Abstract | This paper draws together a number of best practices identified over the course of the national ReCLes.pt CLIL project. Developed by Portuguese Higher Education Institutes (HEIs) associated in the Network Association of Language Centers in Higher Education in Portugal (ReCLes.pt, http://recles.pt), the project promoted pilot teacher training courses in Content and Language Integrated Learning (CLIL). Ultimately, 33 CLIL course modules were implemented in six participating HEIs, impacting over 600 students. Over the course of three years to reach this initial long-term goal, the ReCLes.pt CLIL researchers collaborated to review the literature and work through the resulting debates. The resulting overarching course of action is reflected in the teaching manual, written collaboratively and published with the related data-gathering tools for the study partially funded by the Portuguese Foundation for Science and Technology. The best practices focused on in this article include promoting the perspective of FL learners as FL users, the practical implementation of communities of practice and learning, and the development of CLIL modules to include scaffolding and ICT.

Key words | ReCLes.pt, CLIL, Portugal, Higher Education, Best Practices, Scaffolding, ICT


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Beginning in 2012, the Network Association of Language Centers in Higher Education in Portugal (ReCLes.pt, http://recles.pt) formed a focus group to review the literature on Content and Language Integrated Learning (CLIL) in higher education (also known as ICLHE – Integrating Content and Language in Higher Education). This research aimed to determine the viability of a nation-wide project aimed at the coordinated implementation of local teacher training courses in CLIL which would enable these content teachers to effectively teach their respective courses using English and CLIL methodologies.

As an approach to foreign language (FL) teaching that simultaneously promotes content and FL learning, CLIL – Content and Language Integrated Learning – was determined to be an appropriate reflection of the context of the European Higher Education Area (EHEA). The “harmonized” effect of the Bologna Process also draws on teaching missions and the learning experience of the ERASMUS and the current Erasmus+ program. As such, visiting professors and students from any number of countries lecture and learn on Portuguese campuses throughout the academic year in courses that are taught primarily in English.

An extensive needs assessment of academics and administrators at seven Portuguese HEIs confirmed that English, as the most widely-spoken language, is privileged in their internationalization plans both on campus and through EU-funded projects. Given the greater prevalence of English over Portuguese for these plans, HEIs have adopted a dual policy to complement the existing curricular units in Portuguese: (1) courses in Portuguese as a Foreign Language and (2) curricular units in English for incoming Erasmus+ students. In these English-lecturred classes, the approach is generally through English as a medium of instruction (EMI), limited to translation without simultaneous support for foreign language learning.

In the interviews with fellow academics and administrators, CLIL was introduced. Since most had never heard of CLIL, the focus of the presentation was on the four Cs – content, cognition, communication, and culture (Coyle, “Theory and Planning for Effective Classrooms”
and “CLIL: A Pedagogical Approach”; Coyle, Hood and Marsh) – which reinforced the lifelong learning qualities of autonomy, plurilingualism, and interculturality promoted in the Bologna Process and in the Europass documents.

Resistance to perceived English-language imperialism was an initial reaction but, when presented as an alternative to the existing reality of EMI on campus, CLIL was seen as an added value in the development of linguistic competences within the applicable HE contexts, given the identified need for sustainable foreign language (FL) training. The combined efforts of this initial research culminated in the acceptance of formal requests for authorization and support in the implementation of 10-hour CLIL teacher training courses in the participating HEIs.

The researchers then rallied to prepare the training courses for these future CLIL teachers and to build the theoretical/practical backbone to support the teacher trainers within this community of learners. Preparation and pilot testing of appropriate CLIL teaching materials and resources throughout 2014 and 2015 led to publication of the ReCLes.pt CLIL Training Guide: Creating a CLIL Learning Community in Higher Education (Morgado et al.) with partial funding from the national Foundation for Science and Technology (in Portuguese, the FCT). This training manual includes practical orientation for creating a CLIL teacher training course and each section concludes with suggested activities that focus on strategy development. Original data-gathering tools have also been included that have been tested and specifically designed to monitor and evaluate the various steps in the process. Comparative study of the results documented in these teacher and student questionnaires, observation field notes, self-reports, as well as informal and/or structured interviews have formed the basis of articles detailing the theory and practice of this project (cf. Morgado et al., “CLIL in Portuguese Higher Education”; Arau Ribeiro et al., “O Projeto CLIL-ReCLes.pt” and “Promoting Dynamic CLIL Courses in Portuguese Higher Education”; Arau Ribeiro; Abreu et al.) and pointed out multiple best practices in this study, based on a resounding response of satisfaction from teachers and students alike. This enthusiastic response crosses the participating HEIs, where the students not only request more CLIL modules but also express the hope that their remaining teachers will receive training to apply the CLIL method in other content
areas; the content teachers involved request more CLIL training and more opportunities to develop CLIL material for their classes with the foreign language teaching specialists (the ReCLes.pt CLIL researchers themselves); these have carried the results forward in articles, reports, posters, conferences, round tables, and meetings with other HEIs in Portugal and Europe. Some participating HEIs have continued to formally offer CLIL teacher training courses while others have focused on iterative applications of the CLIL modules with an expanding base of students, both national and international.

The focus of this article will be on three lessons learned, which can in truth be understood as confirmation of previously known best practice for teaching and learning through (i) promoting the perspective of FL learners as FL users; (ii) the practical implementation of communities of practice for both teachers and students, and (iii) the development of CLIL modules to include scaffolding, terminology and ICT. These lessons learned take on special relevance because of their context, within Portuguese higher education, an area still dominated by magisterial-style lectures despite a decade of trying to adapt to the Bologna Process pillars of autonomous learning and student-centered teaching approaches, and with students who are the product of the teacher-centered teaching styles still predominant in Portuguese high schools, where the prescriptive curriculum leaves little room for tailoring the educational plan to the needs of the students.

**Promoting the Perspective of FL Learners as FL Users**

While CLIL, as a teaching and learning approach, is not forcibly dedicated to English, its success depends on a cultural orientation that varies across languages (Chumbo and Morgado), the national project in question worked exclusively in English as a FL given its status as the language of science, where approximately 95% of technical and scientific publications are in English (Science Citation Index, compiled by the Institute for Scientific Information, in Van Weijen) and given that, already in 2004, three-quarters of business interactions used English as a lingua franca or as a mediator between non-native English speakers (Tardy). The widespread use of English means, in part, that those who have this communicative competence will be able to participate
more actively in new intercultural experiences with greater self-esteem and self-confidence. Specifically for Portuguese students, where the country has claimed a B1 level in the Common European Framework of Reference (CEFR) for languages (Eurydice; Holmes) for its high school graduates, higher education has had to shoulder the responsibility for those who have not actually reached this level and continue working with the development of English language competences for those who have been successful.

The essential orientation toward maximum use of the target FL is expressed in the rhetoric, promoted by Cook for L2 users, whereby the students are FL users rather than FL learners. This levelling term is particularly useful in a CLIL perspective which has a triptych orientation: the teachers of the CLIL teacher training course are FL users, whether native or non-native speakers of English, who are CLIL researchers specialized in FL teaching; the students of the CLIL teacher training course are content teachers who are non-native speakers of English and, thus, FL users as well. In the next phase, these content teachers, enabled with new FL awareness and teaching skills to promote simultaneous content and language learning, work with their own students, also non-native speakers of English who are also FL users, whose CLIL classes are observed and assessed by the initial FL users, the researchers themselves.

In designating that all the participants are FL users (Moore and Dooly qtd. in Morgado and Coelho; Arau Ribeiro), the focus on language use itself was not lost. The L2 user paradigm was fundamental in establishing parity within the teacher training sessions and in classes such that any sense of inferiority based on language competence was banished at the beginning. The relevant material at hand was the process of discovery of how to simultaneously and strategically promote language and content learning. Although the CLIL researchers were the leaders of the community of practice, they participated actively in the detection and identification of difficulties and best practice.

Content teachers, in the 10-hour CLIL teacher training course, were particularly concerned that their own English language competence would not be sufficient. By shifting the spotlight from the perception of “who knows more English” to the practical use of the English language in specific
content-related situations, tasks, and problems, the hierarchical pressure for the content teachers to be better at English than the students was relieved with the suggestion and evidence that both students and teachers were working toward the common goal of getting the work done... in English.

In the initial moments of the CLIL teacher training courses, some of the content teachers even expressed embarrassment at being compared to each other and to their FL teacher. Clearly this affective filter (Krashen), involving decreased motivation, a poor attitude, or low self-confidence, and high anxiety, would have been a barrier if it had not been made apparent early on that, having been selected to participate in the training course, the objective would never be on any perceived language “deficit” but rather on learning and practicing skills to be effective CLIL teachers who could adequately assess their students’ needs, prepare appropriate CLIL materials to scaffold learning of the content and of English at the same time, and identify when to ask for assistance in doing so.

In a globalizing context of English in business, health, technology, and the arts, CLIL is characterized by maximizing competences in English and learning objectives that are pluricultural and where the experiences of the FL users are always central. The benefits of this insistence on the FL user include the acceptance of new approaches toward acquiring the FL, toward learning in general and toward self-assessment.

In acquiring FLs, FL users became acquainted with a greater respect for their existing pluricultural and plurilingual competences, which are enhanced by the plurality of their competences in two (or more) languages, from lexical to syntactic awareness and phraseological and musical characteristics of the languages they know. The resulting lift in self-esteem and absolute abolition of the idea of inferiority leveled the playing field, especially in the CLIL teacher training courses. Teachers who tended to describe students as knowing very little were encouraged to value students’ multicompetences and their own responsibility for providing appropriately designed learning tasks to reach defined objectives and to solve concrete problems related to the content at hand.
In an Accounting degree, for example, students of all different competence levels worked as FL users to prepare market-ready financial statements of real and fictitious companies. These students were not limited to taking a test or completing blanks in a workbook but were engaged in using the target language in a meaningful, content-related target task. In this social context, these FL users of all levels flexed their linguistic memory, engaged in spontaneous conversation, and wrote text, demonstrating not only communicative sensitivity but also metapragmatic skills.

A Civil Engineering teacher reflected that the simple recognition that both he and the students are FL users regularly directed his attention toward the need to promote concrete and well-defined opportunities to actually use English rather than resort to time-honored lectures. He commented that this new role as a dynamic facilitator contrasted dramatically with his tendency to lecture and was applicable to his other classes in Portuguese as well since it promotes the preparation of student-centered classes. A Computer Science teacher found that considering students as FL users reminded him to scaffold the terminology which, from another perspective, seems so obvious since the area is dominated by English vocabulary; thinking of students as FL users helps teachers to promote a wide variety of situations in which the language will be used to solve problems or deal with tasks in a given area.

By moving beyond the language itself, FL users were able to test hypotheses about the FL and expand their tool kit for communicating strategically, using a range of linguistic, corporal, and facial expressions, cast in a new role as FL users rather than the traditional hierarchically distant professor in higher education. Even the most basic A1 and A2 level FL users could participate and communicate, some for the first time in English, so that not just the class aces but all students were pro-actively involved in the activities.

In terms of overall learning, many teachers and especially students noted the application of new strategies, like subdividing tasks into manageable steps or phases, which helped them avoid the overwhelming fear that comes from perceived failure. The CLIL paradigm is transferrable to other areas because thoughtful scaffolding and support can happen across peers as well as from teacher to student. By establishing more realistic objectives, weaker students were able to
participate and self-assess this very participation, for example, in a Database course that simulated a business meeting with the client. Each client question or comment was fielded first by the students who felt less competent in English, who would then determine whether they dared to respond or preferred to pass it on to the more competent students. The growing confidence as they learned from the scaffolding provided by their peers opened the shared space for collaboration in the discourse and for increased FL use in a practical context.

This productive and desirable approach to collaborative learning and teamwork contrasts dramatically with the student tendency to cheat themselves of real learning through the use of cheat sheets and copying from each other. Students commented on the increased opportunity to contribute and demonstrate their competences without having to take a test, adjusting and adapting their language use in an interactive environment. They also felt that they could take these new pro-active and interactive roles and apply them in other study areas. Valuing the means as much as the ends, they expressed a real appreciation for questioning and expressing doubts more freely for better understanding and their resulting lowered stress levels in an atmosphere that judged them less.

Finally, in terms of contributing to self-assessment skills, appropriation of the FL user paradigm means that students will value this increasing confidence and, simultaneously, learn to deal positively with their own mistakes. After an initial reluctance, students rapidly became eager to be corrected by their peers and teachers and to try to make effective changes since the newfound awareness of their errors prompts the discovery of strategies for further language use. The certainty that improvement through FL use is indeed possible was affirmed initially by the teachers in their respective CLIL modules and reaffirmed throughout the modules. This belief was noted repeatedly by students as essential for their progress and adoption of a positive attitude since especially students with less language competence had an entrenched sense of vulnerability and negativity related to the use of English. Commitment to ongoing assessment in the classroom was seen as the teachers’ confirmation that they too believed that improvement was possible as reflected in the sets of steps created for reaching manageable objectives and using the content
material to solve problems and accomplish clearly-defined tasks in cycles that are committed to recycling and reusing new and old concepts and terminology.

**Practical Implementation of Communities of Practice**

Communities of Practice have been widely discussed and developed by Wenger and subsequently in Wenger-Trayner and Wenger-Trayner, who have identified this approach to knowing and learning as a shared space to not only show a concern or a passion for something people do but also to learn how to do it better through regular interaction. Through this definition, a community of practice necessarily will reinforce the relevance of material that is somehow approachable based on prior knowledge and the significance of this material both now and for the future.

In the ReCLes.pt CLIL project, communities of practice were strategically developed and nurtured in at least four different moments or configurations, similar to the logo of the national association in Figure 1. Parallels among the communities of practice follow the principles defined for regular interaction within a shared space for progressive and collaborative learning. Differences among these communities of practice were based on the number of participants, as will be more specifically defined. As depicted in Figure 2 (below), starting initially at the top right and moving clockwise, the different communities of practice were initially created and developed sequentially but, even after the third year of the project, they are all still active and interactive within and amongst the four communities at each HEI.

The initial community of practice, exclusive to the up to 15 ReCLes.pt CLIL researchers themselves, was composed of English language and culture professors in higher education, and, consequently, foreign language teaching specialists, as well as IT specialists. The uniting material was the debate and discussion to establish the guidelines of the long-term project, review the literature, and develop the viable proposals on language policy and practice and the flexibility necessary in local contexts. Other concerns that required ongoing practice in the community aimed at the development of a common thread for designing the teaching material to include in
the training manual, and the related data-gathering tools, ranging from interview matrixes to questionnaires and observation notes. The configurations had to be discussed openly to determine their relative impact at a local level and eventual constraints on the study. Research strengths and experience, for example, in other European projects and in specific areas such as terminology and scaffolding, were maximized. On the other hand, weaknesses such as less experience in a given technological area were minimized by working collaboratively and sharing knowledge. Serious commitment to the community of practice was tested in the collaborative writing for the training manual in order to maintain a similar style and tone across this extensive publication. The researchers relied greatly on open-mindedness and accepting and offering constructive criticism in regular face-to-face and online contact. A database was also created for suggesting new and existing materials.

During the initial months of interviews with fellow academics and with the local administration at the participating HEIs, where a common objective/material was under discussion,
ongoing interaction focused on the concern and passion for promoting successful plans for language policy and internationalization. While the researchers were assessing and recording the priorities and objectives at their respective schools, they were also offering the ReCLes.pt CLIL project as a viable solution that required a dynamic and shared space for discussion. The virtual “space” morphed from office to encounters at the bar and in the hallways amongst the various specific representatives of the administration (Offices of Mobility, Presidents, Vice Presidents, Deans, content teachers and other FL teachers). The discussion and debate promoted by the FL teachers, traditionally seen as responsible for those soft skills of communication at the language centers, was deemed both timely and relevant and the proposed solutions worthy of in-depth discussion. While these communities of practice were first being prepared, relationships were established and nurtured so that the experienced voice of the researchers/FL teachers could participate in this new perspective on the debate about sustainability in the international market for higher education. The consensus is that the ongoing contact, communication, and constructive criticism has contributed to the overall success of the project.

Still another community of practice received the most attention throughout the project: the CLIL teacher training course. The ten contact hours were distributed over four to six sessions, involving the CLIL researchers/FL teachers and their local colleagues who are content teachers. Since the initiative was supported and promoted by the administration, it was necessarily more visible to the general teaching staff and administrators. Students as well read the strategically posted announcements online and on notice boards and, as a result, were eager to benefit from this nationwide project. Some content teachers were either invited to participate based on previous knowledge of their interest and language competence level or on the fact that they need to teach courses explicitly designed for incoming Erasmus+ students; others, who had been selected by the administrators, applied to participate and were selected through a comprehensive diagnostic test to ascertain their English language level as B2. Regardless of the path, all participants in the CLIL teacher training courses – FL and content teachers alike, numbering between four and ten
on each campus – were highly motivated and took time out from their demanding schedules to become active members of this community of practice.

The final communities of practice to be highlighted are those created by the content teachers for the CLIL module with their own students, ranging in number from 15 to 30. These were the most unexpected within the context of the traditional hierarchical divide between teachers and students, prevalent in Portugal, but in line with expectations created throughout the ReCLes.pt CLIL project. Teachers actually practiced and subsequently planned for a wide variety of class activities in line with communities of practice. As promoted by Wenger-Trayner and Wenger-Trayner, activities like those adapted in the figure below were prominent in the 33 CLIL modules implemented throughout the country.

<table>
<thead>
<tr>
<th>Documentation projects</th>
<th>Problem-solving</th>
<th>Discussing developments</th>
</tr>
</thead>
<tbody>
<tr>
<td>“How many times have we already faced this issue or problem? Let’s at last write it down.”</td>
<td>“Let’s work together and brainstorm some ideas.”</td>
<td>“What do you think of the latest system? How does it compare to the previous system?”</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Reusing assets</th>
<th>Virtual visits</th>
<th>Mapping knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Didn’t we do a project like this for another class last semester? We could easily tweak it for this assignment.”</td>
<td>“We are interested in visiting your program/office/lab. Perhaps we can adopt some of your procedures.”</td>
<td>“Can you find what is missing? Did you identify WHO knows WHAT? What other areas would be good contacts?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coordination and synergy</th>
<th>Requests for info</th>
<th>Seeking experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Let’s work together to reach a better more efficient solution?”</td>
<td>“Where can I find …?”</td>
<td>“Has anyone dealt with a simulated/real situation like this?”</td>
</tr>
</tbody>
</table>

Figure 3. Suggested contextualization for activities in a community of practice
Because of the L2 user paradigm, students in these communities of practice favored relevant and stimulating activities that required the cognitive manipulation of material and FL use in communicative activities, acquiring competences in new areas and practicing proficiency in English. These communities of practice were also more noticeable because they were closely monitored and observed by the ReCLes.pt CLIL researchers, who continue now to meet with the content teachers in an ongoing effort to maintain practice and learning through this approach.

The Development of CLIL Modules to Include Scaffolding and ICT

The material designed for the CLIL modules covered support and scaffolding through the introduction to new concepts based on prior knowledge, meaningful activities, and terminology-based recourse to Web 2.0 tools. The activities conceived and prepared for these innovative CLIL classes had to adequately scaffold the content in a variety of contexts, including a variety of types of activities, such as modeling, bridging, contextualizing, schema building, and re-presenting text. Successful scaffolding in these contexts would be dependent on consistently building on existing student knowledge. It was especially important to initially assess not only student skills but also their attitudes, interests and experience.

Then, based on this awareness of their students’ needs, teachers could repackage information and competences in user-friendly ways. Another strategy in preparation was to redistribute these packages into manageable and logical chunks. Teachers who learned of the existence of different learning styles were better able to diversify their material in response. Other aspects introduced were the importance of fostering creative and critical thinking and challenging students to take yet another step forward rather than remain in their comfort zone. The development of metacognition would allow students to learn how to assess themselves and how to build learning skills and strategies like planning and monitoring.

Although initially regarded as time-consuming and wasteful, scaffolding activities came to be seen as fundamental. A primary use was to subdivide learning objectives into manageable tasks that would contribute to learning of the overall content. Respectful ongoing discussion and
debate among peers, bolstered by the community of practice orientation, removed the menace from information and communication technology (ICT), even for some teachers who had successfully eschewed Web 2.0 tools until then. Teachers were introduced to terminology-based tools, like TermoStat Web 3.0 and TerMine; their students then benefited from extracting and identifying terms, defining these terms and mapping the relations amongst them. The possibility of organizing appropriate discourse and representing their knowledge visually through these and other tools will necessarily be the focus of another article but, overall, the visual orientation of these tools is particularly important for digital natives. Students of this generation readily manipulate ICT and do not hesitate to share their results via Web 2.0.

The central goal of intense, purposeful interaction with the material to be learned led the communities of practice toward the next step: assisted materials design for implementing the CLIL module in each teacher’s content area. The mutual respect established amongst the teachers involved in the project assured that any content teacher that felt they needed help at any time during the process of planning and material design would ask, unrestricted by affective concerns. The activities they effectively designed aimed at not only acquisition of competences in the content area but also, simultaneously, at language competence. Moreover, the variety of types of activities designed promoted eventual autonomy so that students would learn about the management of their own competences and manipulation of these competences for effective and intercultural communication.

Conclusions

Notwithstanding local issues such as class size and the selection of CLIL courses to be offered, monitoring of the implementation of both CLIL teaching and learning and consideration of the results of this evaluation has been an important cornerstone to the careful crafting of the ongoing ReCLes.pt CLIL project. Mandatory monitoring reports are available to all participating schools and templates for data gathering are available online (Morgado et al., ReCLes.pt CLIL Training Guide). The results have added fire to the collaboration, debate and constructive criticism amongst
the teacher trainers and the CLIL communities of practice and learning, within the specific context of each HEI, to determine the most successful approaches to promoting student-centered interactive teaching methodologies. The transferability of best practices from one course to another and amongst the participating schools has been supported by the clear description of specific objectives and competences to be acquired so that the lessons learned are many. While this article has focused on the L2 user orientation, communities of practice, and the assisted development of CLIL modules that simultaneously integrate scaffolding and Web 2.0 tools, other potential lessons learned are still under assessment, such as the application of terminology-based tools, the validity of a minimum level of English language competence to work with CLIL, and the role of Portuguese when CLIL is the guiding methodology.
Works Cited


