Think like an architect. Learn to be an expert.

Foundation U1 Studio ARC 1110

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Why should we use authentic learning in architecture/ other subjects?

Architects in practice have to define and arrange spatial formations in order to accomplish certain objectives that target at the needs of users. And yet the skill to manipulate space is rather hard to be taught via traditional modes of learning. As a matter of fact, alike architecture, skills practiced by experts across disciplines are often in nature, difficult to be taught by lectures and tutorials, which tend to focus on the delivery of knowledge without realizing connections between theories and practice.

Unlike traditional modes of university education which focus on lecturing theories, authentic learning emphasizes the application of theories. Teaching via the authentic approach consists of real-world, complex problems which students were required to resolve as if they were experts in the field. "Portable skills" are nurtured as students would start to realize the connections between theories and practice.

Authentic learning with group projects in architecture

Teachers are often inquired about ways to implement effective authentic teaching classroom. And the answer is to formulate interesting problems (to the least extent which students would like to know more about them) that simulate those of reality.

Foundation U1 Studio (foundation course ARC1110) is an example that has employed topics of group projects as a tool to achieve the benefits of authentic learning.

Authenticity is realised in two ways. First, students are guided through the five main stages of work often required in real practice: Experience, Idea, Form, Object, Space and Context, which were considered to be key stages in developing intangible ideas into tangible features in the practice of architecture. Therefore, the course attempts to equip students with skills in realising and turning experience into practical models by focusing on two aspects, the mental process that transforms experience into space, and activities that an architect should undergo in attaining requirements of each stage. The process in constructing experience into space is illustrated with the diagram below. The course was therefore in 5 parts, each targeted at nurturing one of the 5 components mentioned above.

Secondly, authenticity is also focused in the design of student tasks in each of the five stages. Each stage is conducted in 2 steps, series of lectures from guests and instructors followed by group-based experiential activities, which students would have to accomplish tasks by applying what they have learnt in previous step. Project at each stage began with an introduction to a theme, a problem or a case. Students were divided in groups to perform tasks as required by the

project. They would have to adopt approaches that architects would use in reality. In addition, experiential activities include site visits, installation design, case based projects, poster designs and various literal analysis, which were all in placed to assist students in transforming their experience into components of defining space in actual practice.

The course adopts a progressive approach which inspires students to extract ideas from personal experience. Followed by materialising their ideas into objects and space, students are expected to produce designs with respect to requirements of a context. In other words, authentic learning has been incorporated in both the development of a space (i.e. horizontal progression of experience to space as described in the diagram below) and activities held in each stage of development (i.e. group-based activities contained in each of these stages). Therefore, by immersing in an intensive environment that simulated reality, students would be able to grow substantially in both thinking and adaptations to the practices in workplace, which serves as the core benefit of authentic learning.

In addition to a range of skills that students should have developed to appreciate and to create designs (relevant to horizontal progression of experience to space), they are also expected to have learnt a wide scope knowledge in relation to architectural designs throughout the series of projects conducted in the course (relevant to activities contained in each stage).

Advantages of this learning activity

In correspondence to benefits of authentic learning in other subjects, the advantages of such in the course can be summarized as the following,

- Students can have a taste of the actual working environment as authentic activities tend to simulate tasks that students would come across with in workplace.
- Students would be equipped with portable skills which can be translated and applied in workplace.
- Students would be encouraged to explore knowledge in relation to their core studies.
- Students have learnt to adopt approaches that incorporate interests of multiple stakeholders (constraints of a project inclusive)
- Students may improve their ability to work in teams, in particular, how to behave in a way that maximises the potential outcome of team activities.
- Students may receive peer support from their classmates which in turn reinforce selfawareness and confidence.

Feedback from teachers and students

Students were generally very positive with the design of this course. They had enjoyed learning activities that were based outside classroom and yet educational to equip them with the necessary skills to a profession. Teachers were also very satisfied in a way that these learning activities had assisted their teachings by notifying what students couldn't recognise in rote mode of learning. Hands-on activities were particularly effective in developing the essential skills to approach space in practice among students. However, the course was especially demanding as many of its projects were team based.