

Student Learning Centre (SLC) Embraces the New Melbourne Model of Teaching: Facilitating Collaborative Learning

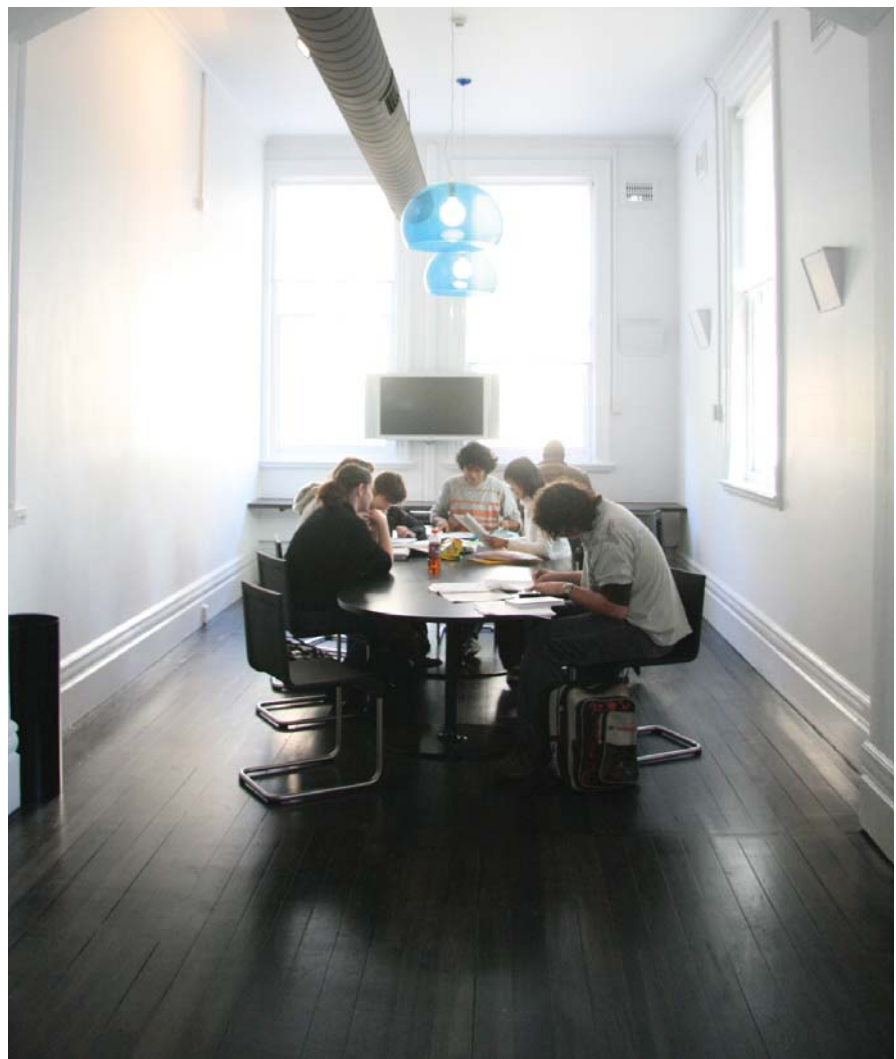
By Sarah Ball

Learning is about discovery and change. As schools and universities look to the future, it is fundamental that they provide environments that facilitate collaborative learning and act as points for interaction and social activity.

The new Student Learning Centre will be about creating the Melbourne on-campus experience - the learning, social interaction, the life and centre of the Engineering Faculty. The Student Learning Centre will reinforce the faculty's commitment to providing progressive, dynamic and innovative environments. It will foster the idea of a community of learners and celebrate the tradition and excellence of the Engineering Faculty.

The School of Engineering at the University of Melbourne has for many years delivered its teaching in a traditional university mode. Feedback from industry employers indicated that University of Melbourne students are well educated in engineering principles and techniques but are less aware of skills required in large corporate organizations. In 2007, the School of Engineering determined that it would re-invent its teaching program and its learning environments to develop these skills. Not only will students learn about engineering analytical processes at a very high standard but also develop communication, presentation, teamwork and collaboration skills.

This coincided with the initiation of the new University-wide under-



The Nook



The Lounge

graduate curriculum that offers students in the early stage of their university course greater opportunities for choice in subject selection. The Melbourne Model is a three year undergraduate degree followed by a two year Master's program. The initial years of the degree allow students to experience different disciplines before deciding on their choice of Master's degree. Rather than teaching by direction, the emphasis is on learning by discovery and sampling through breadth of subject material before focusing on depth of

subject content. The pedagogy change focused on group based learning and the traditional teaching environment had to change to accommodate this.

The redevelopment of the existing Engineering Library into a Student Learning Centre (SLC) embraces the new Melbourne Model of teaching: facilitating collaborative learning while acting as a point for interaction and social activity. The challenges we faced in this project included working within an existing building, making the most of a limited budget and



The Ante Room

aligning the space with new teaching and learning pedagogy.

Learning is about discovery and change -- learning spaces must support this process. The SLC provides a number of formal and informal spaces that respond to the pedagogical shift, creating an innovative adaptable environment.

The SLC is for first year engineering students with two new adaptable classrooms as key attractors to the centre, while the varied supporting group study areas provide students with a place to gather, share knowledge and ideas beyond the formal teaching hours or to simply chill out. The aim was to avoid typical institutional design and instead draw inspiration from places students often study or hang out - kitchen table, lounge room, study, library, cafes and bars.

The interiors are formed by the elegant existing Old Engineering Building; the façade is of heritage significance. The interiors have been stripped back to its original envelope and linings. The quirky and antiquated character has been retained and celebrated as a home away from home for students. The existing fireplace evokes a sitting room while the small skylight corridor is transformed into an outdoor courtyard environment. The large open column free space is based on an open plan warehouse fit-out, containing the notion of dining, kitchen, lounge and formal meeting space. The furniture language is semi-industrial, timeless and could easily become a city alleyway bar. In a symmetrical more private study area, the reference is a more traditional library setting, both dark and formal, attracting a quiet group or individual study.

Classroom

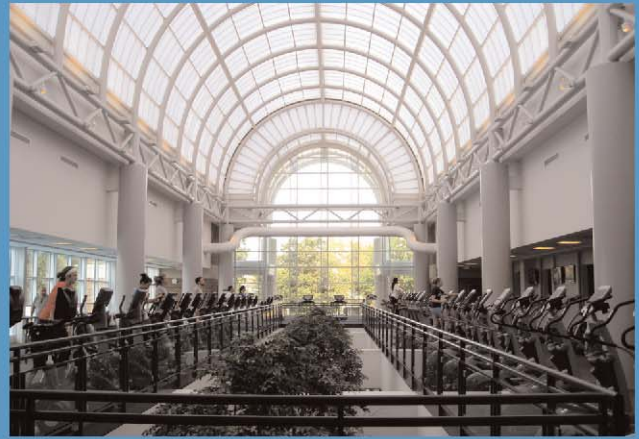
The two pivotal classroom settings are key attractors to the Student Learning Centre. These formal classroom settings are designed to support collaborative learning approaches.

Each classroom accommodates classes of 60 students. The collabora-

TRANSLUCENT DAYLIGHTING SYSTEMS FOR SCHOOLS

- Diffused soft glare-free daylight
- Excellent insulation values, as high as R=10
- Tested as new after 10 years of harsh FL weathering
- Daylighting proven to improve student test performance

Phone (800) 759-6985
www.cpidaylighting.com



University of Illinois, IL



Ferris High School, TX



James Taylor HS, TX



Speed School, IL

tive learning approaches involve students in learning activities within small to medium sized groups as well as individually. Specially designed tables accommodate two computers to allow for students to work in groups of three.

The classroom setting supports a one-to-many presentation style approach, which may involve either the teacher or a student as the presenter. Student movement around the room is facilitated to enable exchange and interaction between groups, as well as the reconstitution of groups during a class. The design of the 'desks' and the integrated IT allows students to 'share' and 'distribute' their work in progress or completed material with other groups within the class.

At the same time the classroom is more than just an IT-intensive space. It needs to be a place for discussion, print-based activity and possibly the development of some form of 'hands-on' skills. This is an environment where 'communica-

tion' and 'presentation' skills are likely to be practiced and highlighted. To allow for this, the 'desks' are designed in such a manner so that the computer screens can be moved to the side to allow for groups of six to also work across the tables.

A central teacher table is very different from the traditional teacher 'stand-and-deliver' approach from the front of the class. The design allows for teaching staff to move freely from group to group engaging students in their specific concerns and problems.

Importantly, the classroom setting is available to students beyond time-tabled hours.

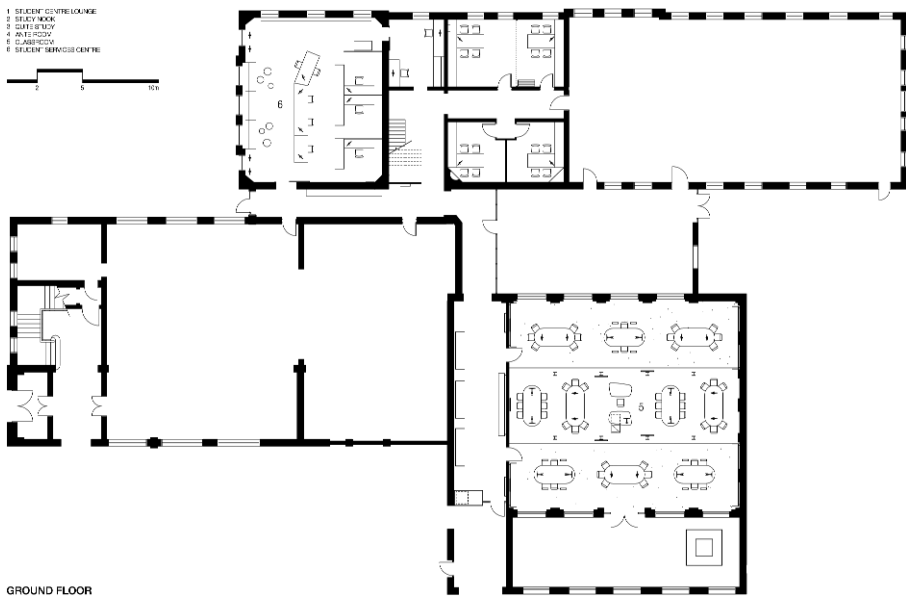
Informal Student Lounge

This area provides students with opportunities to gather and interact in a variety of settings and encourages the continuation of the "learning conversation" beyond the classroom. The lounge supports informal, group-based learning activity, and the blurring between study and



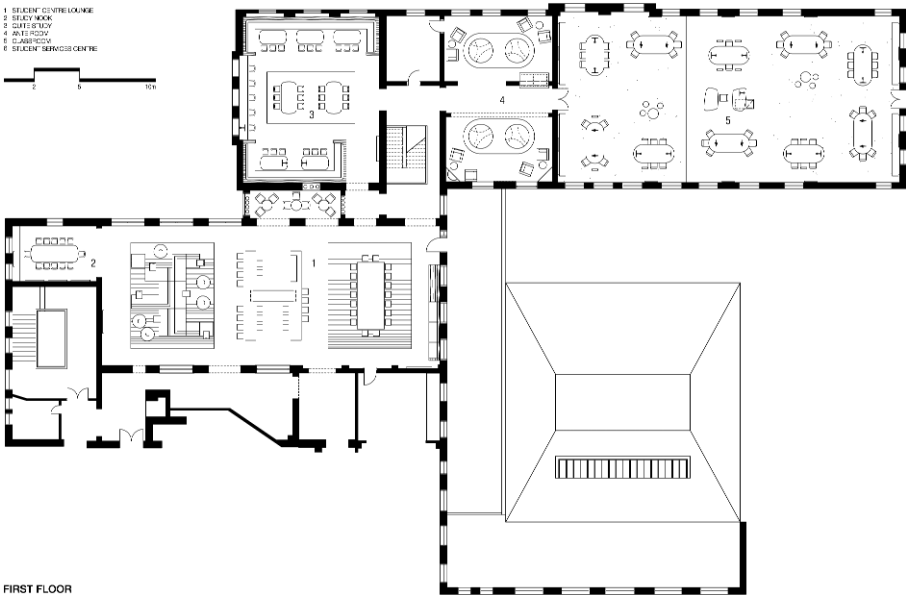
Classroom

- 1 STUDENT CENTRE LOUNGE
- 2 STUDY NOOK
- 3 CAFE ENTRY
- 4 ANTE ROOM
- 5 CLASSROOM
- 6 STUDENT SERVICES CENTRE



GROUND FLOOR

- 1 STUDENT CENTRE LOUNGE
- 2 STUDY NOOK
- 3 CAFE ENTRY
- 4 ANTE ROOM
- 5 CLASSROOM
- 6 STUDENT SERVICES CENTRE



FIRST FLOOR

social interaction which also binds the group. This setting draws upon the idea of the spaces in which students may study at home - the dining table, kitchen bench and lounge. It is important that in combination, the student lounge provides a diversity of seating and working space options for students.

The furniture is also akin to many of the cafés and bars where students spend their time out of uni hours. The arrangement of the study lounge

enables 'separation' between groups while avoiding 'segregation' from the wider group. Visual contact across the whole room is a priority so that all feel part of the whole group.

The Nook

The nook is located off the student lounge and provides a place where groups can prepare and practice presentations and other group-based assessment tasks. The LCD screen allows student to connect

their laptop and present their work to the group.

The Garden

The garden is a little space between the lounge and the study, filled with natural light from skylights above and the arched window. Outdoor furniture is suitable for individuals or groups to read, chat or study with modern grass under their feet.

The Study

This space draws on the idea of the den, the study, and old world libraries. Darker and moodier tones set the scene that this is a quieter study area. Here students will find tables and chairs to accommodate small groups of around 5-6 students. They can spread a range of material across the table as they collaborate on joint activities.

Ante Room

Located outside the first floor classroom, the ante room is a space



Classroom



Ante Room



The Study

set aside for social interaction where students can sit in large arm chairs and talk, or where they can meet before or after class. There are no formal study facilities in this space; it is much more a 'retreat' space.

The Student Learning Centre, with its variety of learning and working spaces has created an active collaborative learning centre and is a working example as to why such spaces are a valid part of the University Campus. The spaces support students in the skills of teamwork, problem solving and communication which are necessary to be "work ready." The School of Engineering, through the Woods Bagot design of the space, has led the way at the University of Melbourne in the development of these facilities and the new spaces created within a traditional old building at the heart of the engineering precinct are envied by students across the University and admired by universities around the world. ■

Sarah Ball
Principal
Woods Bagot

Sarah Ball is a Woods Bagot Principal and a leader in the Education & Science Sector with extensive experience in both Australia and overseas in the development of new sustainable learning environments. She is committed to design quality and is engaged in all aspects of the design process including early investigative work, master planning, initial strategic concepts and planning, schematic and detailed design through to implementation.

Sarah is a registered Architect (Victoria, Australia) and her experience includes three years in the UK working on various independent academy schools and Building Schools for the Future projects. Since joining Woods Bagot she has led several major education projects including the Perth Modern School Redevelopment, Zayed University Library, Albert Park Secondary College, Berwick Select Entry School and the CEFPI Award winning University of Melbourne, Engineering Faculty Student Learning Centre.