

TRAINING THE NEW ENGINEER IN THE EUROPE OF KNOWLEDGE AND CONVERGENCE. THE CASE OF THE SCHOOL OF DESIGN ENGINEERING IN VALENCIA

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Abstract:

The European Union is involved in an interesting process of co-ordination, adaptation and convergence whose main objective is to set up a European common area in the field of higher education (EAHE), as well as in the field of research (EAR). European countries are beginning to realise the need to globally and efficiently improve the quality of higher education systems in Europe. A series of European meetings at the highest level have the final objective of establishing a full common framework in 2010 concerning higher education in Europe. Several key objectives bring about a group of devices to meet these demands at the heart of the process of European coordination: an easily comparable degree system (ECTS and Diploma Supplement), a structure for university studies based upon two major cycles, promotion of European co-operation in educational quality, as well as building up a system of accreditation and validation of studies across countries, etc. Very recently, in the Summit of European Ministers of Education held in Berlin (2003), progress made in strengthening the European dimension of higher education was analysed, coordination with other regions of the world (e.g. Latin America) was considered, and the key pedagogical concept of *life-long learning* was discussed. As can be clearly seen, European convergence is a complex and multifaceted process, in which plenty of factors exert a strong influence: pedagogy and teaching methodology, changes in the views and roles of students and teachers alike, introduction of skills, abilities and dimensions to do with Humanities, financial aspects, and so on.

In line with the importance of that process and of its positive implications, the School of Design Engineering (*Escuela Técnica Superior de Ingeniería del Diseño*, ETSID) at the Polytechnic University of Valencia, has willingly decided to start working on degree accreditation and validation issues, new curricular design, teaching coordination between subjects, implementation of active methodologies and the adoption of ECTS, among other lines of action. All this requires an active involvement and motivation on behalf of the whole institution. The ETSID has a long-term experience in educational projects, and for a long time it has strongly believed in three basic foundations when it comes to training students: educational innovation, international relations and co-operation programmes, and a firm relationship with the industry and business environment. All three elements are comprised within the framework of educational quality management and control. In our opinion, there is the possibility of a strong link between this educational approach supported by the institution and the scheme of European convergence in higher education. The present paper discusses issues concerning the training of the new European engineer in the light of the Bologna approach. Aspects such as new methodologies, structural and institutional factors and pilot projects that are underway at the ETSID, are also studied. This discussion will form a solid base to assess achievement at this stage of the European convergence, highlighting the strongest and weakest points of the system, thus enabling further improvement, while collaborating with similar educational institutions in Europe.