Active Learning in Higher Education: implementation in EMI context

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Goal: To implement different techniques of active learning in Economics English-taught Higher Education modules in a non-English-speaking public Spanish University. Concretely, we use Flipped Classroom and technology supported collaborative learning to promote students actively engaged in their own learning.

Context of implementation: The most widely accepted solution to the conundrum of teaching Economics using English as a medium of instruction (EMI) while aiming at keeping content-wise excellence has proven to be the use of Content and Language Integrated Learning (CLIL). It is an umbrella term which encompasses different forms of using language as medium of instruction by "integrating language and subject teaching, various forms of educational success can be achieved where classrooms comprise learners with diverse levels of linguistic competence" (Marsh 2006, p.3) and, as such, it is "essentially methodological" (Marsh 2008, p.244). This approach focuses mainly on explaining meaning, and not language per se, thus allowing "implicit and incidental learning" which occurs in "naturalistic situations" (Marsh 2002, p.72) which fits the Economics classroom fully, as it suits the purpose of learners who prefer "to learn as you use and use as you learn" (Marsh 2002, p.66) rather than learning language on its own or as separated from Economy and its analysis.

Difficulties detected: Nevertheless, teaching in bilingual curricula, under a Content and Language Integrated Learning approach poses a challenge to instructional design as it is necessary to integrate content learning with instructional language practice. On one hand, students are assumed to already have "an adequate command of the language, but many lecturers report the opposite; in any case, overlooking linguistic competence seems unwise as their "school English" can be very different to the academic English they are demanded at university" (Erling and Hilgendorf 2006, p.284). On the other hand, this students' lack of linguistic knowledge and sophistication for the specific tasks and content which are planned in heavily theoretical-practical degrees such as Economics could arise the feeling that, at some point, either language or content development must be compromised.

Active Learning solutions proposed: To foster content and language-based skills alike, and prevent language from becoming a block to learning degree-specific competencies, is essential that students come to class prepared (linguistic micro-skills, specific terminology, familiarity with concepts,…) through a previous first contact with assigned working materials. Besides, the instructional design developed by instructors should give students the opportunity of performing, alongside content development, linguistic-based designs which help develop their students' linguistic skills, solve meaning-rooted issues and, first and foremost, contribute to the grasping of concepts and the fostering of skills which are directly related to the discipline. The most suitable instructional approach the, from our point of view, help to overcame all the challenges that EMI through CLIL pose is Active Learning methodologies.

Active Learning approach encompasses a broad variety of instructional techniques whose main characteristic is that are student-centered. So, Active learning designs pose students in the center of its learning process trying to engage them in activities, such as reading, writing, discussion, or problem solving that promote analysis, synthesis, and evaluation of class content. Cooperative learning, problem-based learning, and the use of case methods and simulations are some approaches that promote active learning.

The role of technology in Active Learning approach: New technology is drastically changing the conditions in which teaching and learning is conducted and this is also true for higher Education. In this project, we aim to use technology in two different ways developing different types of blended Learning considering that the University where this project is being applied is a face-to-face HE institution

First, Technology used outside the classroom to deliver content is an efficient way to prepare students for classroom activities and increases the class time available for student-centered active teaching. This pedagogical strategy, named Flipped Classroom, could help traditional brick-and-mortar Universities to put in value face-to-face interaction in a digital world (Bowen 2012).

Second, in the current context of budget restrictions, many Higher Education institutions have considered web 2.0 technologies as an alternative way to promote active and collaborative learning in their blended learning designs (Bennett et al., 2012; Grosseck, 2009; Resta & Laferrière, 2007). Open technological platforms to support collaborative projects and manage knowledge are well known in business and workplace (Dave & Koskela, 2009) and they are also useful to support team learning in educational context (Laru, Näykki, & Järvelä, 2012). The potential of seamless learning environments supported by web technology begins to be explore in Higher Education (Marín et al., 2016) and Moxtra, a cloud collaboration service with real-time interactive conversations and annotating and sharing large files capabilities while on the move, could be an attractive setting to assess the prospective educational benefits.(Meza Luna, 2016).

Flipped Classroom implementation: Nowadays abundant on line resources make blending the teaching process possible and move content coverage outside the classroom, in order to spend in-class time to promote high order thinking skills. Therefore, generally speaking, Blended Learning can be understood as on line activity blended with classroom-based delivery. This is a really broad definition that embraces different types of blended learning experiences, abundantly developed lately in all levels of education. As a result, terminological confusion arose between the terms hybrid, blended, flipped and inverted. All these are inconsistently defined in the literature creating a barrier to efficient research on and implementations of these types of classes (Margulieux et al. 2014).

The Flipped Learning Network defines this instructional style as: “a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” (FLN, 2014). So, in a “Flipped Classroom”, students watch videos outside the classroom to have their first contact with course material. Face to face (F2F) time focuses less on content and more on application of this material to new

context, development of higher-level cognitive processing and collaboration, creating significant learning experiences for students (Bowen 2012; Dee Fink 2013).

Over the recent years, the Faculty of Economics and Business of the University of Oviedo (a traditional, F2F Spanish publicly-funded institution) has gradually introduced bilingual courses. Thus, since the academic year 2010–11, the Degrees in Business Administration, Economics and Accountancy and Finance offer the possibility to study the different modules of the curriculum in English. "World Economy", belongs to the bilingual curricula where English is the medium of instruction and evaluation to a cohort of Spanish-speaking freshers. It is a first-year, second-semester (14 weeks from February to May), compulsory module in a BA in Business Administration. It is part of the student's basic training, worth six ECTS credits.

Since 2013–14, the instructional designers developed a "Flipped Classroom" design for this module: videos of the different topics in English to deliver content, pre-class questionnaires answered through the University Virtual Learning Environment, instructor mediation between students and content through mini-lectures and Just-in-Time teaching, student-centred active learning approach for in-class sessions, and individual practice combined with peer-instruction mediated by the instructor. So, this is a competency-based programme designed to target module contents, skills practice and improvement of students' linguistic skills. These elements of the design , one of the cornerstones of the "Flipped Classroom" technique, can be demanding, as the practical, Applied Economics approach to the module, designs specific tasks for the student-centred, active in-class sessions which students might find challenging Firstly, students need sufficient linguistic skills in order to sustain the cognitive processes necessary for their learning. Secondly, they have to use the second language as a vehicular instrument for the specific knowledge to be grasped, plus technical and academic terminology inherent to that content. Finally, they need enough command of the second language as it is also the instrument for the effective communication of this knowledge, particularly as they are assessed in this language. In this context is where the CLIL approach turn out to be useful as it is necessary some kind of linguistic support alongside the module to assure students competences.

Technology-supported collaborative learning implementation: the second active learning experience developed in the same traditional, F2F Spanish publicly-funded institution is associated with the use of Moxtra, an application created the 24th of January 2013, which allows both resource sharing and connection between students. This is a WEB 2.0 tool able to integrate real-time conversation capabilities with file sharing and editing facilities, improving other popular discussion board, including students' favourite WhatsApp, as supportive technology for collaborative learning**.**

It can be downloaded for free in tablet and smartphones devices, existing also a computer-based version. As a consequence of this, there are two main advantages of this platform: being able to enjoy all its benefits without no cost for students, and the possibility of working wherever you are. Users can store information on binders. This information includes individuals' notes (with the possibility of hand drawing), photos, videos, files from Dropbox or Google Drive, websites and websites cuts or articles as our students did. This storage can be done for personal use as a way of organization, or it can

be shared with others fostering collaborative work. There is even the possibility of sharing that information with teachers and professors as it happened in our context.

Moxtra provides very interesting tools for learning collaboratively. Individuals are able to make comments on others' ideas and items, and even modify them. There is the possibility of highlighting, hand drawing or to use arrows on team mates' work. Additionally, there are also available more innovative options to use as it is the case of screen sharing, white boarding and the chance to create video tutorials from the contents incorporated into the binders (a helpful way to review all the information rapidly). To end up, there is the opportunity for students to engage in real-time communication through the scheduling of real-time meetings.

So, since course 2015-16, Moxtra is used as supporting technology in "European Union and Spanish Economy", a bilingual second- year compulsory course with 9 credits for the Business Administration Degree in Faculty of Economics and Business of the University of Oviedo Students are required to work in groups to develop an authentic project related with the European Union hot news during the semester Transatlantic Trade and Investment Partnership, Greek crisis, Brexit,…). The activity is called Editorial Board and students have to produce a poster about the analyzed case and present it to obtain a grade based on both the presentation and the poster. In order to see the influence of technology in collaborative learning, we ask students to use the application Moxtra as an assistant in their collaborative work.

For the Editorial Board activity, each group had a chat and the Professor was a member on all of them. Interactions between team members are fostered through this chat, where members can write and also send voice notes or videos to improve communication and make it more real. As the Professors are also included in the groups chat, they are able to constantly watch individuals' contributions, and help them out with doubts or suggestions of new ideas or approaches to follow, transforming Moxtra in a collaborative learning supportive and monitoring tool.

The use of this type of supportive technologies in the context of CLIL courses increases the potential of communicating in a second language and facilitates enormously the language support given by Professors. Using this tool makes easier to overcome the challenge pose by Emi and CLIL approach as the language interventions do not need to be done in a F2F conversational context, much more difficult to do for the content teacher non language specialist.

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