Getting it together for libraries - designing a collaborative learning centre.

Karen Kealy, Manager, Planning and Projects
Information Division, University of Melbourne

Designing for libraries is a specialised skill requiring an understanding of the services and functions within them. Particularly, designing library spaces for the 21st century is, I believe, more complex than it was in the past. Libraries are seen as places of learning and knowledge pursuit and should be designed to accommodate these needs. However, contemporary library buildings will generally accommodate more than typical library services, and they therefore need to be flexible and multifunctional. Libraries are more than storehouses or repositories of materials - they need to be wired and cabled for delivery of many types of electronic information resources and access to many types of electronic services. So, we must now design for all types of published formats - not just print - and ensure that power and data connections are robust and extendable.

Academic libraries today are often referred to as ‘Hybraries’ or ‘Cybraries’. They must continue to manage and store print resources as well as providing access to a variety of electronic resources. Libraries are also often the hub of a University and the question needs to be asked can the library buildings of today continue to house the ever-increasing print collections as well as catering for continuing access to the collections of the past and those of the future? A modern academic library has to be designed with the flexibility to cope with the changing demands, but has to accommodate traditional print-based resources, multi-media and electronic materials, providing for traditional study spaces, spaces for teaching, access to computers and collaborative learning facilities. This is particularly challenging in the designing and building of libraries, as well as the day-to-day management and upgrading of infrastructure to enable more services to be offered.

In the opening statement of the book entitled Academic libraries as high-tech gateways, the authors sum up the challenge facing library designers in the 21st century: “In responding to rapid technological change, library designers face a challenge: the need to plan buildings that are flexible enough to accommodate a future whose outlines are only dimly visible at present.”  

The issue of inadequate space seems to be a perennial problem in libraries everywhere. Most colleagues I speak to often lament the lack of space in their libraries, and how others are managing to deal with it is a question I often hear when a group of librarians are gathered together. Library overcrowding is an ongoing management issue for librarians, and although we may think it is a relatively new challenge, in the case of the library where I work, there are references to space and accommodation issues in each the library's reports from the 1930s onwards. In the 1944 annual report an item headed “Future of the Library” states “that the present library building is quite inadequate and just ten years ago the Council of the

University declared that a new library building was one of the first and greatest needs of the University”, and “… provision of an adequate library has now become possible, so far as finance is concerned, by the magnificent gift of £105,000 made by the trustees of the estate of the late Mr. E.L.M. Baillieu …”

Also, the following quote from a University Grants Commission report on University Development from 1935-1947:

The problem of library accommodation is of special importance. In nearly every library which we visited, we heard a tale of shortage of book space, or shortage of reading-room space, or shortage of space for administration, and not infrequently of all three at once. The inadequacy of space for administration is unfortunately not confined to older libraries. The life of a library is essentially one of growth and development and we hope that, where new libraries or the extensions of libraries are being planned, those responsible will take a sufficiently broad and imaginative view of the requirements of the future and will take advice from those themselves experienced in the running of a large library.

Investment in library design and construction was seen as an investment in the future that universities were proud to make, once they had accumulated adequate resources. Today there appears to be more of a reluctance to invest in these large, expensive edifices dedicated to the storage of print resources because there is a notion that everything in the future will be digital, a rather unrealistic notion as there will be an increased demand for computer workstations to provide access to the digital resources. Bazillion and Braun make a reference to libraries continuing to be needed to store books for at least another generation, "Space planning between now and 2010 therefore has to do with creating hybrid library buildings that maintain print collections alongside evolving information technologies. The library as a structure will be around for at least another generation, and it will continue to house books". Academic libraries, I believe, have a responsibility as centres of scholarly research to continue to aid the pursuit of knowledge by storing and providing access to these resources. We will continue to contend with the issues of designing space for areas in libraries as it means not just allocating space for collections, administration and reading room or study space, but also taking into account all the modern equipment required, such as computers, photocopiers, printers, scanners, etc. All these devices take up space, use power and generate heat and they will affect the design and layout of the area. Librarians are key people in the design process for building or refurbishing library space and should always be involved in the design phase.

According to Bazillion, the chief aim of the planning and design phase of a project, “is to align assumptions about future trends with the principles of building flexibility so as to maximize the return on a sizeable capital investment. Because no one can accurately predict how technology will develop in the coming decades, planning is an

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exercise in extrapolation.”⁵ Some key principles should be considered when planning a library building project regardless of whether it is a small refurbishment or a large-scale redesign, an extension to an existing building or a new building. You will want to ensure that the funding can be stretched as far as possible to achieve the desired outcome.

Creating an intelligent library design for the 21st century

There are a number of steps that may be followed to produce successful outcomes. These are outlined below:

1. **Look at the big picture:**
   - Having a long-term view of the required outcome while developing the design brief is important.
   - Clearly define the vision of what is required before the project commences, and define where you want to be at the end of the project.
   - There is a need to have a clear conception of the purpose of the space being designed.
   - Visit other libraries to get ideas and to see how others have redesigned and refurbished their space.

2. **Develop the design brief:**
   - Define the purpose of the space and all the functions that will be performed in it.
   - Identify all the requirements of all stakeholder groups and take their needs into consideration.
   - Define client numbers and their needs and develop a user profile to get an idea of the types of people who use the space, and the times of the day and year when large numbers of people are using the space.
   - Investigate traffic patterns and workflow issues relevant to staff.
   - Calculate space and size requirements.

3. **Consultation with user groups:**
   - It is critically important to consult with all relevant stakeholders during this process, for example, key customer groups, senior staff, suppliers, etc.
   - Involve staff as much as possible in the design process; encourage them to contribute their ideas.

4. **Architect and designer consultations:**
   - Consult with the architect or interior designer and provide them with a design brief.
   - Develop more detailed plans based on the design brief, so that specifications can be drawn up, enabling the project to be costed by a quantity surveyor.

5. **Role of the project team:**
   - Assemble a building project team, which may consist of library staff representatives, building project manager, architect, and interior designer if required.

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It is important to have a library representative who is the liaison between the library staff and the building project team. This person is usually the lynchpin to ensure all requirements are met on both sides.

Consideration should be given to deciding how services will continue whilst building works are going on, if it is a building refurbishment as opposed to a new building. This also means keeping track of the collection if it is relocated.

The role of the designer and the architect will be to develop a staged building program to enable service to continue to be provided, and this will need to be done in consultation with library staff.

6. Plans available:
- When initial plans are drawn up set up a consultation session with staff about what has been processed to date; issues such as layout of furniture, etc. can be discussed at this stage.
- Communicate to staff and other relevant stakeholders at all stages to ensure they are kept informed of the progress of the project.
- Make plans available for viewing by staff and other stakeholders.
- Ensure there is a mechanism for feedback to be provided to the building project team on any suggestions for changes to the plans from staff and stakeholders.

7. Final version of plan:
- Agreement on the final version of the plan should be reached.
- Ensure it is signed off and agreed to by all stakeholders.
- The architect will then prepare the documentation to a stage that will enable a quantity surveyor to cost the project.

8. Costing provided:
- The quantity surveyor will complete the costing and provide a detailed costing report to the architect.
- The building project team will then review the costing to see if any changes are to be made if there is not adequate funding.
- The architect will then complete the documentation to enable tender documents to be prepared for tenders to be called from builders.

9. Tender documents:
- Tender documentation will then be prepared and the project will go out to tender.
- Once all tenders are received the building project team will usually meet to advise the client of the tenders received and who the preferred builder is.
- The selected tenderer is informed and awarded the tender.
- The architect and the building project manager will meet with representatives from the building company.

10. Responsibilities of library staff:
- Ensure at least one library staff member is responsible for overseeing and contributing to the different phases of the project, generally someone who is in a position to understand the library's requirements and able to make decisions.
- This person should be involved in meetings with the builder and should receive a detailed works program so that they can communicate to library staff.
the different phases of the project. The library representative should be invited to the building site meetings.

- Communicate the key project dates to stakeholders, especially customers, if there will be some disruption to services.
- Ensure there are regular building project meetings throughout the project if it is a large one; if it is a smaller project ensure the library person maintains regular contact with the architect and the building project manager.

11. Quality control:

- It is important to monitor and check that everything is being done as requested all through the project. If there are problems identify them early. Usually these should be referred to the architect or the building project manager to deal with rather than the library representative taking them up with the builder. It will depend very much on the relationship between the builder and the building project team.

12. Hand over of building site back to the library:

- Ensure the architect does a final inspection. He or she will inform the builder of any items that may be named as defects and require attention by the builder before the final handover is confirmed.
- Ensure the builder has left the site clean and tidy.
- Library can take over the space and move collections, furniture, staff, etc to the space.
- Celebrate the opening of this new space with your staff, customers, and key stakeholder groups.

13. Defect period

- There is generally a period of time allowed for identifying building defects, so ensure that you notify the architect of any defects during this period so the builder can rectify them.

Case Study: The Percy Baxter Collaborative Learning Centre in the Baillieu Library

As teaching and learning methods change in the higher education sector, academic libraries need to be flexible enough to change and meet the needs of the student and academic community. Due to the changes in teaching modalities, in August 1999 the University of Melbourne allocated funding to match funding which the University Library had received from a philanthropic trust to build an ‘Information Commons’. The Information Commons was to be designed to better meet the needs of students and academics on campus allowing them to access information and IT resources more efficiently. The Information Commons was supposed to be completed by Semester 1 (March) 2000. As I was not sure exactly what was meant by an ‘Information Commons’, I spent time researching and asking questions to try and clarify what the expectations were and what services should be provided. The Information Commons was to be a place that gave students a ‘one-stop-shop’: access to hardware and software, access to and ability to develop multi-media presentations, use of all types of software, access to information resources online, and much more. This Information Commons was to be developed and incorporated into our largest library building: the Baillieu Library.
So what is an Information Commons? I did a great deal of research and reading about some of the facilities that had been developed in the United States and Canada. I was fortunate enough to visit the Information Commons that had been developed at the University of Toronto, and Michael Edmunds, then the Director of the Information Commons at the University of Toronto, was extremely helpful and spent a couple of days with me talking about their setup and proudly showed me the recent addition to the original Information Commons. I also visited Stanford University to look at how they set up workstation clusters in the Meyer Computer Cluster in the J. Henry Meyer Memorial Library and learn about how they have used students to staff the area and provide advice to other students about using the technology.

At the time there had been an amalgamation within the University, which merged the Library, Information Technology Services and the Multi-Media Education Unit into a new department named the ‘Information Division’. The Information Commons project was regarded as the first joint project of the Information Division and was intended to deliver integrated services for the University community. This project was not just a building project; it was about designing and developing a new concept in service delivery.

The proposed ‘Information Commons’ at the University of Melbourne was quite a different building project to others I had been responsible for. The ones I had been involved in were mainly about building or refurbishing existing spaces with a clear understanding of the types of functions and services that would be offered within them. This project, however, entailed coming up with totally different ideas to do with non-traditional library services and possibly not using library staff to deliver the service. Generally, I had worked with library and archives staff before this to develop design briefs, agreed on final plans and liaised with the building project team and library staff throughout the project.

In this project I put together a team of people from across the newly formed Information Division. The Information Commons advisory team consisted of a number of library, IT and multi-media staff to ensure we covered a cross-section of the Division. The team spent time consulting with various academics and senior IT people in faculties to let them know what we were aiming to do, but also to ensure we had appropriate information from them, and that the area would meet a need within the University for this type of space. We needed to get an understanding of the changes occurring in faculties in the way courses are delivered and how students are now expected to work. This centre was to be designed and developed to meet the teaching and learning needs of academics and students. It was decided at this stage that the area would be more than an Information Commons and thus developed into a “Collaborative Learning Centre”. We had a very limited budget for this project: just under one million dollars for the refurbishment of the space, cabling and wiring, purchasing of furniture, and acquisition of hardware and software.

We are fortunate to work with an excellent architect and a building project manager from the Property and Buildings department at the University. The architect works for the original firm that built and designed the Baillieu Library in the late 1950s and the Medical Library in the 1960s. The same architect has been involved in all the most recent building refurbishments within our libraries, especially the Better Baillieu
Project, which has been in place since the early 1990s, and is not yet completed due to lack of funding. The architect, the building project manager, a project officer in my department and myself work closely as a team to ensure we deliver on the requirements of the project and generally at a minimum cost.

Due to the time constraints in this particular project, we started out with a minimal design brief and built on it as we went along. We were forced to prepare documentation for the tender process before we had completed the consultations with academics and other key staff in the University, not something I would generally recommend. The whole notion of flexible learning and designing and developing flexible learning and teaching spaces was a fairly new concept at the University. Some departments and faculties are more advanced than others, and it was extremely useful to speak to staff within the areas that had been using this concept in their teaching for a while to see how it has developed over time. A number of flexible teaching spaces were being built across the University and we wanted to be sure that whatever facility we developed in the library supported and added value to what was being developed within the faculties. As academics will increasingly use the World Wide Web for teaching it is important that the technology links with pedagogy.

To assist with identifying the services required of this space the Information Commons advisory team which met weekly, developed a diagram listing the different types of services and how they linked together or overlapped. (See figure 1). A great deal of time was spent discussing what we would like to be able to deliver in an ideal world and then making compromises on what would be possible within the limitations of the budget. Feedback from academics about what services we could provide to complement what they were doing in the faculties was crucial to the selection of equipment, software and in developing staff position descriptions.

It became evident during the many consultations with staff that some sort of training facilities were important to Information Division staff and to academics to enable a more fully developed training program to be delivered, encompassing information literacy, web publishing, endnote training, showcasing of new information resources, and a place for classes to use the new online courses being developed, where the faculties did not have adequate facilities. It was decided we would have two training rooms with large sliding doors that would then enable us to open up the space when the rooms were not being used for training purposes. The design of the training rooms that could accommodate up to 16 people was flexible enough that if we decided we wanted to create two smaller rooms we could easily put up a dividing wall. Wherever possible throughout the whole design process we aimed for flexibility. The design of the workstations was such that we could sub-divide them into smaller groups to encourage the collaborative learning aspects.

We were fortunate to begin with a large expanse of space (approximately 900 square metres) that had previously been used as a private study area to come up with a low cost creative design (Figure 2). There is a great deal of natural light, with windows on each side of the building which enabled us to create openness to the space. We wanted the area to be light, bright and inviting to our students.
Figure 1: Venn diagram outlining services for Collaborative Learning Centre

As the original building had been well designed from an infrastructure perspective we were easily able to install cabling for the 56 workstations in the public area, 34 workstations in the training rooms, facilities in two rooms allocated for use by people with disabilities, a consultation room, and staff workstations (Figures 3-5). We had wanted to install a wireless network into this area as well to encourage more collaborative work to be done at the work tables scattered around the area, but were advised by our staff in networking that wireless was not tested enough to be reliable and robust enough for the multimedia work people would be carrying out here. In first semester this year we began testing a wireless network in the Collaborative Learning Centre and the feedback from students is very positive.

During the design process there had been a lot of discussion amongst the advisory team and the building project team about layout and design of the workstations and the training rooms. As time was of the essence we had to come up with a solution that most people could agree on. It is important that the person coordinating the project is in a position of authority and is able to make decisions on behalf of the library.

The next key phase of the project was to identify the equipment and software to be made available. There were many deliberations about the purpose of the Centre and how we thought it should be utilised. It was not meant to be another computer laboratory, but something more. We made a wish list initially of all the equipment and
software and then pared it back to what was possible, given the limited funding. The advisory team also developed the staffing model and the staff that were appointed have proven to be excellent choices. It is interesting to note that only one of them was a library staff member.

On the whole the feedback from students and academics that use the Centre is very positive and we are always looking at how we can improve the access to resources. In the new structure for the Information Division, the Percy Baxter Collaborative Learning Centre (named after the donor) is part of the Teaching Learning and Research Support Department. When we started this process we had no idea what the outcome would be and how this centre would fit into the new structure for the Information Division. This process enabled us to achieve a really positive outcome for the Division, and now we could not imagine what it would be like without it, so much so we would like to develop more of these types of centres in the University and generally there is the support from the academic and student community to do this.

*Figure 2 - 1st floor Baillieu Library space prior to refurbishment*

*Figure 3 - View of a training room*
Figure 4 - View of completed Percy Baxter Collaborative Learning Centre

Figure 5 - View of workstation grouping
Bibliography


