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Student Competencies in Structural Engineering: Modelling Cultural Environment in Qassim University

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This study aimed to determine the learning environment variables related to students interest and perceived competencies of 190 students in Qassim University during the First and Second semester of school year 2011-2012. The study made use of the standardized Cultural Learning Environment (CLEQ) Questionnaire (Fisher and Waldrip, 1998) to determine the cultural factors comprising the classroom learning environment in Structural Engineering courses as perceived by the Architecture & Civil Engineering students. The students' level of interest and perceived competencies in Structural Engineering courses were measured by adapting the Perception of Engineering Classes Survey (PECS) Questionnaire (Molina, 2011). Some interesting insight of the study are: 1). Students are more likely to collaborate, challenge their teachers, use modeling in learning Structural Engineering, and perceive what they learn in the class as matching their learning at home ; 2). Students have a generally low level of interest and perceived competencies in Structural Engineering courses; 3). There is a significant relationship between collaboration and congruence factors and perceived competencies in Structural Engineering courses. ■

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