



Increasing Interaction and Engagement: Leveraging our infrastructure investment to support student learning

Dr Gordon Howell
Questnet 2009

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Outline of this presentation

- Space
- QUT model
- Traditional technology
- Learning principles
- The way forward at QUT

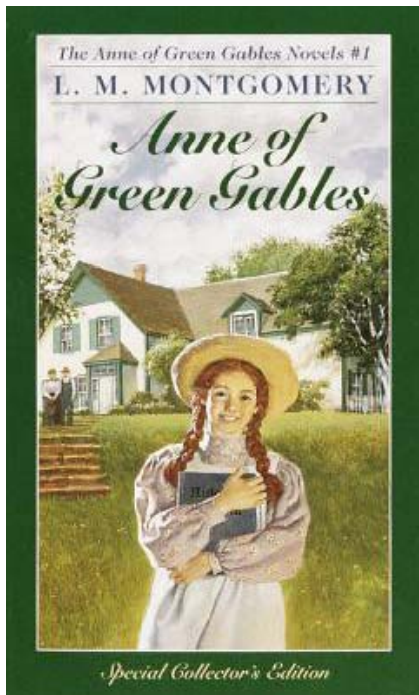
A world of wonderful examples



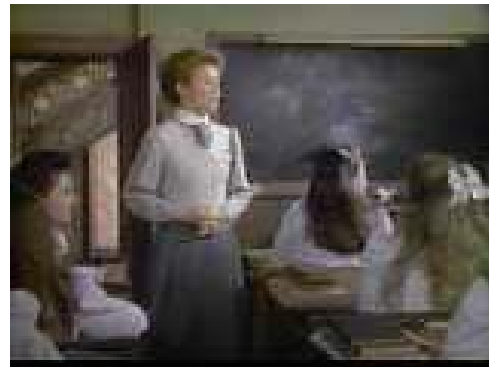
QUT Lab 2.0



Reflecting on the past



2008 was the 100th anniversary of Lucy Maud Montgomery's 'Anne of Green Gables'



Gordon Howell cefpi 2008

Reflecting on the past



Google images
Accessed 25 May 2008



www.workhouse.org.au
Accessed 25 May 2008

Circa 1900

Circa 1891

The reality for most QUT students



B119 Front



B119 Rear



B121 Front



B121 Rear



B122 Front



B122 Rear



B124 Front



B124 Rear



B223 Front



B223 Rear



B224 Front



B224 Rear



B225 Front



B225 Rear



B226 Front



B226 Rear



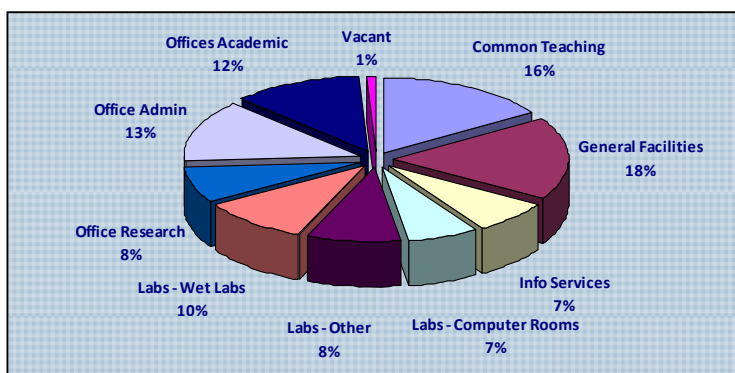
B304 Front



B304 Rear

The Nature of the Space Dilemma

- Useable Floor Area to equivalent full-time student load (UFA/EFTSL) is 6.9 at QUT
 - 34% below the average for the Australian University sector
 - 4.5% below other Australian Technology Network (ATN) Universities, (TEFMA data)



The QUT Model

- Technology provided is to be available to all teaching spaces and not just a selected few.
- Student experience is uniform regardless of where they are timetabled
- The Investment in classroom infrastructure targeted at maximising University learning and teaching objectives



Current technology deployment

- 298 AMX-controlled teaching spaces
- a central room management system that utilises RMS software to remotely monitor teaching spaces
- a common MELT PC interface across classrooms and lecture theatres that enables teaching staff to manage their environment and display resources
- Wireless coverage to all learning spaces



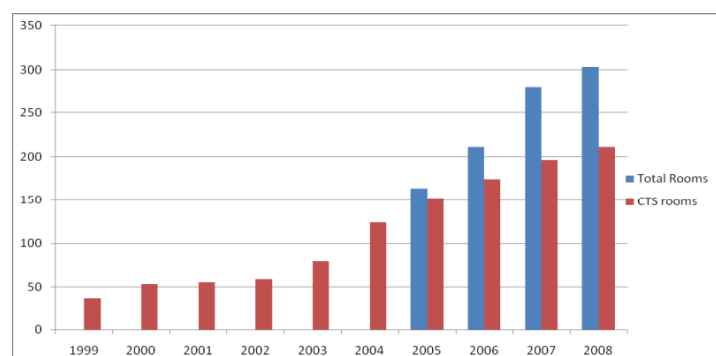
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The Nature of the Technology Dilemma

- The deployment of appropriate technology into all of QUT's central spaces has resulted in high levels of utilisation, and high levels of academic satisfaction (92.9%)
 - But 62% of respondents felt that the same equipment limited their choice of teaching activity

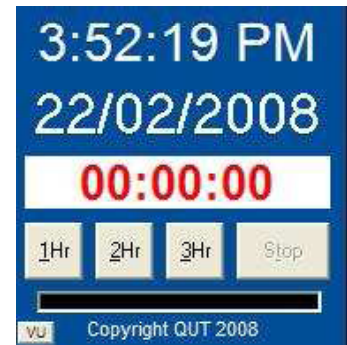


Currently implementing lecture recording in all central rooms

Audio and screen capture.

Hosted on the PC in each lecture room.

Linked to media site servers.



<http://mediaserv1.qut.edu.au/>

The Mobile Collaborative Workstation (2009)



- Consists of a plasma screen on a mobile trolley, a computer, and video conferencing facilities.
- Incorporates lecture recording
- Connectivity on the device is managed wirelessly.

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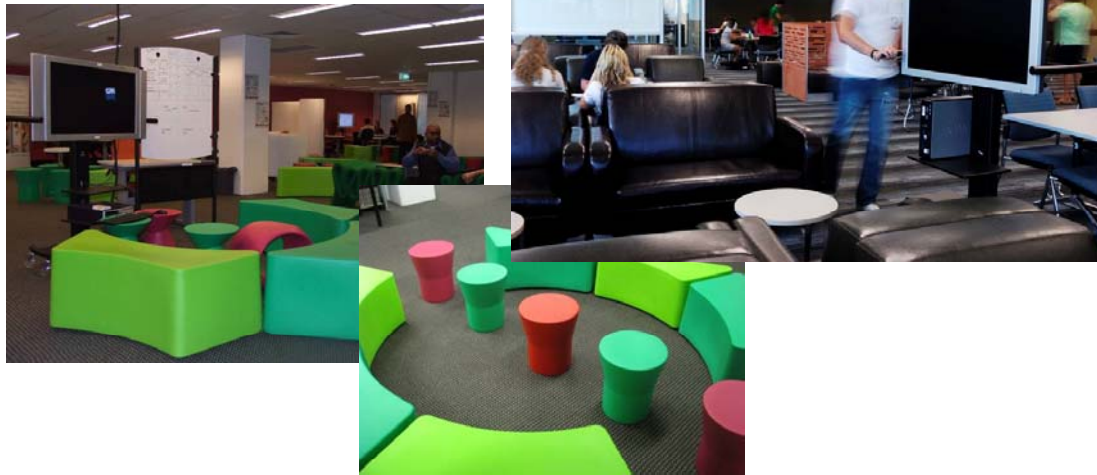
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The Mobile Collaborative Workstation (2009)



- The MoCoWs now have all the functionality of a small classroom with the ability to be moved and located anywhere.
- Just add power.

Supporting New Spaces



QUT in a Box



This utilises the same technology as QUT wireless connectivity on the intercampus buses.

Allows wireless devices to join the QUT network, as though they were at QUT.

For example, when combined with a MoCow it will allow Lecture recording anywhere.

TeamSpot

QUT has negotiated a site license for TeamSpot collaboration software to be available on all centrally supported teaching spaces from the start of second semester.

TeamSpot supports increased Information mobility and collaboration by enabling staff and students to work within a shared workspace.

Help your team work together... better

Shared Common Workspace

Team members can work independently on different tasks on their computers - their **personal workspaces** - then share their results in a common **public interactive display** - the **public workspace** - where others can modify the shared documents using their own keyboard and mouse.



Information Mobility

Participants can easily send files, folders, or web URLs between computers in the TeamSpot with a single drag and drop action. Senders can choose to target individual computers, a common public display, or all computers connected to the TeamSpot.



Spaces with Memory

The Active automatically captures a record of information files, folders, URLs shared in the group and makes that record available to anyone on the team throughout the session. The Active can be used to personal computers at any time and can be imported and re-used in future sessions.



Interactive Screen-Sharing

You can redirect your computer's desktop to display on a common public screen or to another person's computer. This mode, 'View' and 'Share' offer different levels of interaction needed to temporarily transform a personal computer into a resource accessible to the entire group via the common workspace.

Interactivity

Investigating interactive touch screens

Evaluating Wii devices to support virtualisation and interactivity.



Thank you



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Dr Gordon Howell is currently Manager Learning Environments Support at Queensland University of Technology. In this role he is responsible for the support and enhancement of the technology in the university's 300 lecture theatres, lecture rooms, tute rooms, and video conference facilities and the deployment and operation of QUT's 3500 (Approx) public access computers.

Dr Howell is also Technology Advisor to Divine Word University (PNG), and has provided strategic advice on the introduction of PNG-ARNet.

He has had in excess of 20 years experience within education and technology management; having worked as a Research Fellow at the University of Queensland; Manager Client Support Services (IT) at Australian Catholic University where he was responsible for the management of the IT and technology support for Australian Catholic University's 1000 staff and 10 000 students encompassing 6 campuses in 4 states with 200 learning spaces; and as Acting Director IT where he oversaw the introduction of the first end to end VoIP network in the Asia Pacific.

Dr Howell has provided consulting services both within Australia and PNG for high quality, sustainable IT solutions. His particular area of interest is appropriate technology deployment supporting the learning paradigm of social constructivism.