



Encouraging the learning of hydraulic engineering subjects: methodological proposals and evaluation of preliminary results

Leonor Rodriguez-Sinobas (1) and Raul Sanchez Calvo (2)

(1) Dpt. Ingeniería Rural. E.T.S. I Agrónomos. Technical University of Madrid, Spain (leonor.rodriguez.sinobas@upm.es, 349133658245), (2) Dpt. Ingeniería Rural. E.T.S. I Agrónomos. Technical University of Madrid, Spain (raul.sanchez@upm.es, 349133658245)

European universities are updating and changing to meet the Bologna guidelines set out in the Declaration of 1999. A convergence process has begun which will facilitate the exchange of graduate students and will adapt the content of university courses to social demands. In a satisfaction survey of university studies made among engineering graduates from various European countries, Spanish students, in general, failed matters regarding their perception of both learning and socio-communicative skills. In addition, the satisfaction level of students from the Technical University of Madrid was less than average and a significant percentage of them would not return to College again. Likewise, in this university the college dropout rate is more than 20% (Uceda, 2008). In order to reverse this trend, among other factors, an improvement of educational processes efficiency as well as a methodological changes are required.

This paper proposes a number of methodological strategies to encourage learning and communication skills in Hydraulic Engineering subjects. Results from their application to two hydraulic engineering courses for a couple of years are analyzed and compared to the initial situation.