RESEARCH ONLINE

University of Wollongong
Research Online

Deputy Vice-Chancellor (Education) - Papers

Deputy Vice-Chancellor (Education)

2008

Far from common: innovative approaches to designing information rich learning and research spaces

Helen E. Mandl
University of Wollongong, helenma@uow.edu.au

Margie H. Jantti
University of Wollongong, margie@uow.edu.au

Publication Details

This conference paper was originally published as Mandl, HE & Jantti, MH, 'Far from common: innovative approaches to designing information rich learning and research spaces', LIANZA Conference 2008: Poropitia Outside the Box, LIANZA, Wellington, New Zealand, 2008, 1-6.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

RESEARCH ONLINE

Far from common: innovative approaches to designing information rich learning and research spaces

Abstract
The University of Wollongong Library commenced the new academic year with a state of the art complex designed to attract and welcome students, staff and visitors to a new range of lightfilled study and social places. The Library in its current form, is a significant departure from the original three-storey building which was colloquially known as The Bunker. Built in the 1970's it was typical of the brutalist architectural style. The reconstruction of the Library extension during 2007 enabled the deconstruction of traditional approaches to facilities design. Cognisant of the proliferation of group work within the curriculum and demand for fully integrated, ubiquitous ICT, we defied current trends promulgating the creation of vast information commons. Rather than diluting the notion of the Library as the heart of the University we sought opportunities to create stimulating and flexible, information rich learning and research spaces, while working within the constraints of existing infrastructure. This was critical to sustaining the integrity of the purpose of the Library and its role in students' and staffs' academic pursuits, as a place of resource discovery, learning and reflection. The extensive use of glass compels onlookers to explore strategically positioned facilities, information resources and art; clients can immediately see what is available to them and how resources might be used. Student computing facilities have increased but have been spread throughout the building in groups, in multi-purpose teaching labs, in concentrated areas and via extensive desks with power access. Other spaces were designed to offer flexible approaches to individual and small group study, incorporating non-linear layouts, purpose built furnishings and improved space for the use of physical information resources. Managing clients' needs and expectations throughout the building phase posed numerous challenges. Long established service models such as Roving Help (assistance with wireless networking, printing, basic information services and directional support), email a librarian and chat proved advantageous in providing assistance at point of need and fitted naturally with our vision of creating dispersed study and learning spaces, complemented by access to expert help. Our goal to transform, expand and revitalise the Library building to create a vibrant campus hub has been realised. Clients enjoy a lighter, more transparent, welcoming building, equipped with custom-built furnishings, and stimulating learning environments, enhanced by displays of paintings, prints, photographs, sculpture and other art forms.

Disciplines
Arts and Humanities | Social and Behavioral Sciences

Publication Details
This conference paper was originally published as Mandl, HE & Jantti, MH, 'Far from common: innovative approaches to designing information rich learning and research spaces', LIANZA Conference 2008: Poropitia Outside the Box, LIANZA, Wellington, New Zealand, 2008, 1-6.

This conference paper is available at Research Online: http://ro.uow.edu.au/asdpapers/85

Far from common - innovative approaches to designing information rich learning and research spaces

Helen Mandl and Margie Jantti
University of Wollongong

Abstract
The University of Wollongong Library commenced the new academic year with a state of the art complex designed to attract and welcome students, staff and visitors to a new range of light-filled study and social places. The Library in its current form, is a significant departure from the original three-storey building which was colloquially known as *The Bunker*. Built in the 1970's it was typical of the brutalist architectural style.

The reconstruction of the Library extension during 2007 enabled the *deconstruction* of traditional approaches to facilities design. Cognisant of the proliferation of group work within the curriculum and demand for fully integrated, ubiquitous ICT, we defied current trends promulgating the creation of vast information commons. Rather than diluting the notion of the Library as the heart of the University we sought opportunities to create stimulating and flexible, information rich learning and research spaces, while working within the constraints of existing infrastructure. This was critical to sustaining the integrity of the purpose of the Library and its role in students' and staffs' academic pursuits, as a place of resource discovery, learning and reflection. The extensive use of glass compels onlookers to explore strategically positioned facilities, information resources and art; clients can immediately see what is available to them and how resources might be used.

Student computing facilities have increased but have been spread throughout the building in groups, in multi-purpose teaching labs, in concentrated areas and via extensive desks with power access. Other spaces were designed to offer flexible approaches to individual and small group study, incorporating non-linear layouts, purpose built furnishings and improved space for the use of physical information resources.

Managing clients' needs and expectations throughout the building phase posed numerous challenges. Long established service models such as Roving Help (assistance with wireless networking, printing, basic information services and directional support), email a librarian and chat proved advantageous in providing assistance at point of need and fitted naturally with our vision of creating dispersed study and learning spaces, complemented by access to expert help.

Our goal to transform, expand and revitalise the Library building to create a vibrant campus hub has been realised. Clients enjoy a lighter, more transparent, welcoming building, equipped with custom-built furnishings, and stimulating learning environments, enhanced by displays of paintings, prints, photographs, sculpture and other art forms.

Introduction

History

In 1972 sixteen staff proudly took ownership of the University of Wollongong Library. The building sat bunkered down in a vast empty paddock but offered an improvement to the one room annexe that had previously housed its collections.

Over the years increases in student numbers and the growth of the young university resulted in extensions to the building in 1976 and 1988. Changes were made to the interiors to accommodate increasing collections and new developments such as teaching spaces but the brutalist exterior remained. A Stage 4 extension was planned for 1996 but did not proceed. In 2002 a report titled *Scholarly Spaces* highlighted the need for an extension to accommodate collection expansion and student demand for additional study space. As a result, a funding allocation of six million dollars for the extension and refurbishment of the Library was included in the University's capital management plan for 2006. By 2006 the Library's biennial client survey reported student dissatisfaction with study spaces, computer facilities and collections in some disciplines. More space for collections, seats and computers was urgently required.

The Growth of Commons

In the early 1990's the growth of word processing and the implementation of browsers for the Internet generated huge interest in the development of computing facilities within universities. Laboratories were built and computers installed with the aim of fitting as many as possible into the space available. As libraries became technology driven, more computing facilities were required. A search through library and information databases locates articles written in 1996 on the development of information commons at the University of Iowa and at the University of Southern California. At USC the aim was to develop a combination reference library and computer lab (Anderson 1996). By 1999 a number of libraries including the University of Queensland (Frost 1999) had become cybraries, aiming to 'integrate state of the art information technology with traditional services'.

Following the turn of the twenty-first century, university libraries such as that at Dalhousie University start to use the term 'learning commons' (Nikkel, 2003). Whilst still bringing 'traditional library resources and services and desktop computing resources and services into one central location for student use; …the overall aim is to enhance the learning experience on the Dalhousie campus.' The emphasis on the learning experience is evident in recent literature, and limits the notion of a purely technology driven space. Interestingly the term 'information commons' is now also used in relation to the shared knowledge base of information on the Internet and in open access publishing (Johns 2007).

Regardless of the terminology, Bailey notes that 'all commons emphasize the seamless integration of high touch/low-tech with high-tech/asynchronous actions and are strongly and intentionally focussed on patron needs' (Bailey & Tierney 2008).

Common Features

In planning for the extension to the Library, staff wished to take advantage of many of the features often included in information and/or learning commons. These included:

- Spaces on one or more floors of a library
- High speed networks and a variety of public access computers
- Wireless access
- Training labs
- A full range of productivity software
- Collaborative and group study spaces
- Greater collaboration with other university support units
- Adjustable work spaces
- Refreshments nearby
- Less traditional library functions such as exhibitions and functions.

Sitting centrally within the University grounds at the crossroads of a number of major pathways, a renewed Library building would maintain the notion of the Library at the heart of the university and provide study, learning, working and meeting spaces for the University community. The Library did not want to be known for one large high tech area but for the range of learning spaces available. Spaces of engagement scattered throughout communal space.

Staff visited a number of recently built academic and public libraries in Australia bringing back ideas to be incorporated into the planning process. The enthusiasm for some of the architectural features had to tempered with the reality of the situation: this was an extension, not a totally new building; there was a finite budget and finite additional space; the major collections of books and journals would need to stay largely in place; design barriers such as load bearing pillars could not be removed and would need to be incorporated in the spaces we had; the Library would need to remain open and providing client services throughout the building process.

The final architectural submission provided for additional space in an L shape to the north and east of the current building, 2000m^2 over three floors. It incorporated many of the ideas identified by staff. The entrance would be moved from the east to the north becoming more visible and filled with light. Glass panels would provide transparency allowing clients to see in whilst walking past and providing those inside with a view to the outside world. Additional group

study spaces were planned, larger teaching labs and extensive access for laptop use throughout the building.

Uncommon ways

Computers

In the environment of electronic information, access to computers is essential in order for students to locate and read the resources they are seeking. Despite the dire appearance of the Library from the outside, small regular improvements to facilities on the inside had made the Library a desired study location despite the space limitations. Large computer tables had been installed which allowed for a student to work on a computer surrounded by books, journals and other papers. These had proved a very popular and comfortable drawcard for students. The sense of comfort, ease and companionship was greater than in the standard computer laboratories in the neighbouring central computing facilities building.

Once the building program began and spaces changed as temporary walls were installed, this seriously impinged on the Library's ability to provide sufficient computers. Thirty laptops were made available for loan within the Library but an alternative solution was required. In initial plans a distant future provision had been made to knock down walls between the Library and its neighbouring computing facilities building and to build a corridor linking the two. This was called into operation immediately and once completed was utilised to send any overflow of demand into the computing laboratories.

The corridor, named The Link, also meant that there was now an additional entrance and exit to the Library other than the main front doors. Security gates were installed and training provided to the IT help desk staff that assisted in the laboratories. A benefit was that books and printed resources could then be taken into the laboratories and used there although borrowing still had to occur at the loans desk at the main entrance. The Link has remained a popular entrance point and recent statistics show that 6% of clients enter the Library in this way.

While the major building works took place, Library staff continued to discuss the final layouts for furniture and space. It became clear that in offering a range of learning spaces and within the limitations of the budget, we could never provide sufficient computers to meet demand in peak periods. Interestingly at this time staff were noticing a substantial increase in the number of students bringing their own laptops to university and an accompanying demand to locate a power point. Plans were changed to accommodate as much additional power and wiring as possible and new powered desks were designed. Additional wireless points were added throughout the building to provide sufficient bandwidth to meet demand. An unforeseen cost was the additional power distribution boards and cupboards requiring a refit and upgrade to cope with the additional power loads. However it is now possible to walk around the Library and see as many personal laptops in use as there are fixed computers.

Fixed computers were made available in a range of spaces including standing quick access points; brief enquiry/check email areas utilising seating cubes; spacious study desks with good quality ergonomic chairs; rows along walls; and within the teaching laboratories.

Group study

Group work is now an integral part of every discipline. While accommodating formal group study rooms was a requirement, it was also important to provide spaces for informal discussions – in some cases with tables, in others around lounge chairs. Group work areas provide a buzz of activity proving very attractive to other students who wish to work in a busier environment.

In designing the group study rooms, usage of the previous rooms was taken into account. Anecdotal evidence showed that although each of the old group study rooms could seat 8 - 10 students, they often held small groups of 2 – 3. In order to utilise the space available we designed a range of small and larger rooms: 3 x 4 seats, 3 x 6 seats, 1 x 8 seats and 1 x 10 seats. The rooms have glass front walls and clients can see at a glance if a room is free. The previous system of booking rooms at the Loans Desk was abandoned and an online booking system established. Students are now able to select the room best suited to their group size and book in advance. The visual ability to see bookings has also broadened the usage of rooms.

Rather than being centred around the 10am to 2pm lunchtime peak, rooms are booked from 8am to 9.30pm. The mix of changing facilities and changing service paradigms has extended the benefits of the extension program.

Supplementing informal group tables on the Ground Level, Level 2 became the group study centre. Once the quietest part of the building, Level 2 housed the printed bound journals which were receiving less attention as they were overtaken by their electronic equivalent. The building project gave impetus to a weeding opportunity to rationalise the collection where an electronic equivalent was held. Locating the teaching labs on Level 2 resulted in a larger stream of students moving to this level and improved resource discovery. The group tables have proved popular with a constant buzz of discussion emanating from this area. While some complaints have been received, provision for students wanting absolute silence has been made on Level 1, the floor containing the main monograph collection and designated as the quiet study area. Shelvers and rovers regularly circulating on this level are able to keep noise to a minimum.

Teaching spaces

For over fifteen years the University of Wollongong Library has promoted the value of information literacy training to staff and students. In 2007, 498 classes were presented to over 16,100 clients. 73% of the presentations were integrated with assessment activities for a particular subject. Over the years the faculty librarians had moved from lecture style presentations to hands on workshops demanding a computer per student. The older labs in which they taught were set up in long rooms with rows of computers and poor visibility of the main screen for those at the back.

New labs were designed for 35 and 40 machines with glass front sliding doors that could be opened up when not being used for classes allowing open access to the computers. Unfortunately the large space required to locate the labs meant that we could not avoid the structural pillars in the middle of each room which would block the vision of a number of students regardless of how the room was arranged. Avoiding a row based setting, computer tables were designed in a pod shape that had each student facing a different direction. Multiple screen projectors were mounted on the ceiling also facing each of the three solid walls. In this way each student had close and clear vision of the screens being demonstrated with the teacher based in the middle of the room. The teacher is also equipped with a wireless microphone and mouse allowing them to move around the room as required.

On the wishlist for the faculty librarians was a smaller space where groups of 3 – 10 students could be taught without feeling that they were not making the best use of a large lab. To accommodate this need, a seminar room was equipped with laptops and wireless access, providing the same hands-on capacity within a more discrete area. This dual purpose room has suited the needs of large meetings and small teaching groups.

Furniture and furnishings

As the extension took shape, it became apparent that clever solutions would be required to ensure the new areas merged seamlessly into the old. Relatively cheap actions such as repainting the walls in the older areas to match the colour scheme in the new areas gave consistency to the structure. Simple end panels were placed on the otherwise old metal shelving rows and gave an immediate lift to the look of the collections. New signage was designed that aimed to provide sufficient direction without clutter. Old carpet between the stacks was left in place but the walkways around the blocks of shelves were newly carpeted.

A complete inventory was done of existing furniture – the majority was relatively new and would be kept, some very old carrels were discarded. Additional carrels and workstations would be built. In terms of colour schemes there were light grey carrels, dark grey desks and carrels and new furniture in dark grey and beige. A key to making the mixture work was to place like with like and to block this on a plan. The light grey carrels were left in a fairly hidden area, existing dark grey single study desks were collected from two floors and located together in a large block on the quiet study level. New beige furniture would be placed near the glass outer walls on Levels 1 and 2 providing consistency in placement and look in the new areas.

Lushington (2002) notes that “budget priorities for furnishings should emphasize user comfort at chairs and workstations rather than expensive wooden book stacks”. A range of different seating modes were purchased including good quality ergonomic chairs, standard cushioned desk chairs, ottomans, upholstered lounges and single lounge chairs using a colour palette that highlighted tones from the walls, carpet and desks. The aim was for the chairs to add splashes of colour in every area.

A living gallery

Learning commons may include “such less-traditional library functions and activities as exhibitions, readings, performances” (Bailey & Tierney, 2008). The notion that every learning space should stimulate creativity and thinking, understanding and knowledge building was achieved by transforming the building into a living gallery. Over the past thirty years the University had accumulated a significant art collection with some works displayed in buildings on campus and others in storage. With the encouragement of the University Librarian, significant wall space was maintained throughout the Library to accommodate works from the University collection. Three well known Australian artists with local connections and teaching links to the University were identified to feature in the Library. Their sculptures, prints and artworks form part of over 180 original works located in all rooms and areas of the building. Many works have some link in theme or origin to Wollongong and the Illawarra area. Each work is labelled as you would find in a gallery and the collection has become a visible learning resource for students in the creative arts and provides a stimulating and colourful environment for clients and staff. In addition, a reading space was included that could operate as a separate gallery complete with movable art walls.

Services for clients

A transformation of the building called for a re-examination of the services provided to clients. Procedures were revised and options for clients enhanced. At a virtual level the Library web site was reorganised and well used services and resources displayed more prominently. Plasma screens located within and outside the building display a changing range of notices, tips and news. An email list provides subscribers with information on new resources and reminders of facilities and services they may not have used. Information on setting up laptops for wireless access was enhanced, classes held and rovers trained to provide on the spot assistance. Print only computers were installed to allow for those who quickly needed to print off an assignment.

Previous laptop loans had required the client to complete additional forms before borrowing, a process that staff and students found to be very time consuming and which was based on a fear of losing a machine. The form discouraged students and loans were decreasing. The procedure was changed to simply lend the computers on the student card as per any other material and loans immediately increased. For books, borrowing periods were extended, the number of renewals and the number of reservations increased.

Transformation

Nine months after the official opening in February 2008, our goal to transform, expand and revitalise the building to create a vibrant campus hub has been realised. Clients mill in the plaza outside the Library, refuelling at the Library’s café, *Panizzi*. The Library buzzes with the constant movement of students and staff utilizing the range of learning spaces. Everyone is able to find a space they like, some in the quiet study of Level 1, some in group study rooms, having casual discussions and others grabbing any machine they can to quickly check their email or print an essay before a class. Entry statistics have increased substantially, the number of renewals of books has increased, the collection is used more than ever and a larger number of people are borrowing material. Enquiries have increased and more clients are finding and using a greater range of facilities and services. Computers are in constant use and occasionally we have even reached capacity with not a single free seat in the building. While not directly an information or learning commons as illustrated by many other constructions around the world, the Library, the building, its services and its facilities have become a common, a space belonging to and used and appreciated by all members of the University community.

References

(1996). Univ. of Iowa opens Info Commons. *College & Research Libraries News; 57* (9), 567.

Anderson, M. (1996). Peer Information Assistants in Leavey Library's Information Commons. *California Academic & Research Libraries (CARL) Conference Breakout Session II:Leading Students Down the Road Less Travelled: Diverse Paths Toward Information Competence*. Available at: http://www.carl-acrl.org/Archive/ConferencesArchive/Conference96/melissa.html

Bailey, D R & Tierney, B G. (2008). *Transforming library service through information commons: case studies for the digital age*. Chicago, American Library Association.

Frost, D. & Schmidt, J. (1999). Setting our Sites on the Cybrary: Designing a Library Web Site Which Meets Customer Needs. *LASIE: Library Automated Systems Information Exchange; 30* (4), 9-23.

Johns, F. (2007). Open access publishing: reclaiming the information commons. *Online Currents 22* (2), 44-52.

Lushington, N. (2002). *Libraries designed for users: a 21st century guide*. New York, Neal-Schuman Publishers.

Nikkel, T. (2003). Implementing the Dalhousie Learning Commons. *Feliciter 49* (4), 212-215.