



CLIL and Terminology – Moving Forward Towards A Dialogical Relation

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Abstract

In this paper, we propose a terminology-based approach to CLIL, named TerminoCLIL. This approach was developed and implemented in the framework of the CLIL-ReCLES. PT Project, one of the first applied research projects in Portugal, aiming at, in general terms, implementing CLIL courses in Portuguese Higher Education Institutions (HEI) and at establishing a CLIL community of practice in HE.

Although CLIL is still lacking some conceptual clarity [2], in this paper CLIL is viewed as a language-driven instruction tool to learn content, and not as a language-teaching approach.

This is why we believe that Terminology, viewed as the study of terms and their use in specialized languages, can contribute to strengthen the link between the two dimensions of CLIL: (a) content (knowledge) and (b) language (discourse on the knowledge). In fact, due to the extra-linguistic nature of knowledge, it is generally through discourse (language) that knowledge and its representations, conveyed by specialized texts, can be acquired.

In TerminoCLIL specialized texts are used in a scaffolded process of three different but connected stages [8], to support the introduction to, use and structuring of domain knowledge. This approach aims at the progressive acquisition and management of domain terminology by the students using strategies of retrieval/organisation, application and representation/visualisation of knowledge, The use of this approach by CLIL teachers is guided by a Learning Activity Plan (LAP), developed to help accomplish the objectives of acquiring specialized knowledge, either individually or collaboratively, in a scaffolded learning process.

1. Introduction

Considering (i) the new European educational context derived from the Bologna Process, (ii) the urgency of enabling Higher Education students with foreign languages (FL) competencies and (iii) the internationalisation of Higher Education, among other factors, CLIL has gradually become a current educational approach to language and content learning, based on a new paradigm: that of the language user, rather than the language learner [7].

Although “the scope of CLIL is not clear-cut” [2], and the discussion on its core features is getting increasingly more complex [2]; [3], we believe that “a critical, and ultimately the most important, direction for future research is to examine efficient ways to effectively integrate language and content instruction.” [2].

In the context of (higher) education in Portugal, CLIL is nevertheless still giving its very first steps. There are only a small number of experiences with CLIL and little or no research is being developed to support its introduction, dissemination and use [4]. Associates of ReCLES. PT - Network of Language Centers in Higher Education in Portugal – are, therefore, making an effort to contribute to reduce the paucity of research in this area. For this purpose ReCLES [1] developed a national program for training content teachers in Portuguese higher education to best learn and apply essential concepts of CLIL, like integrating classroom management, scaffolding, developing learner autonomy, promoting the use of Web 2.0 tools and terminology-based learning activities.

In the framework of a national project promoted by ReCLES. PT (2014-2015), seven HEIs prepared some groundwork for the creation of a CLIL Learning Community of foreign language teachers and subject teachers in a training manual[5].

2. The relevance of terminology to CLIL

One of the approaches that was considered to better suit the knowledge acquisition needs of this public and its subject teachers was the terminological approach, as terminology methodologies are valuable knowledge organisation tools, focusing on the collection of terms, description, processing and systematic representation of concepts in a specialised domain. In fact, terminology plays an

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important role in the development of communication as well as in information and knowledge sharing in specialized contexts.

The use of terminology appeared, in our view, as a key construct in CLIL teaching, as it involves the search, production, use and dissemination of information. Having this in mind, we decided to conceive a terminology-based approach to fit CLIL specific teaching and learning environments and workflows, which we present in this paper.

2.1 From discourse to concept: the terminology-based approach

The terminology-based approach to CLIL follows Bloom's taxonomy and a terminology workflow, throughout a scaffolded learning process, divided into three stages: (1) Knowledge retrieval/organization, (2) Knowledge application and (3) Knowledge visualization (figure 1).

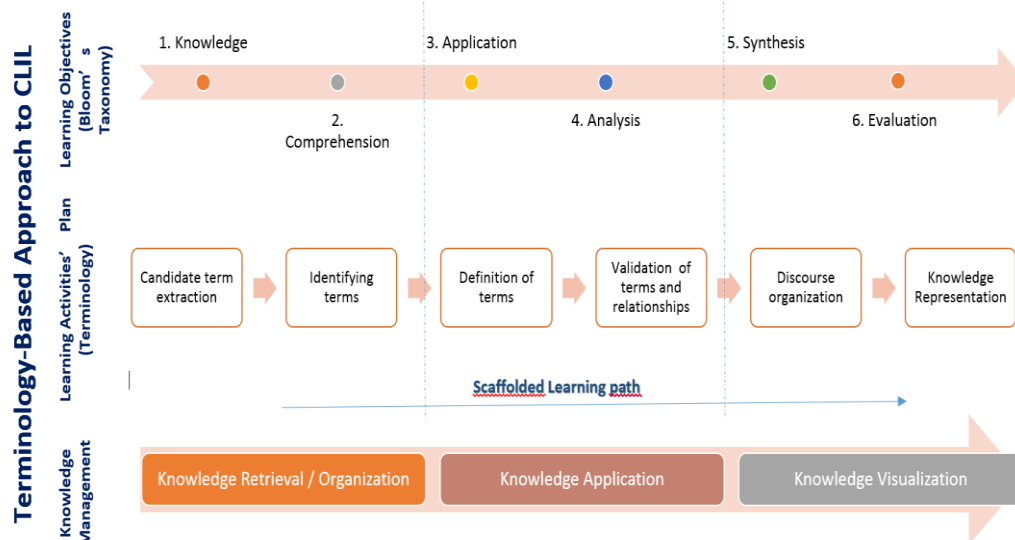


Figure 1 – Integrated Terminology-based approach to CLIL

In the CLIL learning environment, with strong linguistic and extra-linguistic input, terms will allow students to access and acquire knowledge and competencies which will then be further elaborated as they use that knowledge. The students' learning process can be guided by a Learning Activity Plan (LAP)², with different stages and a set of defined learning objectives, according to Bloom's Taxonomy.

2.1.1 Stage 1: Knowledge Retrieval/Organisation

This stage involves recalling information, observing reality in the field of knowledge and finding/extracting information in/from texts. Students are expected to learn how to recognize terms related to the domain specific information and organise them in a meaningful way. With the CLIL teacher, they can initially use an extraction tool to select term candidates (knowledge pieces) from the text in use, discuss their definition and start connections.

2.1.2 Stage 2: Knowledge application

At this stage, students will use acquired knowledge in a new situation, to be examined in detail, so that they can link (at least some of the) terms with concepts. Students will also be more aware of synonyms, polysemy, and levels of language.

Moreover, and since they are accessing knowledge in a foreign language, students will be frequently tempted to find equivalents in their mother language. This can be a tricky exercise, since concepts and terms do not map easily across languages. CLIL teachers will have to provide language-independent frameworks of information (e.g. images) since differences in language, culture and conceptualisation must be explained and understood before other activities can be developed, like building a multilingual term base/glossary. This will help students not only to organise their knowledge with cultural awareness, but also to define terms and correctly present specialised information in multilingual contexts.

² Available at

https://www.dropbox.com/s/e59wvd0hreoy8td/LEARNING%20ACTIVITY%20PLANS_LAP.pdf?dl=0.



2.1.3 Stage 3: Knowledge Visualization

At this stage, students can organise discourse and represent their knowledge and should be able to understand reality from an expert point of view. Texts continue to be important, but they will now be an outcome instead of being simply a starting point (as in stage 1) or a bottom-up method to access knowledge. CLIL teachers and students need to understand the complexity of the field of study and the semantic diversity required for expression; then, they must find a method to represent it. Provided that the learning process was initiated as or has included a multilingual approach, these activities can be carried out both in a foreign language and in the L1. This can be done with the help of the Learning Activity Plan³.

Since most of the relations between concepts have been refined and validated with the CLIL teacher (expert), students will be able to represent domain knowledge (top-down) in at least two ways: (1) in glossaries, an engaging but demanding task, that provides an opportunity for students to better understand the new concepts, the way they relate to each other and their position in the overall knowledge structure of the new domain; (2) in a conceptual map. As an effective means of representing and communicating knowledge, concept mapping can be useful classroom tools for observing nuances of meaning, helping students organise their thinking, and summarising subjects of study. Concept maps support knowledge representation, both individually and collaboratively, and promote a more efficient way to share knowledge.

The active participation of the expert (teacher) contributes to resolving problems that are:

- conceptual – knowing the domain can help to avoid ambiguity and increase semantic precision;
- linguistic – familiarity with the specialised language and recognition of most of the terms to be used in different languages will speed up the time needed to find the proper equivalent;
- pragmatic – awareness of the use of the term and its acceptance by peers can make it easy to understand and anticipate meaning, based on the context.

3. Conclusion

This approach is being tested since the release of the manual [5] in several HEIs in Portugal. At Porto Polytechnic we are now starting to assess the training and experiences of the CLIL teachers who built the first communities of practice (since 2015).

Nevertheless, based on the data we have collected during the project, we can already state that, although not all communities have adopted all the proposed stages and tools, the use of TerminoCLIL is said to have led to an awareness of the potential usefulness of the terminological work and (online) terminology tools to boost learning.

Moreover, the flexibility of the proposed model allowed teachers to adapt the Learning Activity Plan to their needs and those of the students, especially when the interaction took place in a collaborative environment (ex.: during the negotiation and representations of knowledge in concept maps). We are, still, able to differentiate some profiles and observe that more *tech savvy* teachers are more willing to go ahead and change their activities to try the approach and the tools on a more continuous base and the same happens with students.

It's important to stress, however, that this learning path needs to be collaborative all the way, although in different levels in the different stages. This collaborative work between teachers (both expert and linguist) and students can be either strictly personal, or also technology-driven, e.g. supported by collaborative platforms.

These first results makes us believe that the future results of the training to the CLIL teachers and the CLIL classes, we are collecting soon, enhance the mutual beneficial dialogical relation between CLIL and Terminology. This link, according to our experience, brings together two crucial dimensions of both fields: (i) knowledge and competencies (concepts and expertise) and (2) language (discourse on the knowledge). Both these dimensions can, surely, foster non-ambiguous and more efficient communication about specialized knowledge.

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