CLIL VS ENGLISH AS THE MEDIUM OF INSTRUCTION: THE PORTUGUESE HIGHER EDUCATION POLYTECHNIC CONTEXT

Margarida Morgado (marg.morgado@ipcb.pt)*
Margarida Coelho (margco@estgp.pt)**

ABSTRACT:

This review paper purports to review Higher Education experiments that use “English as a medium of instruction” (EMI) and “Content and Language Integrated Learning” (CLIL) approaches in several countries across the world. It addresses non-native English speaking contexts to explore differences, specific problems encountered, and effective strategies used, that might be transferable to the Portuguese Higher Education context. Experiments with CLIL and with EMI will be mainly analyzed as to how they essentially differ in relation to basic educational and methodological approach, as well as to strategies for coping with instruction in and through English. As a conclusion, this paper aims at issuing some recommendations on how to implement the learning and teaching of English into Portuguese Polytechnic Higher Education curricula, practice, and research.

Keywords: CLIL, Portugal, methodology, strategies, teaching of English in higher education.

RESUMO:

Este artigo propõe-se rever experiências de abordagens de “Inglês como meio de instrução” (IMI) e de “aprendizagem integrada de conteúdos através de uma língua estrangeira” (AICLE), realizadas no contexto do ensino superior em diversos países. A revisão incide nos contextos de utilização do
As experiences of ENM and of AICLE related are particularly analyzed in what concerns to the way they differ in the pedagogical and methodological orientation, as well as in the strategies to deal with instructions in and through the English language. As conclusion are made some recommendations regarding how to implement the teaching and learning of English in the curriculum, in the practice and in the investigation in higher education in Portugal.

**Keywords:** AICLE, Portugal, methodology, strategies, teaching of English in higher education.
1. INTRODUCTION

Higher Education contexts, faced on the one hand with an increase in the demand of foreign language learning and on the other hand with reduced provision in language courses (Kees de Bot 2002 e Marsh 2002 cit. in Fernández-Santiago, 2011: 50), are thus faced with options that must be clearly explained. Under the pressure of increasing internationalization and trying to enhance the employability of their own students, they have to offer instruction in a global language (English is the most obvious choice in Portugal) and they have to prepare their own students and teachers to be able to function academically in a language of global communication. Higher Education institutions may be open to the introduction of courses in foreign languages or of language centers that essentially offer provision in language skills to students and teachers. They may be sensitive to courses that offer Language for Specific Purposes to be run parallel to the main curricula, but they are hardly aware of how instruction in a global communication language other than the students’ mother tongue affects their learning and cognition or which may be the most effective methods to develop linguistic proficiency of both students and teachers. It falls to the language specialists to explain clearly the advantages and disadvantages of innovation and research in language policies and English teaching/learning models and methods.

For most Higher Education teachers and stakeholders in Portugal, CLIL is not familiar, while English for Specific Purposes or English as a Medium of Instruction sound more familiar. ‘English as a medium of instruction’ (EMI) is generally used to describe educational approaches that either introduce English as a Foreign Language (EFL) in HE as a supportive methodology (such as Language for Specific Purposes) or, more often, describes subject specific learning through a foreign language. The fact that CLIL requires interdisciplinary approaches, an integrated curriculum of language and subject specific content, professional development and team teaching (in some models) makes it even more threatening to educational environments that rely on the Language Departments to prepare students and teachers linguistically or that presume that everybody knows enough English to teach and learn through it.

Thus, we argue that it is important for language specialists and providers in Higher Education to clearly understand where they stand in relation to foreign language provision when it comes to content-based teaching and learning. Is using English as a Medium of Instruction (EMI),
which might include English for Specific Purposes, so much different from Content and Language Integrated Learning? Can EMI and ESP be classified as the same as CLIL in HE?

Rather than focusing on the theoretical definitions of CLIL and EMI, we propose to review experiments across several countries that are non-native English speaking or bilingual contexts in order to explore differences, specific problems encountered, and effective strategies used, that might be transferable to the Portuguese Higher Education context of both EMI and CLIL approaches.

Experiments with CLIL and with EMI will be mainly analyzed concerning how they essentially differ in relation to:

- basic educational and methodological approach,
- strategies for coping with instruction in and through English,
- the specific demands of each approach.

This review paper aims at issuing some recommendations on how to implement the learning and teaching of English into Portuguese HE curricula, practice, and research in Polytechnic Institutes.

1. HIGHER EDUCATION EXPERIMENTS WITH CLIL

1.1. Basic Educational Approach

Coyle (1999; 2005; Coyle, Hood, & Marsh 2010) defines CLIL through the 4 Cs (content, cognition, communication, culture) to argue that what is required of the learning of a foreign language for the future is that the learner can manage content-oriented information, can make use of that information by using cognitive skills, can communicate effectively and can do so across cultures.

As a dual approach to language and subject specific teaching and learning that benefits both specific subject learning and language learning in an integrated way, CLIL generally raises three types of resistances: one is that it may impede student communication and comprehension of content or does so more than if it were done in the mother tongue; the other resistance is connected with who is to teach CLIL classes in higher education. Although there are several models of tandem teaching at primary and secondary level, it seems obvious for higher education that the ideal CLIL teacher is a subject specialist with appropriate proficiency in English, trained to scaffold the language learning of students. Thus, the resistance to CLIL focuses on how to make the specialist teacher sensitive to linguistic learning and
scaffolding so as to promote higher linguistic proficiency of students and how to improve on the teachers’ own linguistic competence in English. Some authors will, nonetheless, insist that there should be multidisciplinary cooperation in the design of CLIL courses even at tertiary level. There is a third resistance, as highlighted by Fernández-Santiago (2011: 62), which concerns, on the one hand, Foreign Language certification of integrated learning and on the other hand professional incentives to multidisciplinary teams of teachers and to students in CLIL courses.

Anderson (2011: p.64) further raises the issue of the cognitive demands of CLIL and claims that CLIL needs to respond to “various backgrounds, needs, and usage scenarios” of students. The author gives the example of writing a book report as a communicative task that is not solely dependent on linguistic knowledge or skills, but also on cognitive, content-based and cultural knowledge of the ‘professional culture’ of writing book reports. The cognitive academic language proficiency envisaged by CLIL does not depend on the foreign language alone, the author claims, but also on the students’ own cognitive and higher order thinking in the mother tongue. The same applies to their basic interpersonal communication skills. Thus, it is important to analyze the appropriate cognitive, communicative, content-based (and, probably, cultural) competences of students previous to any CLIL adventure in HE.

Other scholars, namely Moore and Dooly (2010) call on Wenger’s (1998) notion of Communities of Practice (CoP) to highlight that CLIL operates within the new paradigm of the language user in subject-specific fields of knowledge that could be considered highly contextualized communities of practice, where it makes no sense separating the subject and the linguistic paradigm. Form and meaning have to be negotiated together and knowledge is shaped in that complex interrelation (Gajo 2007 cit in Moore and Dooly 2010: 76)

1.2. Methodological Approach

Most authors will agree that CLIL is an educational constructivist approach for the 21st century that promotes “active learning and teaching methods, use of authentic tasks and materials, student-centeredness, focus on project work and task-based learning” (Mehisto, Marsh, Frigols, 2008 in Vilkanciené 2011: 111). According to Vilkanciené (2011: 113), the key principles of CLIL involve more tolerance to language usage, more support for language production,
and allowing for code-switching. CLIL is generally praised for its motivational value: Vilkanciené (2011: 112) mentions that CLIL designs learning activities which generate genuine need and desire to communicate via the foreign language.

Some other authors prefer to focus on the value of CLIL as a productive language learning strategy that relies more on project or problem based teaching, on authenticity of learning scenarios, on multiple learning foci, on active involvement of students in projects, on allowing time and opportunities for clarifying terminology, on understanding difficulties among peers and with lecturers.

The CLIL experiment at the School of Economics, Universidad Nacional del Litoral – Santa Fe, which is developed through 4 semester cycles, described by Fernandez (2009), highlights the minimum language requirements of students as being B1 for Receptive skills (Listening) and B2 for Reading; and A2 for Productive skills (Speaking and Writing). The CLIL based English language provision, called ‘Technical English’ is based on ‘having learners use, negotiate and re-construct subject-matter meaning’ rather “than in introducing new specific contents from the fields of Accounting, Economy and/or Administration” (Fernandez 2009: 18). For instance, instead of teaching Marketing, the course unit focuses on ‘Advertising: Cultural impact on image promotion’ because it allows for the introduction of new content items, and through it that which is taught is ‘cultural awareness’. Through this CLIL approach several communicative skills and semantically and functionally related strategies are integrated.

1.3. Strategies for Coping with Instruction in English

According to Vilkanciené (2011: 114), who reports on a Lithuanian survey of students engaged in a CLIL program, students mostly use their mother tongue in group work and switch to English for the presentation.

Moore and Dooly (2010) highlight that pluri-lingual talk interaction enriches the collective learning experience. They argue that CLIL practice should highlight the pluri-lingual repertoires of the participants because they are meta-linguistic activities, and they further refer that learners feel quite at ease using several languages in the same communicative event.

Fernandez (2009: 18) recommends that redundancy, banality and oversimplification should be avoided. “Aim at enhancing, projecting,
instantiating, exemplifying, comparing, analyzing, synthesizing or re-dimensioning topics dealt with in the subject-matter areas”

Aguilar & Rodríguez (2012: 183) report on a pilot CLIL study at a Spanish university aimed at finding out how both lecturers and students perceived their experience. It was found out that “lecturers were mostly interested in practicing and improving their English spoken fluency; they did not feel that the quality of their teaching had been sacrificed; they had not included any question on language learning in their assessment and they showed great reluctance to receiving any CLIL methodological training”. As for students’ opinions, they highly valued the specialized vocabulary they had learnt and the improvement of their listening and speaking skills. The negative aspect most frequently mentioned was lecturers’ insufficient level of English.

2. HIGHER EDUCATION EXPERIMENTS WITH ENGLISH AS THE MEDIUM OF INSTRUCTION

2.1. Basic Educational Approach

Teaching subject courses in or through English has generally little to do with language specialists and there is generally little concern with language as the medium of instruction, since the focus is on content and understanding content, academic or subject-related. Some authors will refer to this approach as “Language teaching by content teaching” where language learning is developed incidentally (Fernandez 2009: 15 quoting Mohan 1986).

However, this approach is generally believed to motivate students to learn the language, to improve their language skills and to constitute a competitive advantage in the job market (Chang 2010: 4). However, the EMI approach has to make concessions to students’ comprehension, cognition and level of proficiency.

This kind of content based approach may also be the realm of the language specialist, or the language-sensitive lecturer, when the content is used to illustrate certain language points (such as specific terminology that is already known in the mother tongue); or when topics are addressed that range from a diversity of academic courses (Chang 2010: 3). This is what happens in courses that are called English for Academic Purposes, or English for Specific Purposes.

Chang (2010: 11) argues that “if students are to succeed in English-medium instruction” they will have to demonstrate that their
proficiency is high in this domain and therefore it is desirable that Higher Education institutions offer supplementary English courses/programs and/or select the students that will be qualified for English-medium instruction.

Chang (2010: 19) also highlights that the subject teachers’ skills should be worked on, which is a point that will be examined by many other researchers in the context of English as a medium of instruction.

2.2. Methodological Approach

Airey (2011: 37) mentions several empirical studies and research which have been made in the Nordic countries about the use of English as a Medium of Instruction (EMI). These studies focus on such areas as domain loss, parallel language use, English as the language of international research, the extent to which English is used in Higher Education, the attitudes of lecturers and/or students to teaching and learning in English or the ability of students to learn in English.

Thøgersen & Airey (2011 in Airey 2011: 38) studied some Swedish university lecturers’ experiences of lecturing in English and “found that the lecturer took longer to present the same subject matter, speaking more slowly and using more repetition in L2. They also noted that in L2 the lecturer’s language was more formal – with a number of similarities to written, textbook style”.

Another study conducted at a technical university in the Netherlands (Vinke 1995, in Airey 2011: 38) came to the conclusion that the lecturers in the study say they hardly notice any difference in teaching in English or in Dutch. However the author notes that using English as a medium of instruction “reduced the redundancy of lecturers’ subject matter presentation, lecturer’s speech rate, their expressiveness, and their clarity and accuracy of expression” (Vinke, Snippe & Jochems 1998: 393). The lecturers who answered the questionnaire also reported an increase in preparation time needed for English medium teaching.

A Swedish study analyzed the disciplinary learning of undergraduate physics students taught in both Swedish and English (Airey and Linder, 2006a, 2006b, in Airey and Linder, 2008) and concluded that on the whole students believed that the teaching language had little effect on their learning. However, conclusions were quite different when the video footage of teaching situations was seen, and indicated a reduction in the amount of interaction in lectures taught
in English and a greater concentration on the process of note-taking in English-medium teaching classes, at the cost of following the lecturer's line of reasoning. The study revealed that the students changed their learning strategies to cope with the language shift in a number of ways: by reading the documents before lectures, taking notes in class; "in some extreme cases lectures had simply become sessions for mechanical note taking with extra work needed to make sense of these notes later." (Airey and Linder 2008: 148).

2.3. Strategies for Coping with Instruction in English

According to Jensen and Thogersen (2011: 15) lecturers in Scandinavia and in the Netherlands do not consider it to be very different to teach in English or in their mother tongue, though lecturing in English may be more strenuous. They do refer, however, that they need more time to prepare lectures and that it may be more difficult to express ideas adequately. Studies such as these are often correlated to studies on the English skills of lecturers that may find them good in reading, writing and listening, though somewhat poorer in terms of oral skills. Data collected also shows that lessons tend to become more monologic and less interactive when a lecturer uses English as a medium of instruction.

Students may complain or feel that they do not comprehend content fully because instructors do not speak good English (Chang 2010: 12).

A study conducted by Airey (2011) followed eighteen lecturers at two Swedish universities, all fairly inexperienced in teaching in English, who participated for 12 weeks on a 7.5 ECTS teacher training course – Teaching in English – delivered almost all online, for university lecturers to train in the use of EMI. The lecturers’ relative inexperience in EMI justifies their acute awareness of their limitations when teaching in English (Airey 2011: 49) and contextualizes their 9 recommendations for other teachers who are faced with the transition to lecturing in English, among which are recommendations not to translate, to think and prepare in English and to practice before lecturing.

Otálora (2009) describes an interdisciplinary seminar on English content in teaching addressed to lecturers in several fields (Administration, Nursing, Psychology, Law, and the Humanities) at Universidad de La Sabana, Colombia, which identifies needs and expectations of teachers to be the need for support in FL, regular
seminars, sheltered teaching and student coaching in written and oral production.

3. SIMILARITIES

Both CLIL and EMI converge in several points that might be summed up as responses to the new contexts of foreign language learning across the HE curricula and as a means to communicate about something rather than learn FL as an end in itself.

Both approaches also converge methodologically on the following points: the need to focus on specific vocabulary and terminology, the creation of authentic learning scenarios, the use of learning strategies that actively involve the learners, such as task-based learning or project work, and language usage, support for language production and code-switching between FL and mother tongue.

The use of code-switching and the acceptance of the plurilingual repertoires of learners and lecturers as communicative resources represent a challenge to traditional ways of looking at language learning and competence that are based on ‘the idealization of the monolingual native speaker’ (Moore and Dooly 2010: 77).

The perceptions of learners also show points of contact in that they will value added time to practice the FL, while complaining that it makes learning, at times, more complicated and difficult. Research results show (Chang 2010: 6) that whether using CLIL or EMI, students feel that they improve their linguistic skills and proficiency when they are taught in English, even if their command of English is not high. Students also report difficulties in understanding content and in expressing themselves fluently in class.

As to lecturers, there aren’t many terms of comparison, since CLIL experiences in the tertiary sector seem to be scarce (or scarcely documented), but one would expect that some of the issues raised by studies on EMI will find echo in CLIL approaches, namely, reduction of interaction time, speaking more slowly, using more repetition, reduction of expressiveness, clarity, accuracy of expression, and redundancy. It is also to be expected that by using a FL to teach, a lecturer will take longer to present the same subject matter, need more preparation time and will eventually become more monologic.
4. DIFFERENCES

Conceptual and methodological differences between CLIL and EMI may stem from similar concerns such as the need for higher exposure to the foreign language or to improve the linguistic skills of students (Fernández-Santiago 2011:50), but they give rise to different approaches and address diverse situations.

When using EMI, there is a gap between the skills acquired through general language courses and the English language skills needed, as pointed by many scholars (Dudley-Evans & St John, 1998; Evans & Green, 2007; Hutchinson & Waters, 1987; Swales, 1988; Widdowson, 1998; Evans and Green, 2007, p. 5). This is exactly what CLIL tries to bridge.

Whereas EMI seems to expect higher FL levels of students (C1), CLIL experiments locate minimum language requirements, as one example showed, at A2 for productive skills, B1 for listening and B2 for reading.

There also seems to be higher anxiety as concerns both the linguistic skills of students and subject teachers in EMI than there is in CLIL, which is understandable, since CLIL presupposes an integrated curriculum of language and content and, if not team teaching, at least some background preparation of the teachers involved as to their command of the FL, as well as with concern to effective classroom strategies that may foster students’ learning in terms of content and simultaneously of language.

What makes CLIL different from content-oriented approaches, such as EMI, according to Fernandez (2009), is the fact that students are required to learn a foreign language by studying subject-matter content; it is content that determines what language needs to be learnt; it may be focused on lexicon and discourse rules are fore-grounded. More importantly, CLIL problematizes linguistic and subject knowledge (Moore and Dooly 2010). Methodologically CLIL supports the learning process of learners’ language production, and more time is needed for further explanation and illustration so that learning can be cognitively assimilated in the FL.

While in EMI we may find content teachers devising strategies (simplifying, classifying, translating, etc.) to help students understand content, and in ESP we find language teachers helping students to learn content-specific language, in CLIL language and content are integrated. As defined by Fernandez (2009: 14) “CLIL assumes that content is a discourse construction and teaches the language forms that will allow
comprehension of disciplinary discourse, thus integrating form, function and meaning in its ideational, interpersonal and textual manifestations”.

On the whole CLIL seems to be a more flexible solution to students’ and lecturers’ needs as well as more effective and inclusive of students with weaker FL abilities.

In sum, CLIL appears essentially as a compensatory strategy to work on the foreign language skills of students in HE when there is no adequate language provision in higher education curricula or when the students’ skills in FL are low; while EMI seems to constitute a practice introduced under internationalization pressures and the presence of many international students, with poor results in terms of effective learning and teaching.

From the organizational point of view, EMI seems to call forth the question of how to prepare specific content lecturers to teach English. This might include – in the context of ESP – the preparation of English Language teachers to deal with subject specific vocabulary, lexicon and context or specific preparation of content teachers, so that they can overcome their reluctance to a methodological training in the area. CLIL also requires interdisciplinary cooperation among university lecturers and integrated certification of CLIL courses both for the Foreign Language and the Content, claims Fernández-Santiago (2009: 61).

Both CLIL and EMI work best in higher education the higher the Foreign Language competence of students and lecturers is. Lower levels of foreign language competence require explicit focus on language learning. This can be done through CLIL (if modules are used within one subject) or though a specific language course for specific purposes. Either used as a “compensatory curricular strategy for the learning of foreign languages” (Fernández-Santiago 2009: 49) or in different ways, there seems to be evidence for the implementation of multidisciplinary coordinated programs, in which both content and foreign language are jointly taught, learned, evaluated and certified.

5. THE PORTUGUESE CONTEXT

In order to characterize some of the particular problems that may arise for the Portuguese context, in particular in the Polytechnic sub-system of Higher Education, we have used a questionnaire adapted from Jensen & Thøgersen (2011). The results are not representative for the 14 state-funded polytechnics in Portugal, but they are indicative of
shared reactions in particular among smaller institutions in the interior part of Portugal.

Two different questionnaires were drawn, both in English: one focuses on data collected through the Foreign Relations offices and/or governing bodies of three Polytechnic Institutes (Castelo Branco, Portalegre and Guarda) and the other gathers a sample of opinions of lecturers working at each of those Polytechnic Institutes.

Questionnaires were answered on paper or online during March 2012 and lecturers were contacted directly or indirectly, so as to have at least 5 from each organic unit of each Polytechnic (70 in all with a return rate of 60% and a total of 42 questionnaires returned). Considering the purpose of this study and its exploratory nature, we decided at this phase to only invite answers from those lecturers who (we knew) were able to respond in English.

Governing bodies and Foreign Relations offices were asked, through the International Officer and the President/Vice-president office, about courses taught in English and other foreign languages, the number of international students in the current semester and their ability to follow classes in Portuguese, international visitors, publications in English, Spanish and Portuguese (considering that the main international languages for academic publishing are English and Portuguese). They were also asked to define the Polytechnic language policy (if there is one) and to give their opinion on language rivalry between languages, such as English, used as a Lingua Franca and Portuguese.

Lecturers are characterized as to their English language proficiency (self-assessment), age and the amount of their current teaching load in English. In the 2nd part of the questionnaire lecturers are asked to take a position on 12 statements, by marking them from 5 to 1, i.e., from Strongly Agree (5) to Strongly Disagree (1). The option (Don't know – 3) was also possible. These statements address competence of teachers to teach through English; their perceptions of the impact of using English as a medium of instruction and on how and why they thought English should be introduced.

As for the characterization of the respondents most of them (43%) are 40-50 years old and have presently no assigned teaching load in English (52%) (Figure 1).
Most respondents (59%) rate their skills in English as “good” or “very good” (Figure 2), which was to be expected because they were selected because they could read and respond in English.

It is interesting to notice that the 10% who evaluate their English skills negatively, clearly consider their writing as their weakest competence (Figure 3). Reading is the skill people seem to be more confident with, as 85% of those surveyed evaluate it as “good” or “very good”. Listening, with 65%, and Speaking (48%) follow in the scale of confidence, and only Writing scores under 37% in the respondents self-evaluation. An average of 31% of those surveyed, consider their competence in the 4 skills as average/Ok.
The 12 statements:

Lecturers’ reaction to the 12 statements was globally very positive as most “Agree” (45%) or “Strongly Agree” (30%) with the statements presented, in contrast with only 12% who “Disagree” or “Strongly Disagree” (Figure 4).

This broad agreement among respondents is also clear when we consider their answers in terms of groups of statements (Figure 5).
As for Group 1, when asked specifically about the dissemination of specialized language and terminology (Figure 6) most respondents (68%) “Agree” or “Strongly Agree” that it is important that Portuguese technical terminology further develops, although they also state that within their field English technical language is more developed than in Portuguese and that it is a societal problem if specialized areas cannot be explained in Portuguese. Only 14% of the respondents “Disagree” or “Strongly Disagree” with these statements and 17% “Don’t Know”.

Group 2, which includes statements 8, 10, 11 and 12 (Figure 7), focuses on linguistic policy and these statements gather the highest percentage of agreement among the respondents (84%). Teachers think Universities/Polytechnics should offer more courses in English and that by doing so they ensure that their students are well prepared for the future, that academic standards will raise and that it will improve
competitiveness at international level. Only 5% disagree with the statements and 11% do not know.

![Figure 7: Respondents' answers to Group 2](image)

In Group 3 statements aim at understanding the respondents’ view on teachers’ English skills in HE (Q.2) and their attitude towards the use of course materials in English (Q.6). Although the answers clearly indicate their concurrence with the statements, it should be noted that there is a difference between the respondents’ answers to statement 2 and to statement 6. Whereas the response to the statement that not all university teachers have the necessary skills for teaching in English (Q.2) received a quite high percentage of agreements, the argument on the advantages in the use of course materials in English (Q.6) (Figure 8) scored 12% less than that and got a higher rate of “Don’t Know” answers and disagreement than statement number 2.

![Figure 8: Respondents' answers to Group 3](image)

Finally Group 4 is centered on the learner. Despite acknowledging the advantages of a strong linguistic policy that both
promotes the offer of more courses in English, ensures students' preparation for the future, raises academic standards and improves competitiveness at international level (Group 2), most respondents still consider that “Students learn best when they are taught in their mother tongue” (Q.4). On average 15% of the respondents “Disagree” and “Strongly Disagree” with the idea that academic standards fall when the medium of instruction is English (Q.3) and that teaching in English could lead to a wider gap between students’ levels of ability (Q.5), but only an average of 42% “Agree” or “Strongly Agree” with these statements (Figure 9).

![Figure 9: Respondents' answers to Group 4](image)

6. RECOMMENDATIONS

As stated before, this review of experiments with CLIL and EMI aims at issuing some recommendations on how to implement the learning and teaching of English into Portuguese HE curricula, practice, and research and in particular at clarifying recent linguistic options, such as CLIL, to governing bodies.

In terms of research there is much to do in Portugal, since CLIL is practically non-existent and EMI has hardly been investigated. Other avenues are open to research: Anderson (2011) suggests investigating how particular learners in particular contexts acquire a foreign language, actually use it, what needs they have and how and to what extent they have acquired cognitive and intercultural competence in their mother
tongue and in the foreign language. We would also like to suggest that this kind of exploratory study is widened to other institutions and to the teachers without obvious competence in the FL.

Most other studies we reviewed also suggest research on the close work needed with the lecturers, the administration and the certification bodies, as well as forms of student support.

As to recommendations for the Polytechnic Institutes in particular, the first recommendation is that they need a strong language policy. This means adequate preparatory training of students and teachers and ongoing support in FL (Hughes 2008), besides a clear view on the advantages and disadvantages of training models and of the impact of wider uses of the FL in courses and research.

As governing bodies are seldom experts in this area, it falls on FL teachers and Directors of HE Language Centers to play the role of advisors on which will be the most effective methods to pursue an effective linguistic policy and which provisions are needed for students and teachers.

In more concrete, hands-on terms, we think it is important that Language teachers and Higher Education Language Centers work, in policy terms, towards offering more courses/modules taught in FL (English/ Spanish) to increase competitiveness in international terms but also to attend to the specific needs of Mobility Students.

These could either be offered as EMI or CLIL. However, attention should be paid to the implications of the method of instruction selected.

We have shown that there may be more reluctance to embrace CLIL because it is new. However, in our opinion, CLIL is a key tool for any solid language policy because it focuses on the language user - rather than on the teacher of the Foreign Language (as EMI does) - it emphasizes language use for communication while learning subject-specific content and it requires team work of subject-specific teachers and linguistic teachers. Some may consider this difficult to achieve in HE, but it constitutes a 21st century interdisciplinary collaborative approach that should be valued. Wenger’s (1998) notion of communities of practice applied to this context in HE could yield interesting results, as would Otálora’s (2009) suggestions of creating the structures that ensure that the Language Department (or the Language Centre) offers support to other departments, offers bi-monthly seminars to other teachers to coach them in their uses of EMI or CLIL, and offers support to students through several strategies.

In order to respond to the perceptions that most HE lecturers won’t be prepared to teach in a FL, it is important that FL teachers,
departments or language centers offer specific courses to teachers, follow them through their practice and share results with other teachers and researchers. We would suggest as a model Airey’s (2011) proposal of a 12-week 7.5 ECTS *Teaching in English* course delivered almost entirely on line and his follow-up of 18 Swedish lecturers who were relatively new to the experience of EMI. This would certainly respond to the need identified earlier in the questionnaires that even though lecturers may feel at ease with the FL, they feel they need to work on their writing skills, though it would certainly also focus on selecting ideas for presentation, making lists of useful vocabulary and terminology, varying bibliographic sources, preparing handouts and other class materials, using visual tools such as graphs and tables for communicating information in more direct ways, checking pronunciation and practicing oral skills. Besides addressing the need to improve the teachers’ own linguistic competence, this course could also address the other main problem identified by research, namely how to make the specialist teacher sensitive to linguistic learning and scaffolding.

Another dimension that remains to be addressed is the competence of students. Improving the competence of teachers to work in international scenarios requires concomitant actions for students. As the competence of Polytechnic students in the FL (English) is relatively low, we would not discard the potential of CLIL despite the obvious preference for EMI as the traditional offer.

Research experiments such as Fernandez (2009) suggest that CLIL can also be done by FL teachers, working in collaboration with other teachers, and focus essentially on negotiating and reconstructing subject-matter or enhancing, enriching, comparing, analyzing, synthesizing and re-dimensioning certain content topics. This could constitute an interesting starting point to explore CLIL’s potential in HE. Experiments by Moore and Dooley (2010) in Catalonia encourage us to look at pluri-lingual talk interaction in CLIL classrooms and to pluri-lingual uses of course materials as ways to improve simultaneously content and language knowledge of students. Coyle, Hood and Marsh (2010: 16) encourage trans-langag-ism (dynamic forms of bilingualism in the classroom) by using one language to outline and summarize main points and another for the remaining functions; using first language materials and a vocabulary and concept list in the FL or shifting systematically from one language to the other.

Lastly, if CLIL is to be implemented, complex evaluation tools and frameworks need to be put in place to account for the benefits
described for students and the efforts undergone by lecturers or the team work of content lecturers and language specialists. This may be a particular sensitive area that needs further exploration.

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