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CHALLENGES FOR THE THIRD MILLENNIUM

Integrating Sustainability and Social Commitment Transversal Competence across Civil Engineering Curricula through Case Studies and a Common Evaluation Rubric

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ABSTRACT

At the Civil Engineering School of Barcelona there is a long tradition applying own experiences from international co-operation for development projects to teaching and learning activities [1-3]. The continuous work carried out in this line has been supported by three pillars: 1) Motivated lecturers and professors; 2) Institutional framework (including support for teaching innovation and Int. Cooperation for Development); 3) Link with Education for Development (ED) international networks.

In this work, the authors present the last Case Studies developed within an ED initiative supported by the Ajuntament de Barcelona during 2016-2017 [4]. The approach follows the European initiative GDEE [5], which recently published a set of 28 examples of teaching materials for introducing global development within engineering studies [5]. The work presented here includes a coordinated set of five case studies covering from first year of civil engineering to compulsory/master courses.

The case studies include different kind of activities, which can be integrated and evaluated within each course, as usual, but also under the framework of a common evaluation rubric [4,7] divided in three levels (basic, intermediate, final). This rubric operationalizes UPC's definition of Sustainability and Social Commitment transversal competence (one of the common competencies to all UPC studies).

All five cases reflect previous experiences from School's students, lectures and professors through preliminary drafts of these supporting materials. Some of them have been already implemented successfully in previous years [8] and others are being tested during the year in course. A brief discussion about drivers and barriers for the development, application and consolidation of such pedagogical proposal is included.

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