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## INTEGRATION OF ENVIRONMENTAL BIM ANALYSIS WITH DESIGN PROJECTS IN THE PEDAGOGY OF ARCHITECTURAL EDUCATION

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### Abstract

In the curriculum for Bachelor of Science in Architectural Studies, Architectural Design subjects are the main subjects, which are supported by other theory subjects. The Architectural Education pedagogy was programmed with integration of the Architectural Design subjects with the theory subjects at all level. However, the current situation of Covid-19 pandemic has made it a challenge to integrate the environmental conscious design subjects with design subjects. The theory subjects were taught with very minimal or no integration with Architectural Design subjects. The Architectural Education pedagogy was programmed to In the Department of Architecture, quality education is not only educating the students to design with aesthetic value but also with an environmentally conscious attitude. This study evaluated the impact of integrating environmental BIM analysis with studio design project in Semester 5, final year architecture programme. This study consists of two objectives. The first objective is to evaluate the students' perception on the importance of integrating the environmental BIM analysis with their studio design project in Semester 5. The second objective is to evaluate students' perception on how the environmental BIM analysis improved their knowledge in architecture. The case study was the Department of Architecture, International Islamic University Malaysia. Part of the University's mission is to provide quality education and produce responsible graduates and khalifahs. The selected sample students were Year 3 final year students who have completed basic Revit modelling course in Year 2. A quantitative analysis was conducted by distributing survey questionnaires to the students and 42 students responded to the survey. In conclusion, students found that it is important to integrate the environmental BIM analysis with their studio design project. They also agreed that the environmental BIM analysis improved their knowledge in architecture, particularly in environmental science and passive design strategies. This integrated environmental BIM analysis have guided the students into becoming responsible architects, designers and decision makers, for a sustainable future.

**Keywords:** Building Information Modelling, Environmental Analysis, Architectural Education.

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