Learning From New Learning Environments

The design of new (& improved) learning environments must draw on the research into effective T & L in higher ed - we know much about improving teaching & learning already.

But, successful learning environments (classrooms, informal settings) can seduce & deceive the viewer…..

Key lessons are to be found in design ‘process’ & design ‘ideas’ - including what options were not taken & why?

Mistake to simply duplicate & transpose to other contexts…

Socio-spatial implications of new pedagogy

<table>
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<th>Student-centred</th>
<th>Active</th>
<th>Problem-based</th>
<th>Collaborative</th>
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<td><em>Space oriented as ‘their space’</em>&lt;br&gt;<em>Student control of facilities</em></td>
<td><em>Student movement within space</em>&lt;br&gt;<em>Constructing knowledge/skills,</em>&lt;br&gt;<em>'Doing' (thinking is 'doing' too)</em></td>
<td><em>Formulate ‘problems’</em>&lt;br&gt;<em>Trial/test outcomes</em>&lt;br&gt;<em>Present solutions to class</em></td>
<td><em>Size of groups &amp; what are they doing</em>&lt;br&gt;<em>Ways to interact/exchange/assist</em></td>
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Classrooms for new pedagogy?
Each of these classrooms are located in two buildings that were acclaimed as 'architecture'……?

Little integration of 'cultural' collections into classrooms - why?
What impact does intensive IT presence have on users?

Focus of my presentation:
✦ Critique of current approach to design of new classrooms (& other learning spaces)
✦ Designing for ‘Place’ not space
✦ Propose a concept of Teaching & Learning process stressing ‘key’ relationships as the basis for classroom design
✦ Describe a design process informed by this perspective
.....the current process in universities?

Conflicting ways of ‘seeing’ new classrooms within universities...

✦ **Property/Facilities staff** - project as ‘construction process’, schedule, budget - they ‘own’ the PROCESS- to increase quantity/quality of property stock

✦ **Space Management/Timetabling** - space to be allocated with maximum efficiency - typically have no first-hand knowledge of specific spaces

✦ **AV/IT** - classrooms as platform/shell for installation & operation of technology- see AV/IT as device added to the space

✦ **Teaching team** - classroom ‘outside’ regular responsibilities; to be used on completion (not a priority factor in T & L process)

✦ **Academic Developers** - professional development rarely linked to use of new classrooms
... and the **project architects**:

- See themselves as the expert designer of space (even when not experienced in creating T & L spaces) - often not good 'collaborators' in design process.

- (often) see the new space(s) via the mechanism of a poor 'brief' - tend to reproduce existing 'types' of classrooms or copy 'latest' design.

- (often) fail to appreciate the needs of users of the space being created (better at building structures than creating liveable spaces?)

...typically results in a Project process & 'Brief':

- Focused on physical parameters - i.e. What is to be built

- Fixed on construction process - location, schedule, budget (delivering the job)

- Uncertain about project 'client'

- Lacking 'educational' input & focus

- Not supported by post-construction 'implementation' plan re educational use

"Surely it is the supreme illusion to defer to architects, urbanists or planners as being experts or ultimate authorities in matters relating to space."

- Lefebvre, *The Production of Space.*

*The creation of improved learning environments is an 'educational' design process.*

Designing Effective Learning Environments: towards an authentic response?
Key factors in design process:

*Understanding of T & L principles & research.
*Accurate project brief - including client’s educational aims & other requirements.
*Potential of the space - its physical & other attributes.
*Mix of expertise & good spatial awareness - knowledgeable & high expectations.

Approaching the process as design:

Time intensive.
Risk-taking.
Discovery - exploration.
Addresses specific ‘problem’.
Questions established practice, thinking.
Uncertain (failure?).
Collaborative (outside ‘job’ boundaries).

Changing Perspective from ‘Space’ to ‘Place’...

“A place is where I am situated, where I find myself, physically, but also emotionally, spiritually, intellectually. A place is the space I inhabit, and all the beings that inhabit with me. Place defines me and I define it: it acts on me and I act on it. A place encompasses me, sustains me. I live in a place.”

-Walck, 1996.

Classrooms must have the capacity to become ‘places’ for students/teachers:

✦ Develop sense of belonging (‘insider’ not ‘outsider’)
✦ Inhabit & occupy - not just ‘use’
✦ Sense of ownership
✦ Control
✦ Comfort

.... a simple example
Studio-classroom…
mix of formal to informal use…. comfortable, colourful, options…
…. it's their ‘place’

… possibilities???

When we introduce the educational perspective into the ‘design process’, must view Teaching & Learning as more than:
- curriculum
- content
- teaching methods
- assessment

…. see T & L in terms of key relationships ....

Student-Centred Relational View of T & L

“The physical environment that we construct is as much a social phenomenon as it is a physical one”.

- Proshansky (in Lawson, 2001)
Case Study: Learning Lab, The University of Melbourne.

Aim:
replace a 100 seat, tiered lecture theatre (venue for Chemistry tutorials) & create a site for more active tutorials.

.... confront the university (& visitors) with a space that questions the form and function of the classroom...

Learning Lab Design Based on:

- Primary focus on group experience.
- Class of 40 max.
- Volume of space enabled ‘tiers’ to separate groups - their ‘place’.
- Collaborative use of IT/AV.
- Student control of key facilities.
- Support exchange & interaction within & between groups.
- Teacher as facilitator; mobile with easy access to all students.

Learning Lab Project Personnel & Expertise:

- Assoc. Professor Peter Tregloan, Chemistry - Academic team leader.
- Jon Peacock, University of Melbourne Information Services - AV/IT design.
- Carlo Sgro, University of Melbourne Information Services - AV/IT design.
- Frank McCoy, University of Melbourne Property & Campus Services - project construction manager.
- Peter Schreuder/Jo Joyce, Blomquist & Wark - project architects
- Peter Jamieson - Learning Environment Designer.

*One other key factor- full support of an engaged university leadership
Viewed ‘Functionally’ New Classroom is:

- 3-tiered floor area
- 40 student capacity
- Arranged as groups - (5 x 8)
- Each group in a distinct zone
- Each zone fitted with large LCD screen, 2 desktop computers, document camera, whiteboard
- Teaching nook - AV/IT facilities, room control, ‘dual’ teaching site
- ‘Break-out’ space
- ‘Demonstration’ point (Chemistry)
- Extraction system (Chemistry)
- Not Chemistry specific - universal ‘booking’

Related Matters:

- Design reflects research-based findings on effective T & L in higher ed.
- Curriculum & teaching practice reviewed & renewed simultaneously with design & construction process
- All teachers required to undertake formal professional development - conducted in the new classroom - prior to use
- Commenced use - start of 2007 academic year
- Formal evaluation to commence second semester 2007 (cameras enable remote access observation/recording)
1. Student-Content Relationship

Provision of LCD screens, IT access.

Teacher material ‘distributed’ to zones - students use IT to search, create.

‘Working’ surfaces in zones include ‘doc’ camera, table surface, white board, floor space, benches.

2. The Teacher-Student Relationship

Teacher proximity to all student groups.

Easy physical access.

Intimate atmosphere.
‘Scaling up’ -
‘Scaling down’

... easy shift from presentation mode....

... to group mode.

3. Student-Student Relationship

Group focus -
max of 8;
easily transforms to 2 x 4.
- enclosed ‘place’.

Tiers ‘separate’
groups - reinforces focus on the ‘group’ over the ‘class’.

Table versatility supports various use & student combinations ...

... promotes student control over zone
Material exchange’ within & across groups.

Collaborative IT use.

‘Place’-making in the zones

Student storage provided in zones, coat-hangers.

Student control of IT, lighting .... network link & power provided for other use.

‘Placing’ the teacher in the setting

Teaching ‘nook’ with views to all zones - includes computer, ‘doc’ camera, DVD-CD player; mobile AMX room control.

‘Dual’ teaching position.

Summing up...

It is not sufficient to see the Learning Lab as a ‘type’ of classroom (collaborative learning) ... vital that it be seen in terms of its socio-spatial qualities.

Its design reflects consideration for the teacher & students.

It is exciting, provocative, comfortable, generous, well-appointed, interesting & contains many possibilities.....

In this sense, it is a ‘place’ for learning from which we can all learn.