



Evaluation of students' perception of their learning environment and approaches to learning

Manousos Valyrakis and Ming Cheng

University of Glasgow, Infrastructure and Environment Research Division, Civil and Environmental Engineering, Glasgow, United Kingdom (manousos.valyrakis@glasgow.ac.uk)

This work presents the results of two case studies designed to assess the various approaches undergraduate and postgraduate students undertake for their education.

The first study describes the results and evaluation of an undergraduate course in Water Engineering which aims to develop the fundamental background knowledge of students on introductory practical applications relevant to the practice of water and hydraulic engineering. The study assesses the effectiveness of the course design and learning environment from the perception of students using a questionnaire addressing several aspects that may affect student learning, performance and satisfaction, such as students' motivation, factors to effective learning, and methods of communication and assessment.

The second study investigates the effectiveness of supervisory arrangements based on the perceptions of engineering undergraduate and postgraduate students. Effective supervision requires leadership skills that are not taught in the University, yet there is rarely a chance to get feedback, evaluate this process and reflect. Even though the results are very encouraging there are significant lessons to learn in improving ones practice and develop an effective learning environment to student support and guidance.

The findings from these studies suggest that students with high level of intrinsic motivation are deep learners and are also top performers in a student-centered learning environment. A supportive teaching environment with a plethora of resources and feedback made available over different platforms that address students need for direct communication and feedback has the potential to improve student satisfaction and their learning experience. Finally, incorporating a multitude of assessment methods is also important in promoting deep learning. These results have deep implications about student learning and can be used to further improve course design and delivery in the future.