 2006). For the purposes of this chapter, the term 'foreign' language will be used instead of 'additional', as in Portugal the main language of CLIL programmes is a foreign language, namely English. This approach necessitates the formulation of learning outcomes for both content and language, so that appropriate attention is given to both during the teaching and learning process. As with any educational innovation, the prior and continual provision of teacher education is crucial in order to guarantee quality and success within any school context. This is evident in the 'forewarning' of Marsh, Mehisto, Wolff & Frigols:

Teachers undertaking CLIL will need to be prepared to develop multiple types of expertise: among others, in the content subject; in a language; in best practice in teaching and learning; in the integration of the previous three; and, in the integration of CLIL within an educational institution. (2010, p. 5)

This is no easy task, and these words are enough to instil a certain degree of apprehension in those who may be faced with this challenge. Many teachers involved in CLIL in Portugal did not receive any specific CLIL training in the degree courses which gave them access to teaching and professional status. Currently there are no teaching degrees, Master's or otherwise, which combine content (non-language subject) teaching and foreign language teaching; for example, a Master's in teaching Geography and English in lower and upper secondary education. Degrees in teaching are polarised into those teaching content subjects or languages. Master's degrees in teaching content subjects do not usually include didactics of language – how to teach about the language needed by students in order to communicate their knowledge and understanding of the content of the subject, i.e., the academic language of the discipline. Currently there are also no degrees in primary education which focus on the teaching of foreign languages. In this level of education, the teaching of English as a foreign language is the remit of teachers with this specialism who must now hold a Master's degree in teaching English to young learners which includes supervised teaching practice. With the exception of FLUP, these degrees do not contain a compulsory curricular unit on CLIL despite it being mentioned by a hearing of experts invited by the Portuguese National Council for Education (Conselho Nacional de Educação, 2013) as the preferred model for integrating English in the first cycle of basic education.

In Portugal, CLIL is taught by content teachers or language teachers during the curricular time of the content subject. It may also be taught by foreign language teachers in their curricular time. This latter type of CLIL is often referred to as 'soft CLIL' as the main aim is to develop proficiency in the foreign language via a content-based approach to teaching. This type of CLIL rarely deals with the nuts and bolts of subject content, its complex concepts, skills and competences. However, in some cases, CLIL is implemented by English language teachers in the form of project work or in subjects such as Citizenship Education (see Ch.6., Leão this volume) where important real world topics are addressed, and skills and concepts developed. In CLIL/billingual programmes in Portugal, students attend foreign language lessons and CLIL lessons. In the PEBI programme, English language teachers and primary generalist teachers are advised to collaborate and be flexible in order to ensure that children are both prepared for lessons given

in English in Social Studies (Estudo do Meio) and that the level of English in the English language lessons is sufficiently challenging for children in this programme (see Ch.8., Xavier & Tice this volume).

There are no CLIL coursebooks which focus specifically on the Portuguese curriculum in Portugal. As yet, no national publishing house has produced a series for any single content subject. This is in stark contrast to neighbouring Spain where CLIL is served by national as well as international publishing houses with a realm of coursebooks for all school levels and subjects specifically designed for the Spanish curriculum. This is because in Spain, the phenomenon is much more widespread, with bilingual education now a reality in many regions. CLIL teachers in Portugal have to design their own materials or adapt from other sources. This can be very complicated and time-consuming. That said, an increasing number of locally-produced English Language Teaching (ELT) coursebooks do include CLIL in the form of the 'CLIL page' or end of unit cross-curricular project, though many of these focus primarily on language.

The system of recruitment of teachers in Portugal means that many newly-qualified teachers may wait years before finding a permanent position in a school. Where teachers on short-term contracts are involved in CLIL, the project runs the risk of ending when they leave. This means that the sustainability of CLIL projects is often in the hands of older teachers who find themselves stepping out of their comfort zones to embark on a new professional challenge in the latter stages of their careers. Continuation of CLIL across educational cycles has not always been guaranteed within the same school cluster either, thus curtailing the bilingual education of children.

All considered, teachers implementing CLIL in Portugal face their own unique challenges within or outside of their control. Such factors influence individual teachers and school investment in professional development for this educational approach (Ellison & Almeida Santos, 2017).

The purpose of this chapter is to address professional development for CLIL in Portugal against a backdrop of core understanding and mindsets for teachers, i.e., what teachers need to know, and how they need to mentally prepare themselves for it. This is based on research and experience in the Portuguese context. Teacher profiles are examined for their credits (what they bring to a scenario) and needs (what they need to receive from teacher education), as well as the benefits this educational approach brings to teaching and learning. The idea of 'credits' is taken from Moon (2000, p.vii) who acknowledges that changes teachers may undergo can be "stressful". She suggests that it can be helpful "to begin by writing down all of the things you can do already (credits) and think about which of these things you can make use of or adapt for the new teaching situation (credit transfers)."

Finally, a set of recommendations is provided for policy makers, CLIL coordinators, school directors and teachers in Portugal, with indications as to what professional development could constitute and how this may be operationalised.

2. Core understanding and mindsets for CLIL

In order for teachers to embark on CLIL, they need to understand the principles on which it is based as well as its unique methodology which will require a change in mindset to meet the professional and psychological challenge they will face. Principles of CLIL relate to 4Cs – Content, Communication, Cognition and Culture. An understanding of what constitutes academic language is crucial in determining how content is communicated and how students will express their understanding of it. To understand the methodology of CLIL, teachers need to know how to integrate the knowledge bases of content subject and foreign language. All of this necessitates an attitude of openness and willingness to change the way one thinks and teaches. As Coyle (2002) states:

This shift has brought with it a need to redefine methodologies to take account of language use by both teachers and learners which encourages real engagement and interactivity. It has also brought with it teacher reflection on how best to teach and therefore embraces issues fundamental to the education process itself. CLIL therefore has implications for teacher education at both pre and in-service levels. (p. 28)

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2.1. Core understanding

2.1.1. The 4Cs of CLIL

Grounded in this educational approach are principles related to content, communication, cognition and culture (or community), also known as the 4Cs of CLIL (Coyle *et al.*, 2010). **Content** is the knowledge, skills and understanding of a school subject; **Communication** is the way that knowledge, skills and understanding are communicated through specific and generic academic language; **Cognition** is the thinking that students are engaged in during tasks and activities. This thinking is accessible and transmissible through language; **Culture** is what binds educational activity together – in acts involving working with others – learning

about, from and with them in the classroom and beyond it if links are forged with other school communities within and across national borders. CLIL draws on socio-constructivist approaches to learning where knowledge construction is achieved through interaction among students in the classroom (Marsh, 2006). This necessitates that students work together on group tasks where there is a reason to use the language in acts of communication and meaning making.

Effective CLIL involves the "planned pedagogic integration" (Coyle *et al.*, 2010, p. 6) of the 4Cs. They can be used as a framework for planning CLIL lessons. They require teachers to account for the language and language skills (reading, writing, listening, and speaking and mediating) learners will need to be involved in to access and communicate the content, the thinking skills they will need to activate or develop, and how and with whom this will happen. A useful guide for considering cognition in CLIL is the revised taxonomy of Bloom's cognitive processes by Anderson and Krathwohl (2001), which consists of cognitive and knowledge dimensions.

Professional development for CLIL should involve teachers in applying the 4Cs to their subjects in the Portuguese curriculum. For example, in the Master's in Teaching English in the 1st Cycle of Basic Education (MEBI) at FLUP, students conduct and present a curriculum analysis of an area of the curriculum for Social Studies (Estudo do Meio) for either the third or fourth year using the 4Cs. They assemble an audit of each of the 4Cs which consists of an analysis of the concepts of a specific content, the academic language of this content, the thinking skills and how these are expressed through language, and the types of interaction required to understand, manipulate and apply content concepts. These students also consider the genres or text-types that the young learners will need to interpret and produce (see section 2.1.2 below).

2.1.2. Academic language

Academic language or the 'language of schooling' is the formal language register of a given subject. This differs from everyday language use which does not include subject-specific terminology on a regular basis. The scholar Cummins (1979) made a distinction between what he termed Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP). The former is the desired attainment for general language proficiency – non-formal, socially-appropriate language; the latter is that for formal, academic contexts. Students need to know this difference. Cummins (2000) defines academic language as well as teaching which supports its development as:

the sum of the vocabulary, grammatical constructions, and language functions that students will encounter and be required to demonstrate mastery of during their school

years. This will include the literature and expository texts that students are expected to read and discuss in both oral and written modes. (...) [I]n order to develop students' access to and mastery of academic registers, instruction must focus on meaning, language and use. It assumes that for optimal progress to occur, cognitive challenge, intrinsic motivation, and promotion of critical literacy must be infused into the interactions between teachers and students. (p. 541)

In each subject, students are expected to use language skills (read, write, listen, speak). As they do this, they will develop academic literacy. The way in which students activate their language skills in the subject will depend on the genres of the subjects. Genres or text types and how they are organised are key to supporting academic literacy. Examples of genres (text types) are: reports of experiments in Science; narrative accounts of historical events. These follow particular organisational conventions and include specific academic language for expressing functions, what Dalton-Puffer (2013) calls 'Cognitive Discourse Functions' (CDF) (e.g., the language used to describe, explain, report, etc.). Teachers need to be aware of the key terminology, genres, and CDFs of their subjects in order for them to support their students' knowledge, use and development of these. This is vital, as it is through their application of academic language that students express their understanding of curricular content. Crucially, as Mehisto (2017) emphasises, their ability to use it will influence their success.

Ultimately, schools expect students to express their thinking through academic language. Moreover, schools use academic language to assess students' learning. Thus, as academic language is the language of assessment, it can also be said to be imbued with power, and hold one of the keys to academic success. (p. 89)

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Teachers, therefore, need to be good models of academic language, to use it appropriately and strategically, and to help students to notice and use it. It is said that academic language is no-one's mother tongue, but teachers and students need to be aware of and activate it if the latter are to succeed in their schooling.

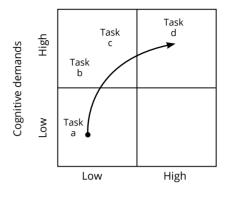
2.1.3. Fusion of knowledge bases

As an integrated approach, CLIL draws on the knowledge bases (the *what* and the *how to*) of the content subject and those of the foreign language. CLIL is a fusion

of these knowledge bases (see Ellison, 2014 for an extensive list). Since there are few teachers in Portugal whose initial training has equipped them with both sets of knowledge bases, teachers involved in CLIL must acquire an awareness of what these are. This is best done through collaboration with colleagues (foreign language and content) and observation of teaching practices. This will help teachers adopt the necessary 'sensitivity' towards language or content which will complement their own (knowledge base). For example, pre-service teacher education for Master's degrees in teaching English could include the observation of generalist teachers teaching regular lessons in Portuguese in order for English language teachers to develop an understanding of the cognitive and linguistic demands made of children in the mother tongue. In addition, pre-service students should also be given the opportunity to teach a CLIL lesson or lessons themselves. Where this is not possible, a CLIL lesson could be given in the English language class, thus establishing cross-curricular links which may be further developed.

A CLIL teacher will need to adapt their regular mono-disciplinary/mono-lingual practice to accommodate the integration of the other, allowing it to become bi-disciplinary and bilingual. This does not mean translating subject content from one language code to another, but rather adopting different pedagogic strategies from the other knowledge base. For example, the teacher of Geography will need to become aware of how they can facilitate the understanding and use of the foreign language in the CLIL Geography class using language teaching techniques which focus on the academic language of Geography, as well as developing language skills (reading, writing, listening and speaking). Similarly, if it is the foreign language teacher who teaches CLIL, they will need to become aware of the knowledge and concepts of the particular topic of Geography as well as its academic language. Both types of teacher need to be aware of how these can be effectively communicated without diluting the content at the expense of language or vice versa whilst maintaining the depth and precision of the subject. The matrix developed by Coyle et al. (2010, p. 43) is a useful guide to balancing cognitive and linguistic demands in tasks and materials.

FIGURE 1. The CLIL Matrix.



Linguistic demands

Source: Coyle et al., 2010, p. 43.

Content and language teachers need to collaborate in CLIL in order to pool their expertise and ensure that content and language are given the desired attention and are supported with the appropriate type and amount of scaffolding (Pavon & Ellison, 2013). This delicate balancing act will help to ensure the necessary integration of content and language pedagogies.

2.2. Mindsets

The undertaking of CLIL for many teachers not only poses a considerable cognitive challenge, but also an affective one, which more often than not, means stepping out of their comfort zone into less familiar territory. This may leave teachers feeling vulnerable for a number of reasons: they may not have the level of language needed to teach in it and thus be a good model of it in terms of accuracy, fluency and pronunciation; they may not be able to recognise students' language needs or difficulties, leaving them unable to correct or support them; they may find it difficult to find, design or adapt appropriate materials for their students' levels; they may struggle to balance cognitive and linguistic demands in tasks; if language teachers, they may lack content knowledge and academic language of the disciplinary area since degrees in language and Master's in teaching language focus mainly on general English. Both types of teacher may lack confidence, but

content teachers are particularly vulnerable. They may be less at ease, less able to be anecdotal and be 'themselves'. They may feel that their own content knowledge and expertise are threatened, and may appear less 'in control', particularly if there are students whose language level is good or even better than theirs.

Needless to say, the CLIL teacher must have the right knowledge - content and language, and be in the right frame of mind to be able to teach effectively. Above all else, they should be encouraged to actively reflect on their own practice before, during and after lessons. Professional development for teachers should incorporate reflection and reflective practices which help teachers identify their challenges and achievements (Ellison, 2021). It should be "affective professional development" (Ibid. 2021, p. 189) which incorporates cooperative and collaborative reflection through professional partnerships. By nurturing a spirit of collegiality and trust, teachers will feel more at ease with observation and more willing to see it as a constructive tool in both the teaching and learning process (Ibid, 2021). Engaging teachers in actively investigating their practice through, for example, action research, leading from their increased ability to reflect, would hopefully contribute to much needed practitioner-led research and the evidence base of CLIL in Portugal. In addition, they should engage their students, regardless of educational level, in reflecting on their learning in CLIL - on their content and language knowledge, and ability to think critically within the discipline. Such metacognitive strategies will help to foster learner autonomy. In light of the above, it is useful to reflect on CLIL teaching scenarios and teacher profiles in Portugal to identify credits, needs and benefits.

3. CLIL teaching scenarios and teacher profiles: credits, needs and benefits

Four predominant CLIL teaching scenarios and the profiles of teachers (content and language) involved are presented below. These apply across educational levels. The designation 'content' teacher is here synonymous with pre-primary educators and primary generalist teachers, and subject teachers in middle school, and lower and upper secondary school. In each case, what the teacher brings (Credits) and what they need to receive from professional development (Needs) are identified. Benefits of CLIL to teaching and learning are highlighted in each scenario.

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3.1. Scenario 1:

The content teacher teaching through CLIL

Credits

The content teacher is an expert in their field. They have the content and pedagogic knowledge to be able to transmit the concepts, skills and understanding of their subject to their students in Portuguese. They can identify the academic language of their subject in the mother tongue and use this in their classes. They are aware of the genres/text types which predominate in their field which students are expected to understand, interpret and produce. They know how to organise and facilitate learning for and among students. They are able to recognise students' strengths and difficulties in regular lessons given in Portuguese.

Needs

In CLIL, the content teacher needs to have a high level of proficiency in the English language regardless of the educational level they are teaching. Ideally, this should be no less than C1 level on the Common European Framework of Reference (Council of Europe, 2001). They do not need to be native or native-like but need to be accurate and fluent, and feel comfortable and confident using the language. They should have a good linguistic range and flexibility to be able to reformulate and recast, and know how and when to use L1 (see Ch.3., Feller this volume). They need to know the academic language of their disciplines in English – key terms, structures, functional language which students need to communicate their thinking. The content teacher needs to be able to use the language for classroom management in order to organise students, their tasks and learning.

Content teachers need to be aware that teaching in CLIL is not simply switching language, but it requires adaptations to methodology, too. It is about finding ways to get the message through to students. Teachers (and students) need to know that it may take longer to cover content, and therefore the syllabus, because students need more time to work through materials and opportunities to communicate their understanding inside the classroom. Teachers must be careful not to dilute content at the expense of language. They also need to acquire language sensitivity i.e., to be able to think like a language teacher and activate this when planning and executing lessons. This includes formulating learning outcomes for content *and* language. Teachers need to exploit multimodal sources (linguistic, visual, spatial etc) in order to appeal to all learner types and styles of learning which will facilitate access to content and lead to deeper learning over time. They need to provide for student-focused lessons and group work with more active engagement of students (see Ch.4., Reis Alves this volume).

Furthermore, content teachers need to know how to provide opportunities for the four language skills (reading, writing, listening and speaking) to be practised. Students need exposure to the right genres/text types of the discipline in order, for example, to read, listen, write and speak the language of Geography in English. Teachers need to be able to identify how texts are organised, how language is used and how they can help students to notice this organisation and language so that they can support their students' use of it and in doing so develop their Cognitive Academic Language Proficiency. Thus, the content teacher needs to become aware of language learning strategies and how to support or 'scaffold' these. They need to know reputable sources where they may find and adapt materials.

Benefits

It is understood that content teachers who engage in CLIL become more conscious of the importance of language when they return to teaching in the mother tongue (Ellison & Almeida Santos, 2017; Kelly *et al.*, 2004). Stepping out of their comfort zone enables them to broaden their horizons in terms of new methods and materials, and engage in cross-disciplinary projects. This can be empowering and provide a sense of achievement as well as foster collegiality and the development of "multiperspectival competence" (Wolff, 2005, p. 21).

3.3. Scenario 2:

The English language teacher teaching the content class

Credits

The English language teacher is an expert in their field. They have the content knowledge of general English, a high proficiency in the language, pedagogic content knowledge – how to teach the language and develop language skills (reading, writing, listening and speaking). They have a range of competences which make them proficient users: grammatical, pragmatic, social, communicative, and so on. These teachers can identify characteristics of good language learners and can develop their students' metacognitive awareness of these. They know strategies which make students aware of incorrect language use and how this may be self-corrected by the student, their peers and corrected by the teacher. The language teacher uses BICS, can be anecdotal, and can use the language for classroom management.

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The English language teacher is aware of approaches, methods and techniques in language learning and can apply these appropriately in the classroom according to the context. They know that language learning is best facilitated through 'language using', represented in communicative and situational-functional approaches. They are aware that this is done through a variety of interaction patterns. They can draw on techniques such as drilling to develop pronunciation, and know how to develop strategies and skills for reading, writing, listening and speaking. They may be familiar with task-based, project and problem-based learning which may facilitate CLIL (see Ch.4., Reis Alves this volume). The English language teacher may be familiar with and already adopt cross-curricular approaches in their language lessons where links are made with other areas of the curriculum, and techniques from other subjects adopted and deployed in the language classroom.

Needs

The goal of foreign language teaching is to develop a high level of proficiency in the language (BICS). Teachers have been primed for this in their initial and continual training. However, it is unlikely that they will have received training in teaching language for specific purposes. Consequently, although such teachers are specialists in the English language, they will not necessarily be aware of/familiar with the academic language of other subjects e.g., geographical terms (what they mean/how they are used or how to pronounce them) or the language used to express geographical concepts in primary or secondary education (CALP). They may not be aware of the genres of subject specialisms, but may be able to identify these with more ease.

The language teacher is not a content specialist and cannot teach the discipline without the shared expertise of the content teacher. They must liaise with the content teacher in order to establish the content to be taught, its principles, concepts and skills. Collaboration is paramount in order to both plan for and teach the content through the foreign language. Time must be allocated for this. The language teacher essentially delivers content determined by the content teacher using a combination of pedagogic knowledge of the content and their own knowledge base of foreign language teaching. They need the content teacher to be present in class so that they may be helped by them if issues arise concerning content. The language teacher needs to know that language learning is not the only goal. It is a tool for learning and expressing thinking. As the language teacher is not a content specialist, their teaching of various subjects should be avoided as this would be over-burdensome and not allow them to acquire a 'comfortable' amount of expertise.

Benefits

The English language teacher will develop a knowledge of other disciplinary fields and an appreciation of interesting, useful educational content which they may bring to their language lessons. For example, primary English language teachers will realise that they can import curricular content and strategies from the primary curriculum into their English language lessons (Ellison, 2008; 2010). This will make the lessons more meaningful especially as children are able to see the connections between 'subjects' (Ibid). Teachers of lower and upper secondary levels may adopt more task-based and problem-based learning where language is seen as a tool for communication in authentic activities with real world experiences and concerns. English language teachers will also gain a better understanding of the cognitive demands on students in the subject. This, in turn, may transfer to the language classroom in which they may engage students in more higher order thinking.

3.3. Scenario 3:

The English language teacher supporting the content teacher

Credits

The English language teacher who collaborates with the content teacher essentially performs a supportive role in terms of moral boosting, language and language teaching pedagogy. Their obvious proficiency in the language, as well as pedagogic knowledge, enables them to provide advice about language choice, use and student engagement in language skills. They are aware of errors and mistakes made by content teachers and students. Although they may not be aware of key terminology of the content discipline, they will be familiar with grammatical structures which accompany this as well as CDFs.

Needs

The language teacher who supports a content teacher will need to know how to do this sensitively and respectfully. Their colleague is not their student but their intellectual equal. It has already been pointed out that it is unlikely that the language teacher will have been prepared for teaching language for specific or academic purposes, so they will need to familiarise themselves with content of the discipline, as well as how it is taught (pedagogic knowledge) and the main genres. They will need to consider how attention can be drawn to language in texts, opportunities created for languaging in tasks, and help balance cognitive and linguistic demands. They need to help the content teacher determine language

learning outcomes, the language needed during their input and that required by students to communicate. They need to be able to check the accuracy of language use in prepared materials, pronunciation of key terminology, ensure language is 'noticed' and used in work which involves the four language skills. In delivering the lesson, moral support and encouragement of all participants (teacher and students) is necessary. Support for the content teacher's use of language will be timely, for example, when correcting students' errors or mistakes, and providing them with on-the-spot language to accomplish tasks.

Given that foreign language curricula are not aligned with the language demanded of content curricula, English language teachers may consider how they can support content language development in their own language lessons. CLIL is not governed by grammatical hierarchies like traditional language teaching; it uses language which appropriately conveys meaning. For example, students may be required to understand and use passive constructions in CLIL History lessons before the stipulated time for their introduction in the language curriculum. The English language teacher may provide language 'rehearsals' which draw attention to the passive in their language lessons or task-based learning involving its use and subsequent language focus.

Benefits

The language teacher will gain awareness of content subjects which is interesting for their own personal and professional development. They may expand their own knowledge of academic English. Content from disciplinary subjects may be used in language lessons, or at the very least, reference may be made and connections drawn, which is of benefit to all and provides for more interdisciplinary cohesion. The English language teacher will take satisfaction from the fact that they are supporting teaching and learning in CLIL both outside and within the classroom. The presence of both content and language teachers in the classroom will reassure learners that they have the support of both teachers in their learning process, and that both are working for the good of all.

3.4. Scenario 4:

The English language teacher CLILing ELT

This scenario may occur when there is no CLIL programme in the school, and when the English language teacher wants to experiment with the CLIL methodology as a means of enhancing language learning. Where this is the case, liaising with a content teacher to determine the content which could be taught through English is still important so as to ensure there is no conflict of interest and that accuracy of concepts and knowledge are preserved. Where liaison is not possible, it is advisable to draw on content with which the students are already familiar. It should be noted, however, that when teaching content which the students already know, the cognitive effort is lessened. In this case, there is more of a focus on the foreign language terms for already known content and concepts, and opportunities for the development of language skills. Some (Coyle, 2006) would argue that this is not CLIL. However, when teaching English terms for content, the English language teacher may take the opportunity to reinforce and enhance developmental skills and concepts, for example using the topic of plants from Social Studies (Estudo do Meio) in primary education. After learners have labelled the parts of a plant in English, the teacher may consolidate the functions of each part providing necessary language and concept scaffolding so that learners are able to explain the functions themselves.

Credits

As previously mentioned, the English language teacher is an expert in their field, and, as such, is familiar with all knowledge bases in ELT. Their methodological awareness primes them for creating opportunities for students to develop language skills and proficiency in communication, which is the goal of ELT. It is likely that even if the teacher decides to teach a CLIL-type lesson, their main goal will remain the same.

Needs

The English language teacher will need to consider all 4Cs in their planning and preparation for the CLIL lesson(s). They need to select content which is interesting, relevant and meaningful to students. They need to be aware of the developmental skills and concepts which they will be helping to reinforce. They will need to know how they may establish cross-curricular links and borrow techniques from other curricular areas (Ellison, 2008) e.g., graphs from Maths; angles and symmetry from Geometry; principles of carrying out a scientific experiment, e.g., designing a simple parachute and presenting the results orally and in writing. Teachers need to be prepared to engage students in group activities such as those advocated by task-based learning (for an interesting cross-curricular project linking Geometry with English language teaching in primary education, see Franco & Ellison, 2021).

Benefits

The English language teacher will learn about different content and experiment with strategies from other areas, which will make for more interesting, meaningful learning. They will gain satisfaction from knowing they are supporting the understanding of content and techniques from other areas of the curriculum. As such they will have a better understanding of how the English language can play a role in the holistic development of the learner. They will be in a better position to forge ties with colleagues and collaborate. In primary education, through this type of cross-curricular teaching, the English language teacher may feel less isolated and their work taken more seriously by learners, teachers and parents (Ellison, 2010).

TABLE 1. Summary of key credits, needs and benefits of CLIL scenarios.

CLIL Scenario	Credits	Needs	Benefits
1 The content teacher teaching through CLIL	 is an expert in their field has content and pedagogic knowledge can identify key terminology is aware of text types knows how to organise and facilitate learning 	 To feel comfortable and confident using English To know: how and when to use L1 strategically that CLIL is not just switching the language code how to adapt their methodology to integrate content and language learning that in CLIL it may take longer to cover the content syllabus that students will need more time and opportunities to communicate 	 more conscious of the importance of language in mother tongue lessons broader horizons – new methods, materials, collaborations engagement in crossdisciplinary projects
2 The English language teacher teaching the content class	 high proficiency in English can be flexible and anecdotal in English knows about approaches, methods and techniques for language teaching and learning can use a range of strategies to enhance communication in the classroom can identify and correct errors/mistakes in language knows how to draw students' attention to mistakes in language and encourage self-correction 	 To become aware of the key content and concepts of the subject To become aware of the academic language and genres of other subjects To liase with the content teacher to identify and understand the above 	 knowledge and appreciation of other disciplinary fields use similar interesting, relevant, meaningful content in their language lessons may implement more task-based and project-based learning may engage students in more higher level thinking collaboration with colleagues
3 The English language teacher supporting the content teacher		 All of the above To be aware of how they may support the content teacher sensitively and respectfully To be able: to help the content teacher determine the language they need and that students will use to communicate to check the accuracy of language in materials to check the pronunciation of key terms before lessons to ensure provision is made for language development and scaffolding in lesson plans to provide timely language support to the content teacher and students to help students self-correct to provide language support and rehearsals in the language class 	 knowledge of English for specific purposes learner awareness of teacher collaboration which supports their learning process can draw interdisciplinary connections in their lessons empathy and understanding of others
4 The English language teacher CLILing ELT		 To liaise with the content teacher to ensure accuracy of content and concepts To consider the 4Cs in planning To know that teaching content which the students know lessens cognitive demand To know how to borrow techniques from other curricular areas To engage students in group activities 	 learn how to develop cross-curricular links collaboration with colleagues more integrated into the school context and taken more seriously (primary education)

4. Conclusion

Teacher education for the changing times is absolutely essential. Continual professional development is paramount if teachers are to embrace and face new professional challenges with dignity, confidence and enthusiasm. Teacher education for CLIL is no exception. In fact, it is paramount as this approach, which involves the teaching of subject content through a foreign language, is one for which few teachers have been prepared in their initial training. It requires new knowledge and understanding of integrated teaching and learning where there is a dual focus on content and language with a cascading effect on classroom pedagogy. This can impact significantly on a teacher's emotional well-being which is why professional development through reflective practices involving collaboration with others is vital to the success and sustainability of a CLIL project or programme.

Every teacher has something to offer CLIL. In teacher education which brings content and language teachers together and prepares them to work with each other, it is vital that teachers combine credits, share expertise and understand the benefits that CLIL brings to both teachers and learners. This includes complementing each other's profiles in practice in an environment where there is trust and collegiality. It goes without saying, that for CLIL to be sustainable, there must be provision of quality training and professional development for teachers in pre-service and in-service programmes. This would likely require re-structuring of courses, but where this is not possible, adjustments allowing for inclusion in existing courses should be made. The following recommendations account for changes which may be made in most contexts.

5. Recommendations

Adopting a whole school approach to language across the curriculum

It could be stated that all school education involves content and language integrated learning regardless of the content or language. All teachers need to become cognisant of their role in the teaching and learning of both the content of their subject and its academic language and literacy. They need to acknowledge this responsibility particularly if their own teacher education has not emphasised this aspect of their professional identity. Content teachers need to become 'language aware'. This is a sensitive and somewhat controversial issue, and a long-standing one. In the mid-1970s, the report *A Language for Life* (1975), commissioned by the UK Ministry for Education and Science and chaired by Sir Alan Bullock outlined

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that school children in England and Wales were under-achieving on account of the their poor grasp of the English language (the language of their schooling) and attributed responsibility for raising standards in English to all teachers across the curriculum. More recently, in their 'Handbook for Curriculum Development and Teacher Training: The Language Dimension in all Subjects' (Council of Europe), Beacco *et al.*, (2016) highlight the necessity for a focus on language in mother tongue school teaching which would provide for more equality in education. This has been further exacerbated by the CLIL movement, which for some, has put this need firmly back on the agenda.

As CLIL is a fusion of the knowledge bases of content teaching and language teaching, it affords opportunities for a healthy collision of both these worlds. This should happen in the teaching of every subject in the mother tongue. If pre-service as well as in-service education makes provision for this, then the transition to the use of a foreign language as the CLIL language will be made much easier. This can be achieved through the adoption of a whole school approach where special attention is given to the role of language in learning, where all learners are learners of both content and language in every subject, where all teachers acknowledge that they must attend to the language of their subject and that this is part of their professional identity. A professional development course designed to support the above was developed through collaboration between Centro de Formação Aurélio da Paz dos Reis (Gaia) and FLUP. Positive outcomes with regards teachers' academic language awareness and strategies to foster this collaboratively across the curriculum were obtained by those who attended from Escola Secundária Dr Joaquim Gomes Ferreira Alves, Valadares, Gaia.

In-school teacher collaboration: timetables and observation

As CLIL necessitates collaboration between content and language teachers, timetables need to be created which facilitate this. These should enable teachers to support each other's development through observation, planning and materials design. Timetables need to be 'compatible' so that teachers are free to observe each other and even co-teach. These adjustments are in themselves necessary incentives for teachers. Observation may be by an external 'expert' or teacher colleague. Structured observation will focus on predefined areas such as aspects of teacher language use, methodology, personal communication (see Ellison, 2021, p. 194) which may involve the use of rubrics or other tools. Observation should always be preceded and followed by feedback/discussion which allows all present to reflect on practice, pool expertise and share concerns and success (*Ibid.*, p. 195).

In-service courses on language for CLIL teachers

Language proficiency of teachers is paramount in CLIL. Professional development courses which address the linguistic needs of teachers are essential if the teacher's language level is not at 'advanced' level. This should include BICS and CALP. Teachers need to be aware, however, that improved language level is not synonymous with ability to teach. Due attention needs to be given to CLIL methodology and the integrated teaching and learning of both content and language in a dual-focused way.

Optional subject in teaching through another language on Master's degrees

An optional curricular unit/module in teaching subjects through English for students studying for Master's in teaching non-language subjects would appeal to students who enjoy learning and speaking foreign languages. This, for example, may be a support for student-teachers who do their teaching practice in a school which has a CLIL programme, affording them the opportunity for supervised practice in CLIL.

Inclusion of modules on CLIL in didactics for English language teaching of Master's degrees in teaching English

As early as 2004, leading documents which focused on language teacher education such as The European Profile for Language Teacher Education: A Framework of Reference' (Kelly *et al.*, 2004) mentioned benefits to teachers of engaging in CLIL: "such training improves their language competence, encourages more comprehensive use of the target language in non-CLIL classes, and gives teachers ways of raising social, cultural and value issues in their foreign language teaching" (*Ibid*, p. 77). The European Portfolio for Student Teachers of Languages: A reflection tool for language teacher education', (Newby *et al.*, 2007) also includes 'Can do' statements for planning of lessons for other subject content.

Leading figures in ELT (Harmer, 2012; Richards & Rodgers, 2014) now include CLIL in the same breath as other approaches, methods and techniques in ELT. Richards and Rodgers (2014) align CLIL with Content-based language teaching, and whilst there are similarities, there are also a number of differences. A focus on CLIL has been in practise in Master's degrees in teaching English and another language in the 3rd cycle of compulsory education and secondary education at FLUP since 2008. Students learn about the principles and practice of CLIL. They compare CLIL with approaches, methods and techniques in ELT with special attention to the communicative approach, functional approach, and task-based learning. The theory and practice of lesson planning includes the 4Cs in order to engage student-teachers in developing lessons which account for the development of thinking skills, are relevant and interesting in terms of content, are culturally and interculturally appropriate, and engage learners in learning about, with and from each other.

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Inclusion of cross-curricular approaches to teaching foreign languages in didactics for teaching English on Master's in teaching English to young learners. With the exception of the Master's in Teaching English in the 1st Cycle of Basic Education at FLUP, there are currently no Master's degrees of its kind in Portugal which incorporate a 6-ECTS curricular unit on CLIL. Teacher educators should include cross-curricular/activity-based learning (Brewster & Ellis, 2007; Vale & Feunteun, 1995) in didactics programmes on such Master's degrees. Such approaches are based on similar principles to CLIL – where language is used meaningfully and constructively as a tool for other learning. This is in line with the integrationist and holistic ethos of primary education.

References

Anderson, L. W. & Krathwohl, D. R. (Eds.) (2001). A Taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.

Beacco, J. C., Fleming, M., Goullier, F., Thurman, E. & Vollmer, H. (2016). A Handbook for curriculum development and teacher training: The language dimension in all subjects. Council of Europe. https://www.coe.int/en/web/language-policy/a-handbook-for-curriculum-development-and-teacher-training.-the-language-dimension-in-all-subjects

Brewster, J. & Ellis, G. (2007). The primary English teacher's guide. Pearson Education Limited.

Conselho Nacional de Educação. (2013). Relatório técnico: Integração de ensino da língua inglesa no currículo do 1.º ciclo do Ensino Básico. https://www.cnedu.pt/pt/noticias/cne/854-parecer-e-relatorio-tecnico-sobre-a-integracao-do-ensino-da-lingua-inglesa-no-1-ciclo-do-ensino-basico

Council of Europe. (2001). Common European framework of reference for languages: Learning, teaching, assessment. Council of Europe.

Coyle, D. (2002). Relevance of CLIL to the European Commission's language learning objectives. In D. Marsh (Ed.), *CLIL/EMILE The European dimension: Action, trends and foresight potential* (pp. 27-28). Public Services Contract DG EAC 36 01 Lot 3. European Commission.

Coyle, D. (2006). Content and language integrated learning: Motivating learners and teachers. *Scottish Languages Review. 13*, 1-18. https://scilt.org.uk/Portals/24/Library/slr/issues/13/SLR13_Coyle.pdf

Coyle, D., Hood, P. & Marsh, D. (2010). *CLIL: content and language integrated learning.* Cambridge University Press.

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism, 19,* 121-129. https://eric.ed.gov/?id=ED184334

Cummins, J. (2000). Academic language learning, transformative pedagogy, and information technology: Towards a critical balance. *TESOL Quarterly*, *34*(4), 537-548.

Dalton-Puffer, C. (2013). A construct of cognitive discourse functions for conceptualizing content-language integration in CLIL and multilingual education. *European Journal of Applied Linguistics*, 1(2), 216-253. https://doi.org/10.1515/eujal-2013-0011

Department of Education and Science. (1975). A language for life: Report of the Committee of English appointed by the Secretary of State for Education and Science under the Chairmanship of Sir Alan Bullock F.B.A. HMSO. http://www.educationengland.org.uk/documents/bullock/bullock/1975.html

Ellison, M. (2021). Understanding the affective for effective EMI in higher education. In F. Rubio-Alcalá & D. Coyle (Eds.), *Developing and Evaluating Quality Bilingual Practices in Higher Education (pp. 181-200)*. Multilingual Matters.

Ellison, M. & Almeida Santos, A. (2017). Implementing CLIL in schools: The case of the GoCLIL project in Portugal. *e-TEALS*, 8, 43-72. https://sciendo.com/article/10.2478/eteals-2018-0003

Ellison, M. (2014). *CLIL as a catalyst for developing reflective practice in foreign language teacher education* [Unpublished doctoral *dissertation*]. University of Porto. https://repositorio-aberto.up.pt/handle/10216/78036

Ellison, M. (2010). (De)Constructing CLIL in the primary context: Primary practice revisited and reconsidered. *APPINEP Bulletin*, 22, 8-11.

Ellison, M. (2008). Making and doing (In) English: Incorporating ELT into best primary practice. *APPINEP Bulletin*, 18, 6-11.

Eurydice. (2006). Content and language integrated learning (CLIL) at school in Europe. Eurydice. https://op.europa.eu/en/publication-detail/-/publication/756ebdaa-f694-44e4-8409-21eef02c9b9b

Franco, C. & Ellison, M. (2021). Geometria em Inglês – oportunidades para a articulação curricular no 1.º Ciclo do Ensino Básico. *Estreiadialogos*, 6, 93-112. https://www.estreiadialogos.com/vol6

Harmer, J. (2012). Essential Teacher Knowledge. Pearson.

Kelly, M., Grenfell., M. Allan., R. Kriza., C. & McEvoy, W. (2004). European profile for language teacher education – A frame of reference. A report to the European Commission Directorate General for Education and Culture. European Commission.

Marsh, D. (2006). English as a medium of instruction in the new global linguistic order: Global characteristics, local consequences. In S. M. Stewart, J. E. Olearski, & D. Thompson (Eds.), *Proceedings of the Second Annual Conference for Middle East Teachers of Science, Mathematics and Computing. METSMaC* (pp. 29-38).

Marsh, D., Mehisto, P., Wolff, D. & Frigols, M.J. (2010). *The European framework for CLIL teacher education*. European Centre for Modern Languages (ECML). https://repositorio-aberto.up.pt/handle/10216/78036

Mehisto, P. (2017). CLIL essentials for secondary school teachers. Cambridge University Press.

Moon, J. (2000). Children learning English. Macmillan Heinemann.

Newby, D., Allan. R., Fenner. A. B., Jones, B., Komorowska. H. & Soghikyan, K. (2007). *European portfolio for student teachers of languages: A reflection tool for language teacher education*. European Centre for Modern Languages. https://www.ecml.at/Portals/1/documents/ECML-resources/EPOSTL-EN.pdf?ver=2018-03-22-164301-450

Pavon, V. & Ellison, M. (2013). Examining teacher roles and competences in content and language integrated learning (CLIL). *Linguarum Arena*, *4*, 65-78. https://ojs.letras.up.pt/index.php/LinguarumArena/issue/view/293

Richards, J. & Rogers, T. (2014) *Approaches and Methods in Language Teaching*. 3rd Edition. Cambridge University Press.

Vale, D. & Feunteun, A. (1995). *Teaching children English: A training course for teachers of English to children.* Cambridge University Press.

Wolff, D. (2005). Approaching CLIL. In D. Marsh, D. Coyle, S. Kitanova, A. Maljers, D. Wolff, & B. Zielonka, *Project D3 – CLILmatrix – Central workshop report* (pp. 10-25). European Centre for Modern Languages.