

UNITALKS

A Blended Learning Platform for University Specific Foreign Language Training for Architecture Students

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Abstract: *The objective of the UNITALKS project is to develop a blended e-learning solution for foreign language training adapted to the university environment and to careers in architecture and building construction. Based on the VoiceForum project, an Internet or Intranet based platform, the approach aims to create an immersive task-based collaborative learning environment incorporating certain free software tools including a wiki repository where students and tutors can interactively and creatively enrich their learning community with new resources. UNITALKS is forward-looking in its recognition of the social as well as the technological dimension of an effective learning strategy and innovative in its approach to designing discipline-specific content tailored in a staged process to support maximum learner engagement and full operational ability in the professional context.*

Keywords: *Education; mobility; task-based approach; blended learning; learning communities.*

The context for the project

The lack of university discipline-specific training programs for foreign languages is producing low quality teacher, researcher and student mobility in the European space of higher education. Although this problem is noticeable in visiting students coming from newly incorporated countries to the EU, the problem is more severe in highly specialized disciplines such as architecture and building science. Some European countries suffer from this problem and their teachers and students are excluded from the exchange programs either voluntarily or selectively.

When students, young researchers and teachers apply for foreign language courses, they generally

use generic materials developed by well known specialized language training publishers. The content is not necessarily appropriate to the learners' real needs; it tends to be instruction focused and may not be the most efficient way to help university staff and students develop the communicative abilities they need in a foreign university environment and school of architecture, for example.

The inefficiency of foreign language courses is often due to several factors:

- a. The instructor's teaching strategy does not engage the motivation of the students;
- b. The limited periods of training (e.g. intensive courses);
- c. Lack of time for the trainee (demanding aca-

demetic timetables);

- d. The training material is generic not linked to the student's discipline.

The candidates for mobility programs need at least to speak fluently in order to be evaluated by their host teachers. The ERASMUS exchange students in Architecture suffer from a language exclusion syndrome by some teachers and native students, and sometimes receive poor academic qualifications for that reason, despite their brilliant academic results at home.

This problem of inadequate foreign language competences also affects research teams and EU collaborative projects when researchers have to share ideas and concepts; they don't have sufficient time to write properly expressed reports and working documents. Joint European postgraduate projects are also weakened by the low level of specific language competences. In some EU countries this problem is still unsolved despite the huge amounts of money, of research, the use of the most advanced ICT e-learning platforms and the joint efforts of many European teams.

The UNITALKS proposal

Aware of this problem, a joint team of university teachers of the Camilo José Cela University School of Architecture (Spain) and English as a foreign language at the universities of Clermont 2 (France) and Tampere (Finland), are trying to solve this problem using an innovative blended e-learning strategy. The objective of the UNITALKS project is to develop a blended e-learning solution for foreign language training adapted to the university environment and specific architectural and technical discourse.

The target populations for this project are university members: teachers, researchers, administrative staff, and students in general who need to acquire appropriate specific foreign language skills to increase their academic competences and mobility in the future. The pedagogical plan took into consideration the different generations of the learners with

their different expectations and learning styles.

The starting languages of the proposal are English, French and Spanish. Other teacher-tutors will be invited to use the basic course materials and Web 2.0 tools to develop their own content and share it with others. The basic topic will be the university environment and campus communication in the foreign language. The justification is that the students are motivated when they link their training to something familiar to them. Travelling abroad and acquiring new experience is very exciting and encourages them to engage in a more concrete way with the learning contexts and aims.

The design of the UNITALKS course

The course takes into account a general pedagogical strategy, an approach to discipline-specific content progression and a skills requirement concerning the teacher-tutors.

The general pedagogical strategy takes its inspiration from constructivist, communicative and task-based approaches to language learning and teaching. The materials, tools and didactic intent come together in an overall immersive strategy which becomes easier to implement when learning activities are connected to the whole syllabus and participants become stakeholders in the learning outcomes. With this aim in mind, the course content is closely related to the discipline (Architecture and Building Construction in our case).

The most attractive aspects of the discipline are to be given some extra focus to increase motivation as affective factors play a big part in language learning. Learning by doing is part of the immersive strategy. It suits kinesthetic learners in general and architecture and engineering students in particular. This can be linked to an important need in these disciplines for proficiency in the visual language or graphic expression which relates also to the learning style of visual learners. Manipulation of graphics, text and speech data will be developed throughout the course as something indispensable to acquiring

advanced communication skills when working in the field. ICT tools facilitate this integration and blending of different media for study and communicative purposes.

Learning is a socio-cultural act and whereas this may be taken for granted in contact hours in class, it has been taken fully on board for the online component, which means giving special importance to learner interaction and collaborative outcomes. Collaborative study groups have been shown to be effective through the opportunity they provide for peer learning scenarios. This has been an inspiration that we can implement within a simulated architectural studio environment.

A wiki space such as the EduTech Wiki (<http://edutechwiki.unige.ch/en/>) will propose a sustainable repository to store all the content developed by the team and the contributions of students and teacher-tutors. The environment is like a seed, a developing open source collaborative environment.

The blended learning strategy consists of contact and virtual sessions both of which will motivate the students to socialize and build their own personal learning environments and contribute to their learning community. In the project, language learning is supported by a community of learners. Synchronous as well as asynchronous communication tools that are freely available will supplement the platform and act as communication vehicles within this learning community. Webquest-style tasks and web searches for architecture and building construction content will help the students increase their analysis and research competences as well as enable collaborative task-based projects to be conducted.

The overarching framework of the proposed syllabus is international mobility in the European space of higher education. From the beginning the learner will be introduced to typical discourse encountered in international university environments, the objective being to help establish basic communication with supervisors, teachers and other faculty staff and students.

The use of the campus context and lexical field

in the first level, and the architectural culture, building construction and computer technology in the second and third levels of the course will engage the learners and help the teacher-tutors to motivate them. The latter will control the level of difficulty of the task to stimulate the learning process. Learner motivation has been considered in the choices made with regards to designing the learning environment but it has been a key issue also in staging the discipline-specific content. The syllabus strategy is one that charts a progressive level of complexity. As in computer games design where a technique known as difficulty balancing is used to maintain player motivation, learner frustration should be limited by task-based scenarios taking the participants forward through increasing levels of complexity from the first level up to the postgraduate level.

The evolving complexity of content will naturally engender a need for correspondingly higher levels of language performance in order to collaborate and communicate more effectively and with greater precision about complex issues. The content syllabus will move progressively towards higher levels of expectation in learner collaboration and outcomes in the target language. We can see this linguistic progression in the table below (Table 1) with its accompanying reference to the language levels established by the Common European Framework of Reference for Languages (CEFR) scaling up from A1 (elementary) to C2.

An issue insufficiently addressed in course design which integrates discipline content and language is the skills requirement for teacher-tutors. In a blended learning course the teacher-tutor needs to have ICT skills that can match those of the participant trainees. In our case also there are specific teacher-tutor competences necessary for engaging learners and understanding their special needs such as expressing ideas and proposals graphically, understanding the technical-scientific concepts and the cultural singularities of the architectural discipline.

*Table 1
Unitalks content structure,
competences acquired and
proposed teaching materials.*

Second Language specifications	Elementary Academic Environment	Intermediate Cultural Environment	Advanced Scientific - Technical	Proficiency Postgraduate - Academic
Minimum CEF level prerequisite	A2	B1	B2	C1
Content related materials and design (organized according to a progressive level of complexity)	<ul style="list-style-type: none"> - European Space of Higher Education, common terminologies. - Daily academic campus activities - University staff, departments, spaces and functions - Leisure activities - application procedures for UE student mobility 	<ul style="list-style-type: none"> - Basic architectural knowledge areas - associated disciplines - graphic language terminology - history of architecture and art - building components - building types - Computer Aided Architectural Design 	<ul style="list-style-type: none"> - Architectural technologies - associated technical and scientific disciplines and related humanities - advanced architecture research - building construction - philosophy of architecture - architectural criticism - urban planning - environmental studies 	<ul style="list-style-type: none"> - advanced architecture technology - innovation research - high level scientific & technical research & development - architecture philosophy & criticism - engineering science - building codes and regulations - project management
Competences acquired. Students will be able to:	<ul style="list-style-type: none"> - Speak with international tutors, colleagues and attendant staff - write application forms and text messages to foreign universities and international coordinators - search for information about prospective destinations and courses - write short texts and essays 	<ul style="list-style-type: none"> - speak with international teachers and fellow architecture students - write a short essay on architecture - represent a drawing with the adequate technical terms - make an oral presentation of studio work - develop an architectural project proposal 	<ul style="list-style-type: none"> - speak with exchange teachers and fellow architecture students - write an architectural essay - understand technical and scientific publications - search for technical information in libraries and knowledge databases - develop an architectural or building construction project proposal 	<ul style="list-style-type: none"> - speak with peers and leading researchers - understand technical & scientific research publications - write a research paper - make a scientific or technical speech in public events - teach internationally - develop an architectural or building construction project proposal
Proposed Teaching materials	<ul style="list-style-type: none"> - Conventional: Texts, glossaries, university documentaries, illustrations, - ICT tools: voice forum, blogs, voice and instant messaging, wiki repository, Office software for writing and presenting course work 	<ul style="list-style-type: none"> - Conventional: Texts, glossaries, architectural documentaries, drawings, illustrations - ICT tools: voice forum, blogs, voice and instant messaging, podcasts wiki repository, CAD and Office software for writing and presenting course work 	<ul style="list-style-type: none"> - Conventional: Texts, advanced glossaries, technical videos, visuals, mind maps - ICT tools: voice forum, blogs, voice and instant messaging, podcasts wiki repository , architectural software 	<ul style="list-style-type: none"> - Conventional: Texts, advanced glossaries, technical videos, visuals, mind maps - ICT tools: voice forum, blogs, voice and instant messaging, podcasts wiki repository , research software

***VoiceForum*: the e-learning platform**

Teacher-centered classrooms or exercise based student-tracking e-learning systems may not be an adequate framework for teaching languages. Most online learning management systems are used, if not mainly designed, for an instruction-focused approach. This traditional approach has had somewhat limited success due to its reduced emphasis on social interaction compared to classroom learning and its heavy reliance on sustained intrinsic motivation which is a common cause of participants dropping out of their courses. This situation can be improved, however, by combining an LMS system with contact hours using a blended learning approach. Modern online courses provide spaces for peer interaction and learner-teacher interaction but these spaces tend to be peripheral to the course content. The UNITALKS proposal, on the other hand, seeks to place participant interaction at the centre of the process. Online course material will not be there just to be read and learnt but rather to feed collaborative project and task activities where the participants are expected to show their collaboration by results and productive traces. These learning-by-doing results are monitored by the teacher-tutors who can interact at a specific pedagogical level to influence and guide the participants towards greater levels of achievement.

This approach is built into *VoiceForum*, which is an innovative on-going project aiming to modify the traditional learning paradigms. Internet or intranet based, its use transcends the physical location of a classroom as it bridges the divide between multimedia classroom use and independent online work. Work begun in the multimedia classroom can be continued at home or elsewhere without losing touch with co-learners or tutor.

In the existing kernel of the project, the *VoiceForum* concept focuses on asynchronous learner interaction in threaded discussions using voice and text. This interaction between groups of foreign language learners, based around collaborative tasks, calls upon

the learners' own experience, sense of responsibility to a group and own creativity for thought and language. The tutor dialogues at a separate sub-message level, offering guidance and feedback as well as any suggestions for remedial work or further study. In this way, the pedagogical input is always based on the contextualized needs of the participants, can be accessed as often as required and even searched as a resource for future reference.

VoiceForum has already proved to be invaluable for improving oral interaction skills. A built-in sound recorder/player is accompanied by a rich text editor. The user posts a spoken message, for example, to initiate a topic, to reply to another user or to expand an existing thread or conversational branch of the discussion. Appropriate and effective or insufficiently appropriate and effective use of language to accomplish the content-driven task is applauded or corrected with appropriate positive or negative feedback by the teacher-tutor at a separate pedagogical level in the software. To do this, the teacher-tutor has voice and text functionality to provide elaborate possibilities for feedback which does not interfere with the collaboration of the group of users engaged in the on-going task. For oral practice *VoiceForum* achieves what is actually impossible in a face-to-face classroom situation: you cannot interrupt a discussion in real time to provide contextualized feedback to the participants without seriously undermining the communicative freedom necessary for the discussion.

VoiceForum, on the other hand, uses asynchronous voice and threaded discussion forum technology to allow participants to interact freely and to benefit from pedagogical guidance in the participants' own time. That pedagogical input and dialogue can be consulted and developed at will from a link in any thread, thus enabling it to be finely tuned to the context of the participants' language needs and permanently available for further teacher-learner dialogue or revision purposes. Guidance given to one participant is available and searchable by any of the other participants, which means that pedagogical

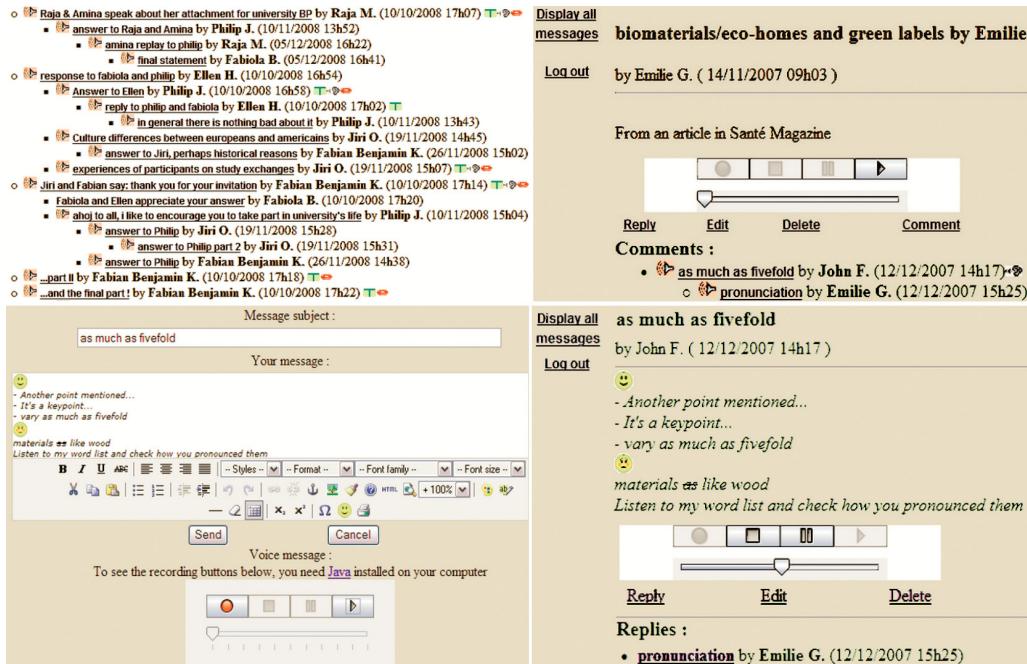


Figure 1
Sample screen shots from VoiceForum: list of voice messages in a threaded discussion (top left), message composition window with voice recorder (bottom left), student message with voice playback (top right) and teacher comment with student reply (bottom right)

feedback becomes over time a new exploitable resource.

Very positive student feedback on their experience of *VoiceForum* in its current implementation encourages us to extend this concept further to sustain user motivation in more elaborate learning scenarios thanks to *VoiceForum's* intrinsic features such as:

- instant membership of a small, identified learning community whose creative activities are at the very heart of the course;
- highly intuitive usability and structuring of information;
- task dependency and learner cooperation;
- persistence and ubiquity for both learners and tutors;
- construction of meaning as a basic goal to drive learning.

UNITALKS can therefore use *VoiceForum* to allow learners to collaborate with texts, visuals and rich media documents that they can create, associate

and share in support of task-based learning objectives by uploading and hyperlinking to them in their messages. In this way and in combination with other tools, ICT provides new opportunities to create a learning paradigm where interactive creativity is the engine of the pedagogical process.

Implementation perspectives

The UNITALKS project is based on the premise that in professional language training, one size doesn't necessarily fit all. Content integration in the language syllabus needs to take into account the unique character of each discipline. Content integration is also an opportunity to motivate and inspire learners. This can be maintained also in the online component especially if the social dimension of learning is respected and a blended approach is adopted. Blending can describe the attested positive effects of combining media types and allowing for different learning

styles and different generations of learners with different expectations. Blending is more frequently used, however, to describe the process of combining contact hours with time and space independence through the use of an online learning environment.

The social dimension combines with discipline specificity and the professional training aspect of the architectural studio metaphor in a way that is totally consistent with the collaborative project orientation of UNITALKS. Socialization and the cultural atmosphere which we aim to develop should be strongly motivating factors and increase the capacity of the learner to retain and reuse content. The architectural studio device gives us an opportunity to innovate in integrating a necessary graphic language with foreign language communication. ICT skills will be needed to support this innovation which is an example of how the project makes new demands on the teacher-tutors who may require some specific training if they are to be fully effective.

A pilot project will be set up shortly. The results will be analyzed and evaluated to see if the expected effectiveness of the language training and the collaborative e-learning platform can be subsequently confirmed.

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