DANMUNNERLEY



A collection of projects and works from Education, Design and Technology

INSPIRE learning environments blended pedagogy and design

LEARNING SPACE DESIGNER - INSPIRE centre, University of Canberra

The INSPIRE centre is a \$7 million purpose built research, innovation and learning space for Education. Bridging higher education and the school sector through partnership programs with ACT Department of Education and Training and the Office of the Deputy Vice Chancellor for Education.

At the heart of the building is a large mixed use atrium that connects all the venues on two levels and encourages exploration and playfulness from visitors through unique seating and brightly colored furnishings. A technology enabled active learning room based on the MIT model can host 60-100 in group and theatre layout, with multiple projectors and writeable walls providing plenty of space to brainstorm and visualize ideas in groups or independently. Studio rooms and a podcast studio provide smaller more intimate venues and an executive seminar and flight lounge offer more discreet get together and conversation spaces. Together with hot-swap offices, desk space and an exhibition area the venue is unique on campus with a gentle industrial style, which complements a natural setting.

The venue has at its core a clear purpose for each learning environment. New pedagogies are embedded in the fabric of the space revealing themselves as we move further away from the 20th century. Design thinking, active learning, student centeredness and mobilization of the curriculum lead to us flipping the classroom and connecting space and surface both digitally and in the analogue.

To learn more about INSPIRE please visit, http://inspire.edu.au

Watch a short video to capture how the Global Service Jam used the INSPIRE venue. http://bit.ly/inspvid

Global Service Jam photos <u>http://bit.ly/canjam12</u>

INSPIRE centre http://bit.ly/inspirepic

hothouse studio

innovation space for academics

PROJECT LEADER - Hothouse Program, Building Blended Learning Capacity, \$216,000 SIF funded

The hothouse studio was conceived as a prototype space to explore new opportunities for learning design and encourage collaborative practice across the universities seven disciplines. Funded by the University of Canberra Strategic Initiative Fund (SIF). This 12 month project was initiated in 2010 and aimed to design, implement and evaluate an environment where academic development, educational leadership, ideas exchange, and educational technology training and support could occur.

Through a competitive application process, 24 innovative academics were identified with projects categorized under five themes. Including blended learning, open education, student centeredness, connectivism and mobile education. A 'hothousing' program was developed and the task of redesigning individual academic units provided a contextual focus for the participants.

The hothouse program was strategically aligned to support the introduction of an additional semester (winter term) and enhance the adoption of blended learning strategies to deal with the new shortened seven week semester. The hothouse process supported the immediate needs of academics scheduled for teaching in the winter term, and built upon the University's blended learning strategy to provide an effective and relevant program for academic staff.

A centrally located space was identified and

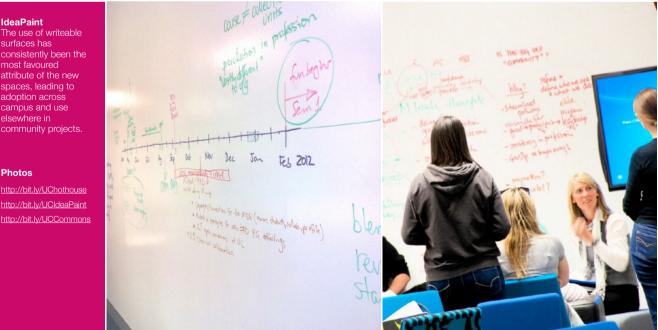
developed, providing a neutral location, with 24h access for participants to work on teaching innovations. During this period the staff were able to drop-in for support from academic developers. designers and e-learning specialists, exchange ideas and best practices with each other through scheduled breakfast/lunch events, search through resources like teaching models, exemplars and case studies or simply use computing resources in a quiet, focused and supported environment.

"Resources + Freedom = Innovation"

Michael DePercy Faculty of Business & Government

The space provided access to printing, wifi, projectors & LED screens, informal furniture, large area work tables, writeable surfaces and good quality coffee. In addition to this it also offered a training space for scheduled and just-in-time training. The hothouse was supported by the Teaching and Learning Centre staff and a full time project officer who could assist with a wide range on user needs.

The hothouse program has been identified through student course evaluations as a major contributor to the success of winter term units and through a commissioned evaluation to the overall success of the winter term. Whilst the studio design has lead to the development of more commons spaces across campus, in particular the teaching and learning commons. (see below)



IdeaPaint

surfaces has consistently been the most favoured attribute of the new spaces, leading to adoption acros campus and use elsewhere in community projects.

Photos

http://bit.ly/UChothouse http://bit.ly/UCIdeaPaint http://bit.ly/UCCommons ARstudio creating opportunities for multimodal lavered learning through AR

PRINCIPAL INVESTIGATOR - \$204,000 ALTC funded

Augmented reality offers opportunities to expand our concept of learning spaces, to create new dimensions in mobile learning and to increase connectedness of learners in multiple contexts. From simple systems where a tagged artifact reveals hidden images when viewed through a fixed web cam to interactive environments accessible from mobile devices allowing for communication and co-design, the



technology for augmented reality is here now.

Augmented reality is being embraced in marketing, the visual arts and in the museum sector. There is a real imperative for the education sector to experiment and find ways of using augmented reality to enhance student learning.

The ARstudio is a 2 year research project, funded by the Australian Learning and Teaching Council (ALTC). This project has the primary goals of developing effective uses of augmented reality in an educational context, together with tools for mapping its uptake and evaluating its effectiveness."

"The ARstudio project has recently been awarded funding from the Australian Learning and **Teaching Council to** research uses for augmented reality in educational settings."

The Australian



The studio itself is a physical environment located in the INSPIRE centre at the University of Canberra. Partner universities include the Australian National University and Macquarie University. The AR studio provides a venue to focus expertise, develop practice, provide resources and connect with industry partners. The AR studio aims to produce four key deliverables ..

- **exemplAR** practice models, 1. illustrating interactive, pedagogically-driven uses of AR in common learning spaces;
- 2. trackAR - tools for mapping the uptake and evaluating the effectiveness of AR-based learning



"located in the soon-to-be-opened Inspire Centre – a place designed to encourage creative thinking"

Makerspace

tools for creative learning

LEARNING SPACE DESIGNER at INSPIRE

The 'makerspace' concept has it's roots in hacking and counter culture. Popularized online through websites like including Visualize, Archive, Build, 'instructables' and through local networking groups like HackSpaceVoid the opportunities for students to participate in inter-disciplinary research and learning. are vast.

Whether it's fabricating prototypes on a 3D printer or monitoring neural activity with an Emotiv headset the

'maker kits' developed at the INSPIRE centre encourage students to explore connections between typically disconnected subjects.

The kits are grouped into themes Augment and Collaborate. When students hit a problem in a subject they can try approaching it from another perspective or think out-of-the-box by applying a technique or tool which they normally would not have considered.

More information about makerkits can be found at http://inspire.edu.au



"being in a civic space where events are centered around people and where there is a chance you might discover something you are actually interested in has changed how I think about education.

Paul Magee Faculty of Arts & Design



Teaching and Learning Commons making space for students and staff

PROJECT LEADER, \$3.7 million Education Infrastructure Fund

The teaching and learning commons is located at the heart of the University of Canberra, adjacent to the library and with easy access to food outlets, faculties and parking. The renewal of this primary space was undertaken in 2009/10 as a collaboration between the Teaching & Learning Centre (TLC), the University Architect and Jackson Architecture.

Funding was secured by the TLC through the Education Infrastructure Fund (EIF) to retrofit existing buildings and improve learning spaces to enrich the student experience. Internal funding was also secured to extend the project to update cafeteria space, improve concourse access and add new entertainment areas for students. In total \$7 million was raised to renew the centre of the campus.

The concept for the commons was to provide a space for learning that was convenient for students and staff to use outside of their home faculties. The design included a mix of formal and informal spaces for individuals or group study. Spaces that are highly visible, safe, networked and with agile furniture including digital projection. Space was also designed for staff, including active meeting rooms and lounge areas to establish a scholarly culture and encourage events across disciplines.

The Teaching and Learning commons has been used extensively throughout it's first 18 months. Accommodating everything from university 'Open Day' to live gigs from prominent bands and even a press conference by the Australian prime minister. The space is busy throughout the day and has encouraged students to stay into the evenings studying in groups.

Many successful elements of the commons, such as large writeable walls, projectable surfaces, mobile screens, reliable wifi and networking infrastructure, multiple power/data and agile furniture have been adopted across campus and throughout our partner institutions.

Photos from the commons can be found at: <u>http://bit.ly/</u> UCCommons, <u>http://bit.ly/UCbuilding5</u> and <u>http://bit.ly/UCcomevent</u>