A Model to Enhance Engineering Students’ Professional Knowledge through Peer Assessment

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 **ABSTRACT**

I have applied this model with 46 students studying in their 3rd year of Civil Engineering. They were given a project that involved designing a water distribution system. Students were given the chance to perform the design individually. They then swap their design with their peers and evaluate their peer’s design given a set of criteria. Students were also given the chance to discuss their evaluation with their peers and explain to each other any misconceptions. The benefit from the peer assessment was then evaluated by means of a test where students individually design a different water distribution network. The results of the proposed model were positive because students performed better designs and especially avoided the mistakes they were exposed to during the peer assessment. Recommendations for best practice and suggestions for improvements will also be discussed.

**Key words**: peer assessment, engineering education, design evaluation, water distribution networks.

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