

Assessment of Civil Engineering Students' Exposure Levels to Active Learning Strategies in the UAE

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Abstract - Active learning environments are recognized as producing well-established benefits in terms of student learning and higher-order thinking skills. The educational system of the United Arab Emirates (UAE), historically characterized by passive learning, is beginning to focus on active learning. In light of these changes, this study aims to answer the following questions: i) What well-known, easily-implemented active learning strategies have Civil Engineering students from the United Arab Emirates University (UAEU) experienced in their classes? ii) How often have they experienced those same strategies? iii) Is there an existing benchmark for expected student exposure to active learning strategies in active learning environments? and if so, iv) How does this study's results compare to that benchmark? A survey questionnaire containing ten well-known, easy-to-implement active learning methods was created and completed by 174 undergraduate Civil Engineering students at the UAEU. Results were assessed relative to an implementation benchmark from Froyd's work and typical characteristics of active learning environments. Findings reveal that while the UAEU's classrooms are utilizing most of the surveyed active learning strategies, there is still room for improvement, as several of the strategies' frequency of usage can be considered lower than desired relative to the ease of implementation standards suggested by the benchmark selected (i.e., Froyd's work) and the high levels of discussion, collaboration, and problem-solving characteristic of active learning environments.

Keywords: Civil Engineering, Active Learning, Exposure, UAE