Title: Providing practical experience towards registration as an architect within the context of a supportive academic environment

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Abstract

A Faculty based projects office can support students who are seeking to work in alternative ways and provide them with the opportunity to pursue projects that are self-driven and motivated by personal passion. Projects carried out within Cass Projects are – regardless of their scale ambitious in their scope and intention.

Introduction

The Sir John Cass Faculty of Art, Architecture and Design (The Cass) at London Metropolitan University places socially engaged forms of practice at the core of its teaching. To support this approach the projects office, a registered architectural practice with the Royal Institute of British Architects, was established in 2004 to enable and encourage students and staff to undertake consultancy and research projects within the support of a professional practice environment. The incorporation of the School of Architecture into a newly formed Faculty comprising three Schools of Art, Architecture and Design in 2012, led to a re-branding of the projects office to become Cass Projects.

The projects office bridges academic discourse and architectural practice. It operates at different scales – at the 1:1 of talking to others, making, drawing and writing, at the mid-scale of built works, engaging with groups of people and particularly with local communities and areas of deprivation, and at the larger national and international scale of working to improve education - influencing social and economic policy and infrastructures. It operates under the direction of Professor Robert Mull, Dean of the Faculty and Anne Markey, Director of Cass Projects both of whom are also practising architects with over 25 years of experience. Two full time architectural assistants, both Cass graduates, are employed permanently and part-time staff and students join the office on a project-by-project basis. Cass Projects increasingly offers support to students and graduates wishing to obtain the practical experience necessary to register as an architect but within an academic context rather than through the conventional route of working within a practice.

Architectural Education in the UK is divided into three distinct parts; Part 1 typically comprises a three year undergraduate degree followed by a year out in practice, Part 2 typically comprises a two year post-graduate qualification and Part 3 a further year in practice followed by a professional practice examination.

This duration of seven years is becoming increasingly unsustainable for UK students because of the recent increase in tuition fees and the ability of graduates to repay loans taken out to recover these fees.

Through initiatives such as the projects office and by engaging with live projects in teaching, schools of architecture could simultaneously satisfy both academic criteria and the professional experience requirements and shave some time off the seven years.

Examples of projects carried out by Cass graduates that were also eligible for Part 1 and Part 3 practical experience are described and illustrated here, including school projects in London, India and Sierra Leone and infrastructure projects in India, Bosnia and Sri Lanka. The projects include actual commissions and self-initiated projects. The projects undertaken provide students and graduates with the experience of working through issues such as communicating with clients, users and communities; navigating legislative, planning and health and safety procedures as well as programming, procurement and construction. Projects range from conventional commissions for external clients, pro bono community projects to live design build projects. All work produced by the projects office is covered by the University's Professional Indemnity Insurance.

London Schools Projects

With the support of Cass Projects students and graduates have over the years worked on a number of inner-city school projects in the more deprived boroughs of London.

At Millfields School in Hackney we were appointed by the parents' association to develop a master plan for their overcrowded playground on a land locked inner city site. We engaged the artist Martin Kaltwasser and student volunteers from Studio 3 in the School of Architecture to involve the schoolchildren in a series of workshops to find out how they would like their playground to change. This resulted in Phase 1, a structure that allowed for imaginary play, whilst at the same time defining the junction between the junior and seniors areas. Phase 2 is currently being developed by Jen Ng, a Part 3 student – a master plan for the whole of the playground to improve and define what is currently an unexciting tarmac expanse of outdoor space.

Figure 1 Play structure for Millfields Primary School, Hackney by ASD Projects, London Metropolitan University with Martin Kaltwasser

At Kingsmead Primary School in Hackney, London Met student Anna Page designed and oversaw the building of a new classroom for reception age children, including an outdoor learning area and covered waiting area for parents during her Part 1 year out with the projects office. The projects office was invited to join a limited competition after one of the school governors had seen some of our previous schools projects that had been shortlisted for the Architects' Journal Small Projects Awards. We were appointed in Spring 2006 and the new classroom was to be ready in time for the second intake of reception children in January 2007. Anna oversaw the construction phase and, with a Part 2 student Rashid Ali who was employed specifically for the project, developed the detail drawings in conversation with the building contractor who was selected for their fast-track building system and their track record of working on innovative architectural designs.

Figure 2 Classroom interior, Kingsmead School, Hackney, by Anna Page, London Metropolitan University, photograph by Morley Von Sternberg Figure 3 Classroom, covered waiting area and outdoor play area, Kingsmead School, Hackney, by Anna Page, London Metropolitan University, photograph by Morley Von Sternberg

The Aldgate Project and Interdisciplinary Projects

The Aldgate Project was a cross faculty project initiated by the projects office on the creation of the new Faculty of Art, Architecture and Design. Academics were invited to respond to an outline brief and incorporate the project into their teaching. The project comprised over twenty cross-disciplinary projects that ran in the academic year from 2011-2012. A wide range of disciplines participated in the project such as architecture, fine art, jewellery, furniture design, textiles design and animation. Tutors and students worked with local community groups, charities and stakeholders expanding beyond the confines of the studio space. An aim of the project was to better connect the new Faculty with its surrounding area of Aldgate and Whitechapel in London's East End, a socially mixed, vibrant but also complex inner city area of London. One live project that grew out of the Aldgate Project was a commission acquired by Zoe Berman, a Part 3 student employed in the Projects Office, to prepare a feasibility study for local homelessness charity, Providence Row, to look at the spatial potential for an Urban Garden to engage their homeless clients to meaningful occupation.

In 2012 John McDonnell MP invited The Cass to propose and establish public art and architecture projects in Hayes, Middlesex. As a response to this, Cass Projects developed the Made in Hayes programme, a series of public art, architecture and design projects initiated by Cass students that will take place in Hayes over the coming years. All projects will consider what great things *have been, are being* and *will be* made in Hayes, and generate ideas about how the town can continue to flourish. Jen Ng of Cass Projects wrote the Made in Hayes brief and she is currently supporting Studio 3 in applications for funding to enable them to collaborate on a landscape improvement project for the Austin Estate that she will be able to use for her Part 3 practical experience.

International Projects

Working on participatory projects at a national level has informed our ability to undertake live projects at an international scale. In 2009 Bo Tang and Shamoon Patwari, two graduates, led two trips to Sierra Leone, West Africa with post-graduate students to carry out a detailed research study of the materials and construction techniques of local buildings. This research has been gathered into an extensive volume that documents all of the physical and cultural surveys that were collected, to be published shortly. The study informed the development of a live project under the direction of Professor Maurice Mitchell for a new building for Ivor Leigh Memorial School, which opened to pupils in August 2011.

Fig 4 Ivor Leigh Memorial School Elevation, by Bo Tang and Shamoon Patwari, London Metropolitan University

Tang and Patwari carried out a similar active research study in the settlement on Kuchhpura in Agra, India with a focus on hygiene awareness. Collected research gathered from working closely with local people influenced the subsequent design development for a low cost sanitation system, with the implementation of over 80 household septic tank toilets. The success of the toilet system, which started out as an initial prototype, has expanded to see Tang and Patwari collaborate with the Indian NGO CURE to build a De-Centralised Wastewater Treatment System that will treat wastewater from the main Kuchhpura drains to provide clean water for local farmers to irrigate their fields. Plans are being made to extend and improve the area around the treatment system to create a new public space in the settlement. Other projects designed by Tang and Patwari in India include 10 community classrooms for the children of quarry workers in Navi Mumbai that have been constructed in collaboration with the NGO ARPHEN.

Fig 5 De-Centralised Wastewater Treatment System at Kuchhpura by Bo Tang and Shamoon Patwari, London Metropolitan University

Fig 6 Community Classroom in Navi Mumbai by Bo Tang and Shamoon Patwari, London Metropolitan University

Increasingly the projects office supports international projects by students of The Free Unit, a post-graduate teaching unit led by Professors Robert Mull and Peter Carl with the practitioner Catrina Beevor. The Free Unit gives students the opportunity to propose, develop and realize independent projects. Some of these independent projects are live commissions or self initiated design build projects. The opportunity to acquire academic accreditation for these independent projects whilst simultaneously being enabled to deliver them within the supportive professional infrastructure of the projects office is a rare if not unique offer within the UK higher education environment. In recent years students have carried out projects, which emphasise their personal histories, often returning to places they have known or wish to work in the future.

Such projects include 'Space for Exchange': A Sustainable Return to Srebrenica by Vernes Causevic (2010-11), a proposal to turn Srebrenica into a sustainable regional centre for vocational education. This project developed into a live commission for Vernes to design a new building to provide this vocational education in Bratunac (neighbouring town to Srebrenica) in Bosnia through the projects office.

Another project currently supported by Cass Projects is Kattankudy Water Management Scheme by Naveen Anandakumar (2011-12). This commission is from the local community of a town in Sri Lanka that has been the focus of Naveen's research into Cultural and Infrastructural development. The project proposes a wastewater system that seeks to integrate itself with the existing physical and cultural infrastructure rather than impose itself on the urban fabric.

Cass Projects and Professional Registration

The Director Anne Markey supervises all projects carried out through Cass Projects. Professional Experience and Development Records required for the professional practice examination are completed by the student and signed by Anne Markey. Attendance at Continuing Professional Development events hosted by practices who are part of The Cass network is possible and the relevance of the experience for the student or graduate's particular needs is monitored on a regular basis and adjusted as necessary.

The scale of commissions and the length of time taken in securing funding for self-initiated projects means that it can take longer to gain the experience required to register as an architect in the UK than it would in conventional practice. Whilst the ideal length of time in practice at the Part 3 stage is one year students are required to demonstrate an understanding of law, practice, and building procurement that may not be achievable within such a period if the student's project has not by that stage addressed all of these issues. A Part 3 student is typically expected to understand the challenges of managing fee income and budgets in conventional practice. Cass Projects also encourages students to take an entrepreneurial approach to their practice and to consider initiating their own projects and securing funding for them.

Whilst Cass Projects is a registered architectural practice it is fully embedded within a University and as such its funding mechanisms are very different to conventional commercial practices. An advantage is that we have the potential to cross subsidise projects with income from other activities such as Continuing Professional Development and Contract Research and we engage with the core academic delivery of the Faculty.

Universities themselves will be called upon to be ever more resourceful with their income sources and financial management in the future and income generating activities such as those carried out through Cass Projects will become more important. This also means that the Faculty can more actively engage Cass Projects in international academic collaborations, drawing on the huge potential for graduate employment in countries outside the UK such as South Korea and Moscow to support students wishing to participate in both professional and academic exchanges and research in such countries.

Conclusion

Cass Projects' offer of a supportive professional practice to enable students to develop self-initiated projects and commissions from their academic work sends an important and positive message from the Faculty. It enables students to combine their academic studies with live projects whilst simultaneously fulfilling their professional practice requirements. Conceived of as an enabling vehicle in the first instance the projects office quickly developed an agenda that mirrored the Faculty's mission statement. Cass Projects quite simply asks that the projects it supports have a clear sense of social purpose. It is precisely this requirement that has resulted in a portfolio of projects that engage with complex issues relating to health, education and cultural heritage in areas subject to rapid change caused by poverty and political unrest.

Clients and users are able to benefit from talented students and graduates who produce thoughtful responses to their particular situation and needs. The quality of the buildings produced by Cass students and graduates through the projects office is recognized by professionals and critics through such programmes as the annual Architects' Journal Small Projects Award.

The projects office works closely with the academics in the Faculty to ensure cross-fertilization between the studio and the office. Bo Tang and Shamoon Patwari also teach with Professor Maurice Mitchell who uses live projects as a pedagogic tool and a research method in his Architecture of Rapid Change and Scarce Resources. Anna Page's concept design for Kingsmead School was developed and refined through a process of design reviews within the projects office and a number of crits with academics within the school.

This combination of the professional support and experience offered by Cass Projects and a Faculty with an emphasis on a socially engaged architecture produces projects of a quality that are – regardless of their scale – ambitious in their scope and intention.