

# CALL Syllabus Integration through ICT-Mediated Tasks

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## ABSTRACT

The present article addresses the integration into the syllabus of Computer Assisted Language Learning (CALL), and particularly of Information and Communication Technologies (ICT), as a measure to achieve full normalization. After reviewing distinct phases in the history of CALL, we briefly describe a model of an ICT-task within a Content and Language Integrated Learning (CLIL) framework. The task is conceptualized here as a means for syllabus organization into which the new technologies are naturally integrated.

**Keywords:** Computer Assisted Language Learning (CALL), Information and Communication Technologies (ICT), Task-based Language Teaching (TBLT), WebQuest, Content and Language Integrated Learning (CLIL)

## Integración del ALAO a través de tareas basadas en las TICs

## RESUMEN

Este artículo se centra en la integración dentro del syllabus del Aprendizaje de Lenguas Asistido por Ordenador (ALAO), y en particular de las Tecnologías de la Información y Comunicación (TICs), como vía para conseguir su normalización. Después de revisar las distintas fases en la historia del ALAO, describimos brevemente un modelo de tarea basada en las TICs dentro de un marco de Aprendizaje Integrado de Contenidos y Lengua Extranjera (AICLE). La tarea en este marco es una unidad de organización de contenidos del syllabus que integra de forma natural las nuevas tecnologías.

**Palabras clave:** Aprendizaje de Lenguas Asistido por Ordenador (ALAO), Tecnologías de la Información y de la Comunicación (TICs), Enseñanza de Lenguas Mediante Tareas, WebQuest, Aprendizaje Integrado de Contenidos y Lengua Extranjera (AICLE)

## Tâches pour l'intégration du ALAO dans des programmes d'enseignement

### RÉSUMÉ

Cet article explore la question de l'intégration de l'Apprentissage de Langues par Ordinateur (ALAO) dans le syllabus comme un moyen d'atteindre une normalisation complète. Après avoir examiné les différentes étapes de l'histoire de l'ALAO, nous décrivons brièvement le modèle de tâche basée sur les Nouvelles Technologies de l'Information et de la Communication (NTIC) au sein d'un contenu de l'Enseignement De Matières Par Intégration D'une Langue Étrangère (EMILE). La tâche dans ce contexte est une unité organisationnelle du contenu du programme qui intègre naturellement les nouvelles technologies.

**Mots-clé:** Apprentissage des Langues Assisté par Ordinateur (ALAO), Nouvelles Technologies de l'Information et de la Communication (NTIC), Approche actionnelle dans l'enseignement des langues, WebQuest, Enseignement De Matières Par Intégration D'une Langue Étrangère (EMILE)

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### 1. INTRODUCTION

A long tradition of research has examined the value of computers for improving language learning (e.g., Polat, Mancilla, & Mahalingappa, 2013; Bower & Kawaguchi, 2011; & Chen, 2007; Ma & Kelly, 2006; Al-Seghayer, 2001; Wood, 2001; Laufer & Hill, 2000;). The emergence of specialized journals in the last three decades, such as *Language Learning & Technology* (University of Hawai'i and the Center for Language Education and Research, Michigan State University), *System* (Elsevier), or *Computer Assisted Language Learning* (Taylor & Francis online) along with prestigious conferences attest the valuable addition of the use of the new technologies to the field of foreign language teaching and learning. However, one feels that at a grass-root level a significant gap remains between empirical research and classroom action, where CALL is not yet normalized. In this line, Bax (2003: 23) cleverly notes:

Normalization is therefore the stage when a technology is invisible, hardly even recognised as a technology, taken for granted in everyday life. CALL has not reached this stage, as evidenced by the use of the very acronym 'CALL' – we do not speak of PALL (Pen Assisted Language Learning) or of BALL (Book Assisted Language Learning) because those two technologies are completely integrated into education [...].

In this paper, we attempt to provide insight into a fundamental aspect: CALL integration in educational practices in the field of foreign language teaching. After that, we propose and briefly describe a model of an ICT-mediated type of task within a Content and Language Integrated Learning (CLIL) setting. The task is understood as a syllabus-organizing unit within foreign language teaching. The rationale for this task corresponds to principles from a variety of sources, such as the methodological principles behind Task-Based Language Teaching (TBLT) and Language WebQuests (TalentQuest), or Oliver (2001)'s constructivist learning designs.

## **2. AN OVERVIEW OF CALL HISTORY: UNDERSTANDING INTEGRATION**

### **2.1 Warschauer's phases**

For Warschauer (1996), and Warschauer and Healey (1998), there are three key moments in the history of Computer Assisted Language Learning: (1) Behaviouristic CALL (1960s–1970s); (2) Communicative CALL (1970s–1980s), and (3) Integrative CALL (1980s–1990s).

Behaviouristic CALL is based on a set of instructional ordered sequences in which the objectives of learning are previously defined and intervention is planned and refined until the goals are met. Internal processes are not important, only observable changes in the form of purely factual learning. The most direct contribution of behaviourism to instructional design was found in programmed instruction, i.e. the use of teaching machines that allow a self-paced way of learning based on the computer's immediate feedback to the learner's responses.

The communicative approach was born in the 1980s. It gave rise to a new phase in CALL that rejected behaviouristic approaches to language learning at the theoretical and pedagogical level, and introduced the microcomputer. Along with developments in speech recognition, machine-assisted translation, artificial intelligence and natural language processing, the birth of the Internet at the end of the decade was another decisive factor in CALL.

Integrative CALL began in the 1990s. Warschauer (1996) provides the examples of the integration of language skills in a task and integration of meaningful and authentic communication in language learning. The author suggests that multimedia and the Internet could facilitate Integrative CALL. Content-, task- or project-based approaches to language learning could support this new perspective on technology and language learning, as Warschauer and Healey (1998) note. For example, in this phase, the Internet enabled the establishment of virtual connections and collaborative environments through synchronous and asynchronous Computer Mediated Communication (CMC) tools.

In education, e-learning and blended-learning Information and Communication Technologies (ICT) models become valuable ways of instruction delivery. In this environment, the student may learn at his/her own pace through a Learning

Management System (LMS). The teacher within an e-learning environment would mostly undertake the role of course and materials developer as well as that of online-tutor. On the other hand, the blended-learning model, or hybrid model, combines e-learning with face-to-face instruction. Such a combination makes blended-learning a suitable model for lower levels of education, where some face-to-face education is advisable.

## 2.2 Bax's approaches

As an advocator of an interpretative revision of CALL against a purely factual account of the field, Bax (2003) re-examines the interpretation offered by Warschauer (1996), and Warschauer and Healey (1998), and provides some amendments and clarification. For Bax (2003: 20), it is not clear whether the phases represent outstanding historical periods or even whether they intend to. Moreover, he considers that if the term *communicative* CALL is to be acceptable, the validity of the characterization of the 1980s as part of communicative CALL would require more support and tighter reference to mainstream communicative language teaching methodology. As Bax (2003: 18) argues, “during the period which Warschauer has termed ‘communicative’ (mostly the 1980s) [...] there was relatively little pedagogically useful communication going on in CALL”. In addition, Bax believes that the rationale for identifying a third phase and calling it *integrative* definitely needs more support. In terms of attitude to language and language teaching, this last phase had not been distinguished clearly enough from the communicative phase. In Bax's opinion, Warschauer and Healey's claims for actual integration of CALL into the syllabus and classroom practice are dubious. In order to cope with the flaws identified in Warschauer and Healey's review, rather than *phases*, Bax classifies the evolution of CALL according to three *approaches*: Restricted CALL, Open CALL, and Integrated CALL.

With minor differences, the *restricted CALL* approach mirrors Warschauer's (1996) behaviouristic phase, yet Bax (2003) prefers the adjective *restricted* because it may refer to a number of restricted or limited dimensions of learning through CALL. Some of the features of this approach included restricted or limited tasks such as closed drills and quizzes, where learners had to reconstruct texts or answer closed questions. Minimal interaction with other learners was observed here. Feedback was provided in form of correct or incorrect prompts. Tasks in this approach were not integrated into the syllabus; on the contrary, they were seen as an optional or extra practice. The main role of the teacher consisted in monitoring the classroom activity, and the physical location of the computer was the computer lab, never the classroom. According to Bax (2003), this approach dominated from the 1960s until about 1980.

*Open CALL* lasts from the 1980s until the present time. It involves a type of CALL that is more open than the kind considered in the restricted approach. Here, simulations, games, and CMC tasks replace drills and quizzes. Learners interact

with the computer and occasionally with their classmates. Feedback is more varied than the one provided in the first approach and it attempts to develop linguistic skills. However, similarly to restricted CALL, open CALL is considered optional and, therefore, it is not yet integrated in the curriculum. In the same way, the lab is the place for this kind of tasks; however, teachers' monitoring role expands to the facilitator role.

In introducing the term *integrated CALL*, Bax (2003) is purposefully making it different from Warschauer's *integrative CALL*. Against Warschauer's term, the new term strengthens the argument that today CALL integration into the L2 curriculum is not a fact, an idea found elsewhere in the literature (e.g. Gillespie and McKee, 1999; McCarthy, 1999; Richards, 2005). Bax (2003) pointed to CMC tasks, tasks with text processors, or the use of e-mail, among the types of tasks that should be found under integrated CALL. A decade later, a myriad of other web 2.0-tasks have a natural place in integrated CALL, for which the computer is one of the many media that facilitate Internet access.

For Bax, within an integrated CALL lesson, the learner should frequently interact with other learners and with the computer itself. The type of feedback in integrated CALL should have nothing to do with the feedback provided in the previous two approaches. Now, the learner should receive a kind of feedback that triggers the interpretation of the information, evaluation, and comments. Integrated CALL views the computer as a non-obtrusive tool for learning that is needed into the syllabus and that adapts to the learner's needs. Hence, Bax (2003) suggests that it should be in every classroom, in every desk, and in every bag. In integrated CALL, teachers are facilitators and managers of the learning process.

One concept relevant to attaining CALL integration is normalization. This means that any kind of technological innovation should become invisible and embedded in everyday practice in order to be normalized. It seems quite logical that for normalized CALL to take place, its integration should be attained at different levels. Hewer (2007) points to three levels of integration: institution, department, and teacher. At the teacher level, a necessary condition is that s/he is familiarized with ICT and its pedagogical use. In this connection, Chambers and Bax (2006) provide a more comprehensive list of key issues in the normalization of CALL (Table 1). They are grouped under four different headings, namely A. logistics; B. stakeholders' conceptions, knowledge, and abilities; C. syllabus and software integration; and D. training, development, and support.

AREAS	ISSUES
A. Logistics: issues of location and access, classroom layouts, and lack of time.	<ul style="list-style-type: none"> <li>• Issue 1: CALL facilities will ideally not be separated from normal teaching space.</li> <li>• Issue 2: The classroom will ideally be organized so as to allow for an easy move from CALL activities to non-</li> </ul>

	<p>CALL activities.</p> <ul style="list-style-type: none"> <li>• Issue 3: Teachers may need additional time for preparation and planning in order to normalize computer use within their daily practice.</li> </ul>
B. Stakeholders' conceptions, knowledge, and abilities.	<ul style="list-style-type: none"> <li>• Issue 4: Teachers and managers need to have enough knowledge or ability with computers to feel confident when using them.</li> <li>• Issue 5: Normalization requires that stakeholders' conceptions about the role of computers lead to integration and normalization.</li> <li>• Issue 6: If CALL is to be normalized, teachers and managers need to avoid the "technical fallacy", i.e. the view that the main determinant of success or failure is the hardware and software, or any other single factor. They will be aware that the success of CALL in their classrooms depends on several interconnected factors, all of which may need to be considered.</li> </ul>
C. Syllabus and software integration.	<ul style="list-style-type: none"> <li>• Issue 7: Successful normalization of CALL requires at least two processes: (1) the actual integration of CALL into the syllabus, and (2) support provision to those teachers who may be uneasy about their new roles.</li> <li>• Issue 8: Progress towards normalization may be enhanced by the use of authorable CALL materials, which allow teachers to better tailor CALL activities to meet syllabus requirements.</li> </ul>
D. Training, development, and support.	<ul style="list-style-type: none"> <li>• Issue 9: If CALL is to be normalized, teacher training and development may best be offered in collaborative mode rather than in top-down expert-to-novice mode.</li> <li>• Issue 10: Successful normalization requires that teachers' concerns about technical failures, and their lack of skills to deal with these failures, be addressed and overcome by means of reliable support and encouragement.</li> <li>• Issue 11: Apart from technical assistance, teachers need pedagogical support to get normalization.</li> </ul>

Table 1. Key issues in the normalization of CALL (Chambers and Bax, 2006, 477-478)

With some differences, Bax's issues coincide with Hewer's levels. To mention some, both authors address logistic issues and technical issues, and both refer to teachers' ICT knowledge as a precondition for CALL integration. Yet, based on

these measures to overcome obstacles to CALL normalization, this paper pays particular attention to Bax's issues 7 and 8, which address CALL syllabus integration. In our opinion, more than any other issue, to get syllabus integration is somewhat similar to integrative CALL. The reason is that CALL and ICT will not be integrated at all if appropriate syllabus integration is not first attained, even though all the other conditions are met.

### **3. TOWARDS CALL INTEGRATION: PROPOSAL OF AN ICT-MEDIATED TASK**

In this section, we briefly describe our proposal of a language task model through which CALL or ICT integration is pursued. The model of task described here is framed within a model of Content and Language Integrated Learning (CLIL), a dual-focused approach of content and foreign language learning where the language becomes the vehicle through which the content is taught (Marsh, 2002). In the last years, CLIL has received the attention of a large number of advocates from different spheres involved in foreign language teaching in the European context.

The language task is a key concept in the field of foreign language teaching and learning grounded in the communicative approach. The task is particularly sensitive to ICT as ICT may provide the breeding ground for authentic language, as well as enough substantiated opportunities for making learners actively engage in meaningful communication.

In Fernández Fontecha (2012), we presented a macro-level account of the framework under which the ICT-mediated task model occurs. On the other hand, in Fernández Fontecha (2010), we offer a comprehensive view of the task model that includes all its components and the relationship among them. In the present paper, yet, we particularly focus on further ICT-related issues of this framework that supports CALL integration into a CLIL syllabus and which remain unexplained in the aforementioned sources.

In the next sections, first, we will put forward the rationale behind this language task model by defining the traditional concept of language task and by explaining a model of learning designs based on constructivism; then, we will offer a brief explanation of the language task model; and finally, we will describe five tasks under the CLIL framework that integrate ICT tools.

#### **3.1 Rationale**

##### *3.1.1 Language tasks*

With slight differences, the literature on Task-based Language Teaching (TBLT) mostly agrees on the essential factors of a task. The task is a special type of language-teaching activity that at least must include the following set of features:

Meaning and Focus on Form: A task implies the use of communicative language. It mainly focuses on meaning rather than on form (Ellis, 2003; Nunan, 1993; Skehan, 1998). This view entails negotiation of meaning.

Purpose: Tasks should be devised according to a pre-established purpose (Crookes, 19968; Murphy, 1993).

Real-world connection: Many authors agree on the development of tasks with a real-world link (Ellis, 2003; Long, 1985; Skehan, 1998), a feature also observed in many WebQuests.

Roles: A task imposes the assumption of roles on learners and teachers. (Candlin, 1987; Roca, Valcárcel, & Verdú, 1990).

Unit of syllabus design: For Nunan (1993), tasks should stand alone as communicative acts, i.e. they should have a sense of completeness. In relation to this idea, for some authors (Long & Crookes, 1993), the task should be the main unit of syllabus design.

The characteristics of a task show the strong connection existing between TBLT and WebQuests (March, 2003; Dodge, 2001), types of inquiry-oriented tasks that tap into the resources made available on the Internet. Under the projects *TalenQuest* (Talen: Dutch for Language) and the ECML project *LanguageQuest or LQuest*, Koenraad and Westhoff (2003) have adapted the concept of WebQuest to cover an adequate approach to foreign language teaching and learning.

### 3.1.2 Constructivist learning

The history of learning theories in psychology and education may be organized around two different trends: objectivism and constructivism (Cobb, 1994; Cronjé, 2006, Jonassen, 1991; Vrasidas, 2000). The objectivist position, also called instructivism, is represented by behaviourism and cognitivism. In line with the behaviouristic perspective, the Cognitive Learning Theory applied to instruction is based on the idea that knowledge can be split into separate chunks to be directly and systematically taught. The knowledge society in which we live requires that we process information and transform it into knowledge. This is one of the main reasons for rethinking traditional models of learning, and adopting other learning paradigms that entail new forms of knowledge transmission, retrieval, processing, and construction (Rüschhoff & Ritter, 2001). This new paradigm is constructivism.

At least two ideas are central to the constructivist theory of learning: (1) knowledge construction understood as an active process, and (2) learners' previous knowledge as essential in the construction of new knowledge. Supported by the teacher, the learner is actively engaged in a meaning-making process of knowledge construction. S/he comes to class with an established world-view, formed by years of prior experience and learning. As this world-view evolves, it filters the learner's experiences and affects his/her interpretation of observations. In order to change this world-view, learners work collaboratively in a *learning-by-doing* environment (Dougiamas, 1998).



Under this framework, Oliver (2001), for example, accounts for five constructivist learning designs that may motivate instruction: problem-based learning, case-based learning, project-based learning, inquiry-based learning, and role-playing.

*Problem-based learning (PBL)* places a real-life problem at the centre of the instruction. Guided by the instructor, students work either individually or in groups to engage in problem analysis. As Oliver (2001: 6) notes, problem-based learning designs “provide students with the opportunity to immerse themselves into a context which requires more than memorisation and understanding of concepts and challenge them to apply their knowledge to determine the best outcome”. PBL should be organized around an ill-structured problem that is messy and complex in nature. This problem requires inquiry, information-gathering, and reflection, and may change with the addition of new information. *Case-based learning* is a kind of PBL with some distinctive features. Here, students work, collaboratively or individually, through a real-like case, and decide on the best course of action. It requires case-based reasoning as a problem solving technique that makes use of knowledge gained through prior experience. In *project-based learning*, students design and create their own products to meet real needs. Students are engaged in discussion, exploration, and testing of ideas and concepts. As in the designs above, students may work either individually or collaboratively. The basis of *inquiry-based learning (IBL)* is the scientific method, i.e. to get students involved in an activity that requires raising questions, formulating hypotheses, observing, making predictions, collecting and analyzing data, testing hypotheses, drawing conclusions, or designing and creating models. In *role-playing*, students play someone else’s roles to solve a problem-solving activity. The difference with PBL is that role-playing encourages the development of the students’ affective dimension.

### **3.2 An ICT-mediated language task model in Content and Language Integrated Learning framework**

#### *3.2.1 Presentation of the CLIL framework*

Once the rationale behind the model of task that we propose has been introduced, we should address the description of the task model. The task is conceptualized here as the unit of analysis of a CLIL syllabus in which a number of topics are taught through the foreign language. This process can take place in the content or the foreign language classroom. The contents of this syllabus are arranged according to a nesting sequence of elements: topic, module, CLILQuests or WebQuests, and ICT-mediated tasks, here called quests. This sequence receives the name of Content and Language Processing Sequence (CLPS) (Fernández Fontecha, 2012) and brings into being the CLIL framework, in which the ICT-mediated tasks occur.

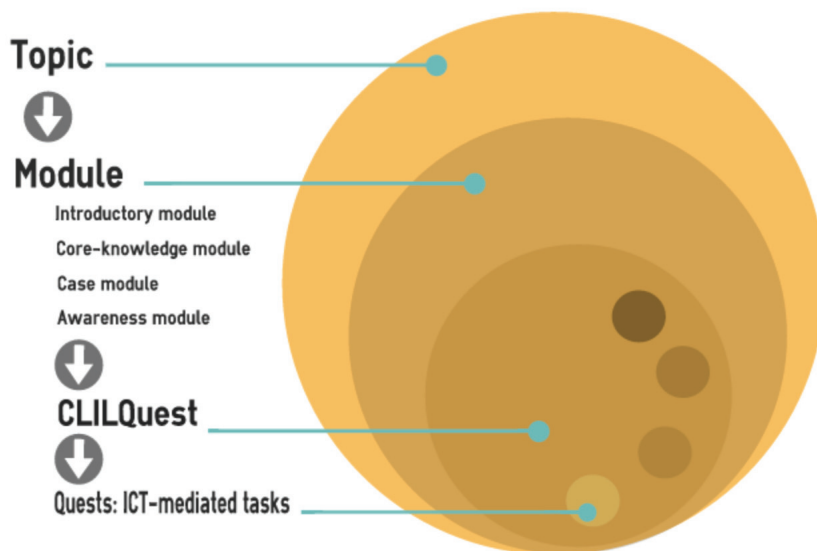


Figure 1. The Content and Language Processing Sequence (CLPS): syllabus organization.

As Figure 1 shows, the topic through which the foreign language is taught is presented via four types of modules or boxes that agglutinate and organize the sets of CLILQuests. Two major categories of modules are envisaged: 1. *background knowledge* modules, which contain the theoretical knowledge required to understand the topic; and 2. *practical knowledge*, i.e. knowledge of how to apply the theory underlying the topic to new situations.

The *background knowledge* modules comprise two further specifications in the category of module: the *introductory module* and the *core-knowledge module*. While the introductory type presents topic facts through terminology and activates learners' prior knowledge on this topic, the core-knowledge module goes deeper into the topic and serves to show the theory behind it.

The *practical knowledge* axis splits into *case module* and *awareness module*. Case modules present a case that learners have to solve by applying the knowledge from the previous modules. On the other hand, the awareness module connects learners' personal experiences with the topic.

An open number of CLILQuests is included in these four categories. Each CLILQuest is developed through an open number of tasks or quests. Thus, the syllabus organization framework proposed resembles a set of Russian matryoshka dolls. The concepts of CLILQuest and quest are explained in depth in Fernández Fontecha (2010). We will provide a brief note on them here:

The CLILQuest is a type of webQuest for the Content and Language Integrated framework of syllabus organisation. It agglutinates a free number of ICT-mediated tasks. The main characteristic of a CLILQuest is that it follows the postulates of the module to which it belongs. Thus, a case module will require CLILQuests that present real or semi-real cases related to the topic.

On the other hand, the tasks or quests through which the CLILQuests are developed are based on the concept of task found in the literature (Ellis, 2003; Nunan, 1993; Skehan, 1998) but one that relies heavily on the use of ICT tools. One CLILQuest comprises a number of interrelated quests that learners have to solve in order to solve the CLILQuest. It has its own steps and outcomes. One workgroup or groups in which the students have well-defined roles can undertake a quest. They may be sequential, i.e. all the groups may accomplish one quest after another, or simultaneous, i.e. different working groups carry out different quests at the same time. The final quest represents the conclusion of the CLILQuest; it is where all the quests converge. The final quest is usually a public face-to-face or online exposition of results. The time allotted for a CLILQuest should preferably be no less than three sessions, but this will depend on the particular situation of each teaching-learning experience.

Differently from the parts of the traditional WebQuest, the ICT-mediated tasks in a CLILQuest present characteristics that reinforce the dual teaching of content and language by engaging learners in active processing of information and construction of meaningful knowledge. Computer Mediated Communication and web 2.0 tools are very useful for promoting collaborative learning environments and bringing the real life into the class. Learners are in touch with other learners from different countries. The foreign language acquires a new meaning usually neglected in the traditional foreign language classroom. Thus, these models of WebQuests and ICT-mediated tasks embed learning tasks in real contexts with a real-like purpose against which learners are encouraged to test their new constructed knowledge. This idea accords well with CLIL recommendations of learners being exposed to authentic language. In our view, thanks to ICT and the web 2.0, this constructivist idea expands the possibilities of exposition to authentic samples of foreign language since the learners must use the language in quasi-real scenarios, with quasi-real expertise and for quasi-real purposes.

### 3.2.2 Sample ICT-mediated task

In this section, we describe a series of sample tasks within a CLILQuest that we have devised for teaching English as a foreign language through the topic of climate change. This programme of tasks is thought for first grade baccalaureate students, who are supposed to be familiar with the terminology of environmental issues. It could be delivered through a blended model by means of some open source LMS. For example, after testing different platforms, this programme was implemented in *Dokeos* (<http://www.dokeos.com>). The class in which this teaching

takes place could be either the foreign language class or the content class (natural sciences).

The CLILQuest here described belongs to the *awareness module* and is developed through four ICT-mediated tasks. This module is the last one of the four-module structure of the CLIL framework, therefore in previous modules the learners are supposed to have been shown the factual and conceptual information on the topic of climate change, and have identified some of the consequences that climate change has for wildlife. The *awareness CLILQuest* developed for this module aims to raise the learners' awareness of the impact that their behaviour has on climate change.

Through this type of WebQuest the learners must find out their ecological and carbon footprints by making use of some eco-calculators. Later on, they will have to find appropriate ways to improve the negative effect of that behaviour. Once they know about these footprints, they will find out what a green home is. For the four quests of this CLILQuest, the class will be divided into three groups. It would be advisable if some other group from a telecollaboration project could be part of this experience): two working teams of eco-designers and a working group of green-living experts that will evaluate the eco-designer' works. As eco-designers, both groups will plan the construction of a green home. Quest 1 is common to all groups, quest 2 will be carried out by the two groups of eco-designers, quest 3 will be carried out by the experts, and quest 4 will be done by all groups again. Quests 2 and 3 will be done simultaneously.

As in previous CLILQuests, all language skills are practised here. The learners will do scanning and skimming, they will watch and listen to some videos, they will write some summaries and reports, and finally, they will present their findings online or in the classroom. As to the type of knowledge that these learners will be practising, this is a kind of procedural knowledge: following Oliver's (2001) proposal of constructivist learning designs, they will do some *inquiry* on how to get a greener way of life.

Following, we provide the description of each task:

## QUEST 1

### FIND OUT YOUR ECOLOGICAL AND CARBON FOOTPRINTS

#### BY USING SOME FOOTPRINT CALCULATOR'S QUIZ

This is a warming-up quest where each learner will identify his/her ecological and carbon footprints. They will note down the topics about which they are asked in each quiz, along with the results obtained

and its implications. Some calculators provide some tips for future green behaviour. They will write a summary with the results of their quizzes and the eco-tips they will actually try to follow.

WORKING GROUP: All groups.

OUTCOME: Write a summary with the results of your quiz and the recommended eco-tips you think you will follow.

RECOMMENDED TIME: 1hr

#### STEPS

1. Use several footprint calculators to find your ecological and your carbon footprints. You have got their links in the *web resources* section.
2. Note down the topics about which you are asked through each quiz.
3. Note down the results that you have obtained and its implications. Some calculators may give you some tips for future behaviour. Collect this information.
4. Write a summary with the results of your quiz and the recommended eco-tips that you think you will follow.

#### WEB RESOURCES

- THE WORLD WIDE FUND FOR NATURE'S (WWF) ONE PLANET FUTURE CAMPAIGN:  
<http://www.wwf.org.uk/oneplanet/ophome.asp>
- WWF'S FOOTPRINT CALCULATOR: <http://footprint.wwf.org.uk/>
- BP'S CARBON FOOTPRINT CALCULATOR:  
[http://www.bp.com/liveassets/bp\\_internet/carboncalc/](http://www.bp.com/liveassets/bp_internet/carboncalc/)
- EARTHDAY'S FOOTPRINT QUIZ: <http://www.earthday.net/Footprint/index.asp>
- DIRECTGOV'S CARBON (CO2) CALCULATOR: <http://carboncalculator.direct.gov.uk/index.html>

**QUEST 2****PLAN AND DESIGN THE BEST/PRICE QUALITY GREEN HOME  
WITH ENERGY-SAVING PRODUCTS**

Each team of eco-designers will carry out this quest separately. Their mission is to find out what a green home is. They will search for ecological products, they will organize them, and note down their prices and eco-features. Finally, they will prepare a draft of the project that should include the design of the green home, a list of energy-saving products and appliances used in its design, the prices of each product, and the reasons why a potential eco-customer should buy the house.

**WORKING GROUP:** The two teams of eco-designers working separately.

**OUTCOME:** Design a draft or plan of the green home including the list of energy-saving products and appliances used in its design.

**DOCUMENTATION:** a web notes template based on the Cornell system (e.g., [http://lsc.cornell.edu/LSC\\_Resources/cornellsystem.pdf](http://lsc.cornell.edu/LSC_Resources/cornellsystem.pdf))

**RECOMMENDED TIME:** 3hr

**STEPS**

1. Each team of eco-designers should carry out this task separately.
2. Find out what a green home is. Find information through the web resources available for this quest.
3. Find ecological online shops at the websites available. Narrow your search and select the best ones.
4. Each eco-designer should investigate a category of products.
5. Organize and compare them. Note down their eco-features and prices. Don't forget to use the web

notes template in the documents folder.

6. Show your findings to the team and comment on the results. Evaluate them and select the best ones. Remember that they should have the best price/quality ratio.
7. Prepare a draft of your project in which you should include the design of your green home, a list of energy-saving products and appliances used in its design, the prices of each product, and the reasons why a potential eco-customer should buy this house. In the next quest, you will present this project to a green-living experts' panel. They will evaluate your work among other proposals and decide on the best one.

## WEB RESOURCES

### LINKS TO ENERGY-SAVING PRODUCTS

- GREENHOME SHOP: <http://www.greenhome.com/>
- UK ENERGY SAVING TRUST'S LINKS TO PRODUCTS:  
[http://www.energysavingtrust.org.uk/compare\\_and\\_buy\\_products](http://www.energysavingtrust.org.uk/compare_and_buy_products)
- UK ENERGY SAVING TRUST'S LINKS TO RETAILERS:  
<http://www.energysavingtrust.org.uk/Find-Energy-Saving-Trust-Recommended-Products/retailers>
- ECOLOGICAL LIGHTING PRODUCTS: <http://www.efficientlight.co.uk/>

### VIDEOS ON GREEN-LIVING

- GREEN-LIVING VIDEOS: <http://www.videojug.com/tag/green-your-home>
- GREEN TV'S ECO-VIDEOS: <http://www.green.tv/>

## QUEST 3

### GATHER INFORMATION ABOUT THE BEST PRODUCTS

### FOR SAVING ENERGY AT HOME

In this quest, the green-living experts need to be prepared to evaluate the projects developed by the two

teams of eco-designers. They will get information on topics such as green homes, energy-saving products, and energy labels, and summarize the information obtained. The work carried out by this group of experts is very similar to the work done by the eco-designers. Both groups will have to evaluate products and choose the best ones. The green-living experts do not have to create the draft of the green home but a summary of the information compiled that will be useful to prepare the evaluation of the eco-designers' projects.

WORKING GROUP: Panel of green-living experts.

OUTCOME: Summarize the information gathered.

DOCUMENTATION: a web notes template based on the Cornell system (e.g., [http://lsc.cornell.edu/LSC\\_Resources/cornellsystem.pdf](http://lsc.cornell.edu/LSC_Resources/cornellsystem.pdf))

RECOMMENDED TIME: 3hr

#### STEPS

1. You are supposed to be an expert on green-living. Then, you should know a lot about green homes and energy-saving products. You should also know about energy labels, such as the EU Energy Label.
2. Analyze this information and determine which products are the best to reduce the ecological footprint. Use the web notes template to organize the information.
3. Summarize the results of your research, and be ready to evaluate the two projects presented by the two teams of eco-designers in the next quest.

#### WEB RESOURCES

##### LINKS TO ENERGY-SAVING PRODUCTS

- GREENHOME SHOP: <http://www.greenhome.com/>
- UK ENERGY SAVING TRUST'S LINKS TO PRODUCTS:



[http://www.energysavingtrust.org.uk/compare\\_and\\_buy\\_products](http://www.energysavingtrust.org.uk/compare_and_buy_products)

- UK ENERGY SAVING TRUST'S LINKS TO RETAILERS:

<http://www.energysavingtrust.org.uk/Find-Energy-Saving-Trust-Recommended-Products/retailers>

- ECOLOGICAL LIGHTING PRODUCTS: <http://www.efficientlight.co.uk/>

#### VIDEOS ON GREEN-LIVING

- GREEN-LIVING VIDEOS: <http://www.videojug.com/tag/green-your-home>

- GREEN TV'S ECO-VIDEOS: <http://www.green.tv/>

## QUEST 4

### PRESENTATION OF PROPOSALS

(face-to-face or web meeting)

The two teams of eco-designers will present their proposals on the best green home to the green-living experts, who will evaluate them and choose the best proposal. In this quest, the two teams of eco-designers will prepare a *PowerPoint* presentation. For that purpose, the eco-designers may make use of the guidelines about the descriptive and expository essays or the report template found as documentation. For their part, the experts will evaluate the eco-designers' proposals in a face-to-face or web meeting. They may make use of the notes template.

WORKING GROUPS: Panel of green-living experts and the two teams of eco-designers.

OUTCOME: Two PowerPoint presentations prepared by the teams of eco-designers and a report summarizing the evaluation session submitted by the green-living experts.

DOCUMENTATION: instructions on descriptive, expository and report essays. Web notes template.

RECOMMENDED TIME: 2hr

#### STEPS

Based on their previous work, the two teams of eco-designers prepare their *PowerPoint* presentations to put forward their proposals on the green home. Try to follow the guidelines found in the uploaded documents.

The experts will evaluate the eco-designers' proposals. The evaluation can be held as a face-to-face meeting or as a web meeting through *Vyew*, *Tokbox*, or *Skype*.

#### WEBRESOURCES

- VYEW: <http://vyew.com/>
- TOKBOX: <http://tokbox.com/>

As the description of the quests shows, web resources (e.g., websites on climate changes issues) and ICT resources (e.g., web meeting tools) are naturally integrated into the resolution of each task. Their use obeys to a particular content or language purpose in each case. ICT gets naturally integrated as a result of the requirements of the type of task, whether it is a problem-based, case-based, project-based, inquiry-based, or role-playing task type.

#### 4. CONCLUSION

CALL integration is a difficult journey for those who attempt to use the new technologies in a natural way in the classroom. One of the most pressing challenges that language teachers face is syllabus integration. This paper has addressed this type of integration towards CALL normalization. In this process, we have described the conceptualization of ICT-mediated tasks as a means of attaining the natural integration of the new technologies into the CLIL syllabus. Among others, the model of constructivist learning designs proposed by Oliver (2001) and the concept of task in TBLT have inspired this type of ICT task. A series of tasks have been included at the end of the paper, which have shown some of these inspirational elements at stake.

In any case, this is just a proposal and it is important that others follow so as to make technology invisible and normalized in everyday practice. In this vein, different initiatives have appeared on stage, such as Mishra, Koehler and Henriksen's (2011) *Technological, Pedagogical Content Knowledge (TPACK)* framework as a starting point for arranging types of knowledge and skills prior to materials design; Puentedura's (2012) *Substitution Augmentation Modification*

*Redefinition (SAMR)* model, which provides the basis for using ICT in more meaningful ways; or the joint model based on the TPACK and SAMR proposed by Puentedura (2012) himself. In brief, any attempt to resolve the issue of CALL integration will be welcome in this field as non-integrated CALL is very likely to lead to non-natural uses of technology. From the educational point of view, wrong practices would only lead to aberration since, as Nelson (1999) claims, “imitating paper on a computer screen is like tearing the wings off a 747 and using it as a bus on the highway”.

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