

**INTEGRATING ENVIRONMENTAL SUSTAINABILITY
IN THE ARCHITECTURE AND INTERIOR DESIGN STUDIO EDUCATION:
A CASE STUDY AT UNIVERSITI TEKNOLOGI MARA**



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PENYERAHAN LAPORAN AKHIR KAJIAN DANA KECEMERLANGAN

Perkara diatas adalah dirujuk.

2. Dimaklumkan kajian dana kecemerlangan ruj.600-KPK(PJl.5/2/2/4)(63) telahpun selesai dan dengan ini menyerahkan laporan akhir kajian dana kecemerlangan yang telah dijalankan bermula dari 1 Ogos 2010 hingga 31 Oktober 2011.
3. Bersama ini disertakan dua (2) set berjilid laporan akhir dana kecemerlangan tersebut untuk rujukan Y.Bhg. Prof.
4. Perhatian dan pertimbangan daripada Y.Bhg. Prof. amatlah dihargai dan didahulukan dengan terima kasih.

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5. Report

5.1 Summary

The conventional design studio teaching methods since the days of the Ecole de Beaux Arts and Bauhaus is recognised not only as the core of most of the design curricula, but also as the formal learning setting in the training to become an architect. It is a place where basic aspects of design skills such as visualisation, representation and most importantly the ability to 'think architecturally' are acquired by the students. However it is coming increasingly under the spotlight as to its effectiveness in shaping future professionals relative to the quality of the built environments and by the way in which the general public values the contribution of architects in general.

There is tremendous diversity of content and methods in studio teaching in different schools and even within one department or school of architecture and interior design. More efforts needs to be made, in the integration of sustainable based education in order to educate graduates towards towering personalities that are able to think critically and having an awareness on current and future global issues.

This research will develop an instrument in the form of survey questionnaires using criteria identified from established global sustainability indices.

The instrument will then be used to measure level of integration by numerical assessment of environmental sustainability in design studio education at the Architecture and Interior Design departments at Universiti Teknologi MARA.

5.2 Introduction

Design studios are places of learning by doing within the tradition of project based or problem based education. This is reflected by its heavy pedagogical and andragogical responsibilities it carries within the design education. Ledewitz (1985) emphasises the purpose of the studio in design education is to teach design. However, there is increasing evidence in the tremendous diversity of content and methods in the conduct of studio teaching in different schools. These dissimilarities may also be evidenced within one department of the same school. Despite the educational advantages associated with design studio teaching methodologies, there exist a number of shortcomings. The purpose of design studio teaching sometimes lack clarity and may have conflicting goals.

This is not uncommon in architectural and interior design schools all over the world including Malaysia. General observation in schools of architecture and interior design around the country points to complexity relating to the running of design studios. Many related technical subjects must be taught parallel to the design studios for them to properly function. This is why there are various methodologies used in the teaching of studio related subjects such as sustainability and construction (Yunos, 2000).

There often exists, lack of awareness on the relationship between construction, design, social and environmental aspect of architecture such as sustainability in design studio education. This may suggest minimal concern on the abovementioned issues. On the other hand it may also reflect that there is a clear favoritism towards design. The subjects of sustainability and construction technology are often thought as distinct disciplines to design; which may be limited to isolated topics based on the teachers' knowledge and interest, devoid of the broader perspectives (Hassan et.al, 2007; Ibrahim et.al, 2006, 2007; Yunus, 2000 and Ledewitz, 1985).

The United Nation's agenda 21 (1993, 2) emphasises the fact that it is the role of education to prepare a curriculum incorporating subjects on environment and development as a 'cross cutting' issues. However Hassan et.al. (2007) found currently the focus on education of sustainable issues and development is not coordinated in the programme's curriculum in systematic ways that are able to give exposure to students in broader perspective. This lack of awareness on the relationship between design and environmental aspect of studio education may suggest, that there is a too much bias towards design and very little on sustainability issues.