# **Enhancing the Foreign Language Learner's Experience through Clilstore**<sup>15</sup>

#### **Ana GIMENO SANZ**

CAMILLE Research Group, Department of Applied Linguistics Universidad Politécnica de Valencia, Spain agimeno@upvnet.upv.es

**Abstract:** The future professional world of today's Engineering students is becoming a lifelong learning process where they have to adapt to a changing market and environment full of new opportunities and challenges. Thus, the development of a series of personal and professional skills, in addition to technical content and knowledge, is a crucial part of their learning process and, consequently, of higher technical education and training. Among these skills, the knowledge of modern languages, especially English, stands as pivotal to achieve successful communication, which is a fundamental ability in an increasingly international world.

**Keywords:** Foreign language acquisition, Information and Communications Technologies (ICT), online learning, virtual environments

## 1. Introduction

The future professional world of today's Engineering students is becoming a life-long learning process where they have to adapt to a changing market and environment full of new opportunities and challenges. Thus, the development of a number of personal and professional skills, in addition to technical content and knowledge, is a crucial part of their learning process and, consequently, of higher technical education and training. Among these skills, the knowledge of modern languages, especially English, stands as pivotal to achieve successful communication, which is a fundamental ability in an increasingly international world. With the necessary time constraints found in current higher education curricula, modern universities should face the problem of training their students in both technical content and professional skills if high quality educational standards are to be met. An area where this match may be successfully targeted is in teaching Languages for Specific Purposes (LSP), since modern languages are tools to enable effective communication in a given context (a technical context, in our case). Therefore, it is not surprising that a new pedagogical trend in modern education systems that is increasingly becoming popular is what has become to be known as Content and Language Integrated Learning (CLIL), which promotes the delivery and acquisition of specific subject matter through the active use and practice of a foreign or second language. From a pedagogical point of view, CLIL is supposed to be highly beneficial as a way of contextualized learning, since it helps improve both language and technology skills (also known as content knowledge) in an integrated way. This paper presents a project for the implementation of CLIL through the use of Clilstore, a multifaceted site which (i) caters for teachers who wish to create or find multimedia language learning units to use with their students and (ii) offers a repository of language learning units in a variety of languages which students can access directly and use independently, developed as a result of the EU-funded Tools for CLIL Teachers project. Firstly, the pedagogical rationale of the project will be discussed. Secondly, the authoring tool and delivery platform will be illustrated in

<sup>&</sup>lt;sup>15</sup> Clilstore is the product resulting from the *Tools for CLIL Teachers* project funded by the European Commission's Lifelong Learning Programme. The project is coordinated by Kent Andersen (SDE College, Odense, Denmark) and is integrated by a further 7 institutions. The author is project manager for the Universidad Politécnica de Valencia, one of the partnership institutions. For further information, please go to http://www.languages.dk/tools.

terms of it being an appropriate environment to implement CLIL in higher technical education. A practical example will be given combining English language learning and electrical engineering subject matter. Finally, some conclusions will be drawn from the study and general pedagogical guidelines will be put forward.

## 2. Content and Language Integrated Learning

Content and Language Integrated Learning was recognized as a teaching methodology by the Commission of the European Communities in its Communication No. 449 on Promoting Language Learning and Linguistic Diversity: An Action Plan 2004 – 2006, published in 2003. This document states that: "Content and Language Integrated Learning (CLIL), in which pupils learn a subject through the medium of a foreign language, has a major contribution to make to the Union's language learning goals. It can provide effective opportunities for pupils to use their new language skills now, rather than learn them now for use later. It opens doors on languages for a broader range of learners, nurturing self-confidence in young learners and those who have not responded well to formal language instruction in general education. It provides exposure to the language without requiring extra time in the curriculum, which can be of particular interest in vocational settings. The introduction of CLIL approaches into an institution can be facilitated by the presence of trained teachers who are native speakers of the vehicular language." It also lists a number of proposals for actions at a European level that will supplement Member States' own initiatives, which specifically includes promoting CLIL in the following ways: a) by funding a series of transnational projects for the development and dissemination of new, specific methodologies for teaching subjects through languages other than lingua francas; b) by increasing support to schools wishing to introduce a CLIL approach, in particular by encouraging extended exchanges of teachers between partner schools; c) by organising events for decision-takers and inspectors and launching a major new study on the benefits of CLIL; and, d) by gathering and disseminating information on the availability of CLIL in European education and training systems, based on the collection of available data by its Network.

As we can see, efforts are being made to generalize CLIL in the European Union (EU) Member States due to a firm belief that this approach may benefit not only the acquisition of a specific subject matter, but also set a framework for meaningful use of a foreign language during a given educational stage.

According to the EU's policy on multilingualism, CLIL involves teaching a curricular subject through the medium of a language other than that normally used. The subject can be entirely unrelated to language learning, such as engineering subjects being taught in English in a university in Spain. CLIL is taking place and has been found to be effective in all sectors of education from primary through to adult and higher education. Its success has been growing over the past 10 years and continues to do so.

Teachers working with CLIL are specialists in their own discipline rather than traditional language teachers. They are usually fluent speakers of the target language, bilingual or native speakers. In many institutions, language teachers work in partnership with other departments to offer CLIL in various subjects. The key issue is that the learner is gaining new knowledge about the subject matter while encountering, using and learning the foreign language. The methodologies and approaches used are often linked to the subject area with the content leading the activities. CLIL's multi-faceted approach can offer a variety of benefits. It:

- builds intercultural knowledge and understanding
- · develops intercultural communication skills
- improves language competence and oral communication skills
- develops multilingual interests and attitudes
- provides opportunities to study content through different perspectives
- allows learners more contact with the target language
- does not require extra teaching hours
- complements other subjects rather than competes with them
- diversifies methods and forms of classroom practice

• increases learners' motivation and confidence in both the language and the subject being taught

# 3. The Tools for CLIL Teachers project

The *Tools for CLIL Teachers* project has created a free online service where language teachers can author and share content-rich, multimedia learning units featuring the creator's own choice of audio, video (e.g. from Youtube), text (e.g. a transcript) and images/graphics. No installation or setup of software is required. The authoring tools feature a unique and innovative element of functionality, i.e. the ability to automatically link every word in a text to online dictionaries in over 100 languages.

The teacher has the choice of either sharing the resulting webpage online from the system's repository or of downloading the webpage for later upload to websites or networks e.g. institutional VLEs. One of the advantages of this system is that technical knowledge of FTP/URL and online publishing is not required.

The online service also enables authoring of learning units from mobile devices (e.g. iPads) and is compatible with any operating system (Linux, Windows, MacOS, Unix etc.). The learning materials may also be accessed and used via smart phones, and materials may also potentially be authored from smart phones. It is hoped that the ability to access the learning materials from smart phones will encourage teachers to create materials and integrate these into their teaching practice.

The user friendliness of the system also benefits teachers of mainstream languages and result in bespoke VOLL (Vocationally-Oriented Language Learning) and CLIL materials in the LWUTL (Less Widely Used and Taught Languages). The inclusion of Arabic also serves a large and growing target group teaching and learning that language.

The authors are convinced that the online system, both the content authoring tool and the repository of materials, will be of huge benefit to educational institutions and learners alike, not least because the service is free of charge and open source (i.e. to enable future development). Crucially, the authoring tools and resulting content can be used from inexpensive mobile devices and older computers as they do not require high data processing capacity or bandwidth. This is a key factor in facilitating the adoption of technology, as there is no assumption that end users will need to acquire new hardware or upgrade their existing hardware in order to avail of the service. Such unseen costs frequently prevent the uptake of new technology and are a source of frustration for potential end users who recognise the benefits of new technology.

## 4. Clilstore, Multidict and Wordlink

In this section we shall describe Clilstore and its two integrated tools, Multidict and Wordlink. All three applications are accessed online from www.multidict.net.



#### 4.1. Clilstore

Clilstore (see Figure 1) is a multifaceted site which (i) caters for teachers who wish to create or find multimedia language learning units to use with their students and (ii) offers a repository of language learning units in a variety of languages which students can access directly and use independently. Students are also welcome to register as authors and create and share units. The repository of existing units is open access; therefore, teachers or students wishing to use existing units do not have to register with the service before viewing or using the materials. Anyone wishing to create units must first register and have their email address verified. The authoring interface has been designed to be user-friendly, however, new users are encouraged to read the step by step guides provided on www.languages.dk/tools and if possible to avail of one of the many training workshops offered by the Tools team. The emphasis in Clilstore units is on multimedia i.e. using combinations of video, audio, images, text, hyperlinks and supporting secondary technologies which allow for the creation and sharing of interactive language exercises etc. In order for Clilstore language learning units to be most effective, however, they should contain a significant amount of text. The reason for this is that a key element of what makes Clilstore a unique language learning service is the way the software treats embedded texts. At the touch of a button all words are automatically linked to our bespoke dictionary interface Multidict, which places online dictionaries in over 100 languages at the learner's disposal, thereby enabling them to interrogate texts at their own pace and according to their own learning requirements.

In Figure 2 below, we have a view of the Clilstore student interface where users (teachers or learners) can use a series of filters to find learning units specified by language, learner level (according to the Common European Framework of Reference for Languages), word count, video length or keywords.

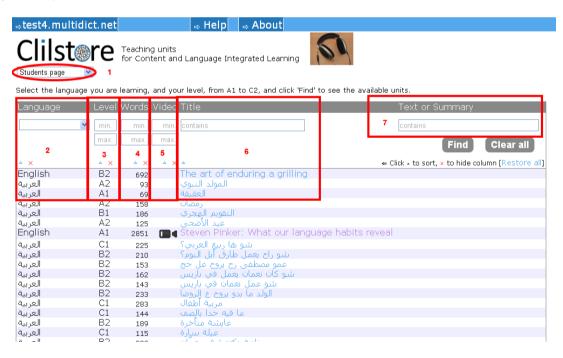


Figure 2. Clilstore student interface.

The highlighted items in the image correspond to the following options:

- (1) Dropdown menu allowing navigation between the student interface and the author interface.
- (2) Filter by the source language of the unit, i.e. the main language featuring in the audio, video or text content of a unit.

- (3) Filter by the learner level as specified by the unit authors in accordance with the Common European Framework of Reference for Languages (CEFR). The scale ranges from A1 to C2, with A1 being the easiest and C2 the most difficult.
- (4) Filter according to the length of embedded texts by word count.
- (5) Filter according to the length of any embedded video files.
- (6) Filter by keyword in the Unit Title.
- (7) Filter by keywords in the author generated summary of the unit or the unit's embedded text.



Figure 3. The view of a unit in Clilstore.

Figure 3 above illustrates a view of a unit once it has been selected. As we can see it includes an embedded video sequence from the BBC, integrating the entire script. By virtue of Wordlink, all of the words in the script have become automatically linked to a myriad of online monolingual and/or bilingual dictionaries in a wealth of language pairs. In the image we can see that the word "quote" has been clicked on, triggering the Multidict dictionary interface to appear on the right hand side of the screen. Here we can see the parameters for the word being looked up; i.e. the source language, the target language for our translation and our selected dictionary. The author of the unit will have already indicated the source language, therefore, this lets Multidict know where to begin. The learner can select the language they wish the search term to be translated into, or if they select e.g. English to English they can perform a monolingual consultation. The user can quickly switch between dictionaries by using the drop down menu of available sources or by clicking on the dictionary icons. They are not required to re-enter the search term in order to switch between dictionaries.

#### 4.2. Multidict

stand-alone interface Multidict functions as a online dictionary accessible from www.multidict.net/multidict but also as the one stop shop for all of the language combinations featured in Clilstore language learning units. Once users of Clilstore units click on words in embedded texts, the Multidict interface opens beside the Clilstore unit thereby facilitating easy dictionary consultation for learners. The majority of the 100+ languages catered for by Multidict will feature multiple online dictionaries, therefore, if a learner is not satisfied with the first result from their search (which they will have performed by simply clicking on a word in the embedded text) they can simply consult another source by either selecting it from the drop down menu of available dictionaries or by clicking on the dictionary icons, without having to re-enter the search term. Multidict will also facilitate bilingual consultation between pairs of languages for which no print dictionary exists (e.g. Irish Gaelic to Scottish Gaelic).

### 4.3. Wordlink

Wordlink can link most webpages word-by-word to online dictionaries, it is the software which facilitates the automatic linking of every word in embedded texts within Clilstore language learning units and can also be used as a stand-alone tool accessible from multidict.net/wordlink for learners who wish to easily consult online dictionaries as they read through webpages.

## 5. Considerations when creating a CLIL unit

When designing dual-purpose learning materials, close co-operation between the language specialist and the subject specialist becomes crucial in order to design and implement pedagogically sound materials that serve the acquisition of knowledge in two disciplines. Due to the fact that these two disciplines –foreign language learning and the given subject matter – may rely on different approaches to knowledge acquisition and teaching methodologies, both the language and the subject-matter specialist have to design learning tasks and activities that complement each other, serve both purposes and are well balanced (Gimeno, 2008).

There are a number of teaching approaches such as task-based learning or problem-based learning that, together with more traditional methodologies, can be implemented to the advantage of both subjects in a CLIL setting.

Task-based learning involves completing everyday tasks using the target language. These tasks, conversely to exercises in a language class, normally aim at non-linguistic outcomes. They focus on meaning rather than on form and seek to achieve a practical goal (Nunan, 2004). In problem-based learning, on the other hand, learning is driven by challenging, open-ended problems; students engage in collaborative group work, and teachers adopt the role of "facilitators" rather than "knowledge-providers". Problem-based learning is also believed to enhance content knowledge and foster the development of communication and self-directed learning skills (Gimeno, 2008). In a CLIL context posing open-ended problems to our students can obviously take on many forms depending on the content subject we are intertwining with foreign language instruction. Technology, therefore, can play a major role in facilitating the key elements in order to carry out a learning task.

The Clilstore authoring tool is particularly suited for CLIL learning contexts in the sense that it favours the development of activities that not only stimulate the use of a foreign language but also foster the acquisition of vocabulary. Additionally, many of the online dictionaries linked to the system are technical dictionaries, thus allowing specific technical and scientific language input to be the base for the development of the learning activities.

# 6. Conclusion

To conclude, it is worth noting that the system described here is completely free of charge and is open source. It relies on an ever growing repository of didactic units which is also freely available to the language learning and teaching community at large.

#### References

- Commission of the European Communities (2003). Communication No. 449 on Promoting Language Learning and Linguistic Diversity: An Action Plan 2004 2006, p. 8. Available from http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0449:FIN:EN:PDF. [Retrieved 5/6/2012]
- Commission of the European Communities (N/A). Content and Language Integrated Learning. Available from http://ec.europa.eu/languages/language-teaching/content-and-language-integrated learning \_en.htm. [Retrieved 5/6/2012]
- Gimeno, A. (2008). How can CLIL benefit from the integration of Information and Communications Technologies? In Linguistic Insights – Studies in Language and Communication. Bern: Peter Lang, p. 77-102
- Nunan, D. (2004). An Introduction to Task-based Teaching. http://www.ed2go.com/elt\_demo/index.html [Retrieved 19/11/2009]