

Challenges and Solution of BIM Integrated Architectural Education towards Construction Excellence

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This study describes the strategy and elements of an exploration on contemporary issues and challenges as well as a technical solution in order to incorporate BIM knowledge in architectural education regarding construction for excellence (CfE). This research is underpinned by literature review, system analysis and development, and questionnaire-based survey. A systematic literature review is to establish a state-of-the-art view about issues and challenges in developing students' knowledge and skills on BIM in architectural education towards the best design practices for construction. A systematic process map is used to enhance architectural education for excellent design and construction integrity in BIM pervasive project delivery. The questionnaire-based survey is used to verify these two research outcomes. The review about BIM integrated architectural education towards CfE focus on people, products and processes. This enables an extensive coverage to BIM related knowledge on policies, regulations, standards, codes of practice, best practices, and technical innovations with regard to education. The proposed process map is to enable the integration of BIM knowledge in contemporary architectural education. This research can inform academics in related areas regarding what architectural education needs to tackle for best practices in design and construction integrity. The process map can be useful in curriculum design and enhancement by integrating BIM towards CfE in architectural education. This research incorporates principles of CfE into architectural education. The process map has the capacity to support value-added architectural education via a reinforced connection between design and construction in BIM pervasive project environment.

Keywords: *Architectural Education, BIM, Construction for Excellence, Challenges.*