

# Teaching and learning spaces to support excellence in learning

## Interim Report

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### Background

The learning outcomes of the module U30020 ( a compulsory part of the BA Architecture) focus on the need for students to develop an understanding of how buildings are put together and function. This is part of a structured progression in design technology over their three undergraduate years.

In the first year the principles of technology in design are introduced, in the second year the students analyse successful buildings and make a detailed case study, and in the third year they apply aspects of technology to their own designs

The CETL project has been associated with the second year U30020 case study module. Students work in groups to collect data for a case study of an existing building, and then complete an individual report from the data collection

### Aims and objectives presented in the CETL proposal, September 2007, reviewed point by point

*To expand the case study presently included in this module by encouraging students to travel to study interesting buildings.*

Much architectural building study is carried out without visiting the buildings, through the pages of books and magazines. This denies the functional aspect of building and reduces the building to a simple two dimensional object. One could argue that architects are weak in resolving the functions of buildings, and that many buildings perceived as great architecture, do not perform well. In this context, with the aspiration of producing architects who both achieve inspiring visual composition, as well as satisfying the requirements of the building users, it is particularly important that students visit buildings, become conversant with the opinions of building occupants and analyse buildings perceived as 'good architecture' They are attracted to buildings that have been prize winning, for example recipients of the Stirling prize have been chosen as case study buildings.

Part of the CETL funding has been used to provide travel bursaries to encourage students to travel to visit and analyse acclaimed buildings. Students have enjoyed the support offered by the travel bursaries, and have been prepared to make arrangements to visit buildings that catch their imagination, even if these are not close to Oxford. The funding has had a wide influence as it has opened the module to more distant buildings.

*The building case studies supported by the funding will focus on teaching and learning spaces that respond to changing students activities and approach to learning and /or specific comparisons of buildings or spaces relevant to the unit design project*

The students on the Architecture courses are very closely aligned with their design studios and case study buildings are chosen to inform their design projects. Choosing buildings that might be good examples of teaching and learning spaces has not been part of the design unit agenda because the undergraduate design projects mostly have not included the complexities of educational buildings.

*To promote sustainability in design. There is an underpinning interest in these projects from a wider perspective of global sustainability. How do the buildings*

*perform? Are they conservative with energy use and materials? Will they require lots of maintenance? Information will be collected to inform a decision about the sustainability credentials of each building.*

Students make a detailed analysis of the way their case study buildings perform, conducting surveys of the users groups as well as measuring and assessing the environmental conditions in the building, and considering both maintenance problems and ways in which the buildings could have been improved. They are very appreciative of the opportunities for going out into real buildings and for assessing how they perform- in the feedback, the assessment and evaluation of a real building is usually the thing mentioned as the best thing. Evaluating the sustainability of the buildings from the energy information is difficult because not many buildings collect this data, and those that have aspirations of low energy use are often particularly unwilling to release their performance data. Only a few of the case studies have been able to assess performance from an energy point of view.

*To develop new student skills suitable to the developing market place but not included in the existing module, for example presentation for publication, and filming skills, uploading into Wiki, to produce a survey that can convey the widest understanding of the building to the end user of the report.*

This aspect of the project has been very successful. With the assistance of Richard Francis, students groups have made wikis to share their survey information around the group. The wikis provide a resource of building studies that can be used in the module in subsequent years. It is planned that analysis work of the virtual field trips mounted on the wiki can be used as part of the module course work but this option has not yet been explored widely, partly because student groups in successive years are attracted to the same buildings.

The use of research videos has been particularly successful. CETL Funding was used to engage specialist lecturers in video work ( Regina Lim who in 2007-08 was completing her Phd) and also to bring in leaders in the field of post occupancy building studies.

Wider use of Brookes Virtual has been achieved, using it to upload the videos for students comments, and also to deliver audio feedback on the videos by the tutors. This is popular because it gives a more immediate response.

The project was presented at the Oxford Conference for Architectural Education (paper attached) to disseminate insights gained and to generate discussion on teaching technology in design. An evaluation of the teaching techniques afforded by the CETL support and an investigation of ways to improve the teaching and learning experience was made and the improvements indicated by the research incorporated into the module for the year 2008/09

#### **Year 2007-08 Financial appraisal:**

	2007/08 Budget £	Money spent £
Extra teaching support (staff plus PhD students)	1640	920
Building visit scholarships	3000	bids 2790, claimed 1808.
Party	<u>300</u>	<u>000</u>
Totals	4940	2728

Residue of staff advance brought forward to fund 2008/09 £982  
Money spent in year 2007/08 £2728.06

#### **Comment on the funding:**

Regina Lim who was completing her PhD last year was co-opted to teach filming techniques as she was using that technique in her PhD. Adrian Leaman, a leader in

the field of post occupancy studies came to lecture to the students: the funding for outside speakers was very helpful as previously no budget was available in technology for external specialists. Regina Lim was already teaching some hours in Urban design and therefore had an established teaching rate which was more expensive than the hourly rate budgeted for PhD students. In our cohort of PhD students, the others involved with sustainability were away collecting data and were therefore not available to tutor.

The students were been pleased to apply and to compete for funding. 87 students of the cohort of 128 students applied for the funding and were given approval to spend, but only 67 students presented receipts to claim the money. The uptake of the funding with final receipts to claim the money was not particularly successful- only about two thirds of the money allocated was actually claimed with receipts. There was some tendency to over claim at the bid stage- which, coupled with the substantial drop out rate in receipts, meant that the money was considerably under spent. The largest claim, involving everyone in Unit D, was made by one of the unit tutors who organised a coach to Brighton where the students were able to visit all three of the case study buildings in that unit (Brighton Earthship and two Walter Segal self build projects)

Administering the payments was time consuming for me. It was suggested that it was better for the students to receive cash which they definitely preferred. It had been hoped to make the funding 'cash in advance' which might have resulted in more uptake- but many of the bids were quite vague and so this was not practical.

### **Conclusions**

For an outlay of just under £3000 the CETL funding has had a significant impact on the module and so I think could be described as money well spent.

The CETL fellowship has helped me to develop the module ,both by facilitating contact with other networks and also by encouraging research into teaching and learning , and the production of a paper for the Oxford Conference.