1.0 Brief History of Architectural Education in Singapore

Architectural education began in 1958 when the Singapore Polytechnic was established. The first batch of architectural students graduated in 1963. In 1968, architectural education was transferred to the School of Architecture at the University of Singapore (renamed to National University of Singapore in 1980). In June 2000 it was re-organised from the School of Architecture of the Faculty of Architecture, Building and Real Estate into the Department of Architecture of the School of Design and Environment (SDE).

During the period, the course has also seen changes over the years and in 1980 it underwent a major structuring exercise to a two-tier degree course with a one-year practical training after completion of the 3rd year. At the end of the 1st tier, students are awarded the degree of Bachelor of Arts (Architectural Studies). At the end of the 2nd tier (two years after 1st tier), students are awarded the Bachelor of Architecture. Both the degrees are recognised by the Singapore Institute of Architects, the Board of Architects, Singapore and the Royal Institute of British Architects, UK. In 1994, in line with the emphasis to develop research and graduate education, the School established a centre for Advanced Studies in Architecture. In 1998, the 2nd tier B Arch was upgraded to a M Arch degree.

2.0 Role of the Institute in Relation to Architectural Education

The Institute, registered as a Society, does not have statutory powers. Notwithstanding, the Institute works closely with the Board of Architects on matters pertaining to the accreditation of local architectural qualifications, foreign qualifications and the professional practice examinations through:

Representation in the Accreditation Board together with the Board of Architects and representatives of the RIBA in the Visitation/Accreditation exercise conducted at the School of Architecture once every 5 years.
Representation in a Committee comprising the Registrar of the Board of Architects and staff of the National University of Singapore to examine graduates of foreign universities in determining the standard of their academic qualifications as eligibility requirements for taking the Professional Practice Examination.

With regard to the School of Architecture, the Institute is represented in the Advisory Committee of the School by the President and the Chairman of the Board of Architectural Education (BAE). In addition, there is periodic dialogue between the Institute and the School to exchange and share views with regard to architectural education.

3.0 Continuing Professional Development (CPD) Programme

Following the directive from the Singapore Government to make Continuing Professional Development (CPD) mandatory as a pre-requisite to renew the practicing certificate in the year 2003, SIA has undertaken the role of the Managing Agent responsible for implementing the CPD Credit Point System which forms the basic mechanism to monitor the participation of CPD activities. All registered architects will have to successfully obtain annual requirement of 20 credit points from attending seminars/courses.

The CPD programme is divided into three categories, as follows:

Courses, seminars and workshops for developing technopreneurship
These courses are aimed at developing technopreneurship skills of the architect and include:

Business practice - setting up a practice
Human resource management
Office administration
Marketing
Corporate and personal financial management
Risk and quality management
Arbitration and mediation
Accounting
Architectural law
Project management
Contracts
Business communicating skills
Creative problem solving
Information technology
Mechanical & electrical co-ordination
Civil & structural co-ordination

Seminars and workshops courses to create awareness of the statutory requirements
These are aimed at informing the latest regulatory requirements of government agencies and include application procedure for new building plan submission system

Safety requirements in the construction industry, Land Transport Development, control guidelines and requirements, National Parks submission guidelines, requirements and procedures General requirements of the planning submissions pertaining to environment control Development control guidelines, computations of GFA and development charge and submission requirements

**Architecture Practice Course (APC)**
Since the revamp of the Professional Practice Examination Tutorials (PPE) in 2008, the Architectural Practice Course (APC), comprising 25 evening sessions conducted over a 6-month period, has prepared the examination candidates more thoroughly for the Professional Practice Examination.

In 2010, APC was reformatted to fulfill the Singapore Workforce Development Agency (WDA), Workforce Skills Qualifications (WSQ) standards and requirements to become a WSQ-approved course for APC participants to enjoy financial support for attending the course.
Architectural Design of Mass Rapid Transit Stations

The Singapore Land Transport Authority (LTA) Academy and the Singapore Institute of Architects (SIA), and in association with 60 Design Centre and Square Peg Design Consultants, jointly organized a course on “Architectural Design of Mass Rapid Transit Stations”. The course is designed to provide architects an overview of the design of Mass Rapid Transit (MRT) stations and related facilities. It is cater to assist architects with no prior experience in the design of LTA major transit projects and to enable the participants to more effectively employ and optimize processes relating to MRT applications, in the course of their work.

Project Safety & Health Coordinator Course

In line with the opening ceremony of the Construction Safety, Health and Security Campaign 2010, Singapore Institute of Architects (SIA) together with Association of Consulting Engineers Singapore (ACES) jointly organized the first Project Safety and Health Coordinator course under the Safety Design Coordinator Series 2010.

The course is designed to equip the building industry with relevant competencies to effectively implement the Design for Safety. The participants will have the skills and knowledge to function as a PSH Coordinator with the purpose to assist the client to address and identify means to eliminate or mitigate the risks inherent in the design of a construction project so as to reduce the safety and health risks during the construction, maintenance/repair phase, and demolition of the building and structure and; the ability to coordinate the flow of construction project safety and health risks information among the stakeholders from the design stage, to construction stage until the handover to the client for occupation and maintenance.

4.0 Key Issues Confronting Architectural Education

The kind of architects we get is a result of the kind of architectural education they receive at the University. Practice today calls for rigorous training in both design and technology as well as management. It also demands the architects to be able to handle design issues at conceptual level as well as constructional and technical issues related to design. With the increasing complexity in the building environment,
practice requires the architect to be multi-disciplinary in approach, able to interact with all consultants at the work site, and an understanding of building economics, management and business.

At the same time, architects in practice are also confronted by new developments in technology, particularly in Information technology and building systems; new practice trends, e.g. D&B, Corporatisation, which has seen the erosion of the architect's role; and an emerging awareness of the need to address bigger environmental issues, such as conservation of energy and the creation of a more balanced ecological system. Furthermore, there is an increasing trend towards a business-driven practice rather than design-driven practice. This could change the role of the architect in the next century.

Thus, the education of the architect at the undergraduate level should prepare them to fit well into the mainstream of practice. More importantly, there should be continuous evaluation and review of the educational curriculum to ensure relevance to the prevailing requirements of practice.

To provide a steady supply of talent into the profession, the Institute also continues to engage junior college students via career talks on the joy of being an architect in order to attract them to the profession.

5.0 New Initiatives

Over the next few years, the Institute intends to engage the general public on the awareness and appreciation of quality architectural design and the roles and responsibilities of architects in Singapore, in the belief that a better educated consumer will make the job of architects easier and enhance the quality of the industry.

On the education front, the Institute has been invited to giving feedback on the curriculum of Singapore’s 2nd Architectural School at the soon-to-function Singapore University of Technology and Design (SUTD), with the hope that graduating students will be industry-ready to face the multi-faceted challenges of today’s profession.