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Architecture design studio culture and learning spaces: a holistic approach to the design and planning of learning facilities

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Abstract

Defining a culture is never an easy task, more so to define the culture of a design studio make out of individualistic and dynamic mind. It is through the students, that each architecture school and architecture program developed their distinct culture. In Malaysia, like other country, the discipline of architecture takes great pride in the diversity of its program and teaching pedagogies. The studio model has its own culture and values that are as influential in a student's education as the actual projects they complete. In many cases, the habits and patterns exhibited in this culture are not the intentional product, but a by-product. These by-products can be very positive, but they can also produce harmful results. Many scholars, like Thomas Dutton and Kathryn Anthony, have called the consequences of this culture the "hidden curriculum" of studio learning. In simple terms, the hidden curriculum refers to those unstated values, attitudes, and norms that stem from the social relations of the school and classroom as well as the content of the course (Dutton, 1991). Academically, architecture is in fact itself pedagogy and each building have their own embedded hidden curriculum that can greatly influence and affect learning process. However, the problem is teaching has been wrongly assumed to take place in buildings and neglected the other experience in which learning can be experienced. The built environment and the landscape can be a powerful tool of learning, in this regard the campus as a whole should be regarded as a place where learning occurs. This paper reviewed the studies of the possible design approach in planning and design architecture design studio learning spaces.

Keywords: Architecture Design Studio; Design Culture; Architecture as Pedagogy; Malaysia; Architecture Learning Spaces;

1. Introduction

In a June 2001 issue of the Chronicle of Higher Education, Peter Monaghan authored an article "The Insane Little Bubble of Nonreality" depicting architecture studios as detached entities isolated from the rest of the campus and society as a whole. The article focused on the intense workloads of architecture school, isolation of architecture students and the disconnection of architectural education from larger society.

"Those who have studies architecture undoubtedly have vivid memories that characterize their design studio experience. Late nights, exciting projects, extreme dedication, lasting friendships, long hours, punishing critiques, predictable events, a sense of community, and personal sacrifice all come to mind. Those aspects are not usually written into the curriculum or even the design assignments, but they are likely the most memorable and influential.

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The experiences, habits and pattern found within the architecture design studio make up what we have termed studio culture." (AIAS Studio Culture Task Force Report, 2002)

2. Studio Culture

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The architectural studio model has its own culture and values that are as influential in a student's education as the actual projects they complete. In many cases, the habits and patterns exhibited in this culture are not the intentional product, but a byproduct. These byproducts can be very positive, but they can also produce harmful results. Many scholars, like Thomas Dutton and Kathryn Anthony, have called the consequences of this culture the "hidden curriculum" of studio learning. In simple terms, the hidden curriculum refers to those unstated values, attitudes, and norms that stem from the social relations of the school and classroom as well as the content of the course (Dutton, 1991). The Redesign of Studio Culture 2002

In comparison to the formal curriculum with its emphasis on knowledge (i.e., course content: what should be "covered" and its place in the curriculum), the concepts of the hidden curriculum brings into focus questions concerning the ideology of such knowledge, and the social practices which structure the experiences of students and teachers.

Using the concept of the hidden curriculum as a perceptual base, one begins to recognize that:

2.1 `Schools are not neutral sites, and thus

2.2   They are an integral part of the social, political, economic, and cultural relations of society.

2.3   This nexus of relations plays a significant role in the selection, organization, and distribution of knowledge

in schools as well as

2.4   The formation of school social relations and practices.

Turning attention to the architectural teaching and learning design studio as a social practice and utilizing the vantage point of the hidden curriculum, it has seen that there is much in the structure of the studio that mirrors the structure of most contemporary workplaces. In other words, characteristics that have come to be common in modern workplaces do take form in some way in the architectural design studio. Normally these include systems of hierarchy which require a strict division of labour, "rigorous obedience" and orientation to means rather than ends, and an ethic of competition to ensure work compliance and intensity. Design and Studio Pedagogy, Thomas A Dutton, Journal of Architecture Education, 1984

Studio culture can also be characterized by certain myths. These myths influence the mentality of students and promote certain behaviours and patterns. There's this romantic notion that staying up all night needs to be part of a architecture student's life; a 100 percent dedication and sacrifice to design. Or the best students are those who spend the most number of hours at studio. This is a serious flaw of a studio system; flaws that are actually considered sound teaching practice and the right attitude. How can we expect future architects to design our built environment when they themselves are train to live a dysfunctional life. More worrying, it is the actions of the students to promote such culture.

3. Architecture as Pedagogy

Academically, architecture is in fact itself pedagogy and each building have their own embedded hidden curriculum that can greatly influence and affect learning process. However, the problem is teaching has been wrongly assumed to take place in buildings and neglected the other experience in which architecture learning can be experienced. The built environment and the landscape can be a powerful tool of learning, in this regard the campus as a whole should be regarded as a place where learning occurs. "Architecture lab is out there among the nature and the built environment," this was quoted from one of the author during a debat among faculty's member, why do architecture students need to travel and spend so much.

In recognizing the architecture as pedagogy, we must first recognize that learning process occur beyond classroom through everyday experience. According to experiential learning theory, learning is a process whereby knowledge is created through the transformation of experience and knowledge results from the combination of grasping and transforming experience. (Kolb, 1999).

4. Campus as Learning Space

Architectural planning and buildings design within a campus can well become part of the curiculum for architecture learning. Indirectly, a campus through its architecture and planning can plays a predominant role in shaping the lifestyle and culture of the students. A successful building is one that quietly serves the educational process but requires no care and interaction of those who use it. (David W. Orr 1993) The goal is to acknowledge the richness in students' experience within a campus and how they maximize encounters among people, places and idea just as a vibrant urban environment does. (Shirley Dugdale, Educause Review, vol 44. No 2, March/April 2009)

Clearly understand the below shall support the argument of how Architecture is itself - Pedagogy.

• Technology trends are influencing space in several important ways. The nature of generic space types is changing too.

• Traditional categories of space are becoming less meaningful as activities blend, space becomes less specialized, boundaries between disciplines blur, and operating hours extend toward 24/7 access.

• In the future, space types are more likely to be designed around patterns of human interaction than around the specific needs of particular departments, disciplines, or technologies.

• With greater mobility, students have a choice in where they can work and tend to gravitate to spaces they enjoy—so quality of design matters more. New space models for educational institutions therefore need to focus on enhancing quality of lifeas well as supporting the learning experience.
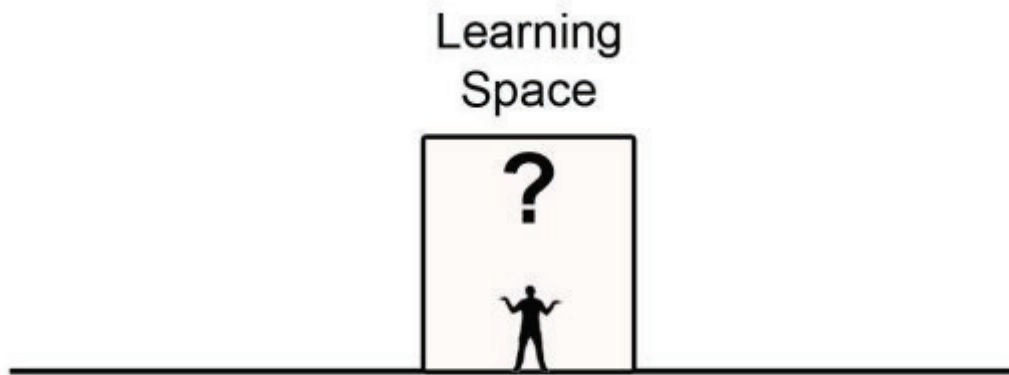
Figure 1 Space for Learning, Learning a Space

5. An Holistic Approach in Designing Architecture Learning Spaces and Planning of Learning Facilities.

5.1 What is learning in today context?

In today's complex world, simply knowing how to use tools and knowledge in a single domainis is not sufficient to remain competitive as either individuals or companies. People must also learn to apply tools and knowledge in new domains and different situations. Industry specialists report that people at every organizational level must be creative and flexible problem solvers (Lynton, 1989). This requires the ability to apply experience and knowledge to address novel problems. Consequently, learning to think critically, to analyze and synthesize information to solve technical, social, economic, political, and scientific problems, and to work productively in groups are crucial skills for successful and fulfilling participation in our modern, competitive society.

5.2 What are architecture learning spaces?

Is architecture studio an important learning space for students? According to Tadao Ando, the answer is no; he travelled a lot to see the nature, the country side and the cities with a sketchbook, but plans are drawn in his office.

As architecture education being institutionalized, the whole process of learning became regimented with the needs to follow certain criteria or guidelines set by the institution. At the same time, architecture learning space is being categorized accordingly. Freedom and dynamic of architecture learning process became cannibalized and being replace with a regimental learning system. Such learning system will only become relevant if there is an appreciation student culture and interpretation of idea of knowledge acquisition.

Understanding and visualizing space is one of the most difficult skills that design students must acquire during their education. Most architecture students begin their education with very limited personal experience in observing and understanding the spaces and forms that they are familiar with on an everyday basis. Architecture forms a

backdrop against which their activities take place, but they are not consciously aware of the influence that the design of those spaces has on their perception.

Students must learn to experience the world as an observer and participants, aware of light, form, proportion, scale, color and texture as well as the perceptual feeling that they create. On a broader scale they must learn to see and experience spaces and forms in a way that will enable them to understand not only the visual but also the environment, cultural and social aspects of the natural and built environment around them. Architecture in its purest form is neutral. Within that neutrality there is an emptiness, it is through the emptiness that diversity is allow to flourished.

6. Investigation of Learning Environment for Design

One such space within a university realm are the space adjacent to traditional learning space such as classroom, lectures room and auditorium or even the landscape. Often, the environment of a classroom is polarized with a clear hierarchy between a teacher and the students. Such polarized environment hinders communication between students and teacher as well as between students and students. The relationship between those in a classroom often limited one way. However to architecture design studio is a whole context all together.

To begin with, it should be noted design process is not a rigid learning process where each process could be easily identified or categorized. It can be describe as a freestyle process which differs from one designer to another. In this study, it shall be examine as how the design studio complement with its adjacent space in a campus context.

The design process is best summed up by Tadao Ando when he said "Once I travelled a lot, to see the nature, the countryside and the cities, with a sketchbook. It is a practice I continue today but plans actually I draw in my office." Tadao Ando's statement summed up the relationship of design process might be undertaking at both the design studio and the outdoor environment. Relatively, Tadao Ando might mean that he got his inspiration and idea from the surrounding in turn developed the idea into architecture in the design studio. Or Tadao Ando might describe how both the context and the design studio are both important in the design process.

Dr Rashid Embi of Department of Architecture, Uniersiti Teknologi Malaysia, in an interview described critique session as more engaging and broad minded when is conducted outside a studio based on his experience. Thus in general an architecture design process can be describe as a combination of both liberal and regimented process. Liberal in how one object could lead to different interpretation depending on the experience of the designer. Regimented in how curriculum, laws, guideline come into being during the design process.

A designer's experience of environment seeks two fundamental responses: delight for our sense and also the need to respond to inherited memories of habitat. The adjacent space being detached from an academic purpose is more generic in nature, thus more universal and more accommodating for wide range of uses. The non-committal nature of such space support liberal side of design process. Such space offer diversity and vibrancy in experience compare to the Euclidean space of a typical room.

A study on architecture students of Department of Architecture, UKM showed that the design process of the students is consistent with Tadao Ando statement and the above statement. In the campus context, the architecture students alternate between multiple locations during the early stage of design which is the design genesis stage where architecture vision comes into being. Such places include the library, in campus or out campus F&B outlets and open spaces. However, when it comes to design development or production stage, the studio is preferred especially when teamwork come into play. It is here formal aspect of the design process could be carried out more efficiently and with most of these activities requires students to work in team, the studio offered such environment for formal discussion and working in large group. Thus allow for efficient dissemination of knowledge among students, where information can be rapidly transferred around. Often such discussion would spill out of the studio when it comes to small group discussion. Students interviewed stress on the liberty and detachment from formal environment to allow effective conversation and discussion.

On a more general level, a similar observation can be seen between library and the 24 hours reading area which is a open space adjacent to the library. Activities of the of both location is recorded and it shows the following. The open reading space is frequented more by students compared to the interior of the library. Again students interviewed preferred a space where different activities could be carried out alternately. The alternation of activities mentioned is the switch from study to casual conversation to discussion and to be supplemented with other needs such as food and beverages. As compared to the interior of the library, the activities are quiet restricted due the nature of the library itself.

A basic learning process by contemporary definition consists of process of acquiring knowledge, process of analysis and process of synthesizing the knowledge. Most formal spaces such as the design studio or the library by default are tangible spaces that only accommodate limited functions. Coupled with the administrative regulation and guidelines, such spaces become more restricted. The important part of analysis and synthesis often requires some form of discussion, a detached space that is non committal that allows different activities of learning and living and caters to different users is more suitable.

Such spaces should not be just any empty space or open spaces. Sou Fujimoto through his interpretation of generic spaces stressed on the needs of stimuli or hints to allow activities to be carried out. As such, there must be a provision of facilities or features that can accommodate for the possibility of learning activities and basic students' needs. It is like a chair or table in a garden, where people could use it for a simple chat, chess game or reading. Without the chair and table, the possibility of such activities to happen would be none. Generally, a design studio and its adjacent space should be designed to be function in Synergy to Generic space.

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