# The dream team: sharing architect and librarian skills to ensure library design excellence

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### **Abstract**

Many library managers around the world are developing close working relationships with architects to ensure that the design of libraries meets client needs, functional requirements, and efficiency criteria, with attractive inspiring buildings providing a sense of community for various types of use and user. At the University of Queensland, in Brisbane, Australia, a model of library service delivery was developed through an effective partnership of the then University Librarian and the Principal of a local architectural firm. Library design and refurbishment at the University of Queensland used innovative design principles, blending the perspectives of both the librarian and the architect in a unique partnership which was both personally rewarding and professionally successful.

#### Introduction

Print libraries are more than books and buildings; they provide context for a number of important kinds of social relationships; they are places, one of the truly successful public institutions; they provide information services, which are catalysts for invention, research and education; and they regulate the boundary between commerce and communities, market exchange and gift exchange (Lyman 1999).

The focus of much past library design focused on the accommodation of vast collections rather than the context of the social relationships of the people using the collections. Unwelcoming and unattractive concrete edifices emerged rather than vital community catalysts. In recent years this has begun to change. Library design focuses increasingly on client experiences in the library, the creation of flexible spaces for current and future use and providing a welcoming and exciting environment.

Technology may have changed the processes, uses and layout of the library but it has not warranted the demise of the library building (Edwards & Fisher 2001, p. ix). The construction and refurbishment of library buildings has been more widespread then ever before. The ugly edifice of the 60s and 70s is slowly being replaced with beautiful icons that create a focal point for the community that uses them.

The use of space in a library has new emphasis. In the past the libraries were created for vast collections of books and other reading material. Today they are learning and inspirational spaces. In any institution whose prime purpose relates to teaching and learning, the library should be a central point, facilitate learning and scholarship, be easily recognizable and simple to use. It should invoke a sense of quality and value (McDonald 2000). The same could be said for a library in any community setting. Some universities are moving away from the term library and instead are calling these buildings Learning Resource Centres. They sometimes provide for additional student services. As part of this new focus, the library is thinking out of the box and also thinking outwardly.

## The Library Paradigm

The role of the Library within the University as a storehouse and repository for knowledge, a link between people and the information resources they require, and a vital support for teaching, learning, research and community service remains. However, developments in electronic production and delivery of information and new client demands have considerably changed that role. The new library is a combination of physical and cyberspace. It provides a point of access to print materials and electronic resources through a single gateway, which organises a multitude of resources and provides navigational tools to resources held locally and throughout the world.

Teaching, information and learning are frequently problem-based and related to resource discovery. As teaching and learning practices become increasingly flexible, online and interactive, the activities undertaken by students vary and include attendance at classes, laboratory work, interaction with academics, collaboration with peers and access to and use of learning and information resources. Learning takes place within formal classrooms, in cafes, in libraries and in many and varied social settings.

In addition, the focus of library and information service delivery is the client. The library client of the twenty first century is sophisticated and media-driven. "Tailored to suit your needs" and "just for you" do not apply only to the commercial sector but also to education which is becoming customised. An analogy of the food service industry can be used to describe how students access library services – eat-in, take-away or order-in. Some students choose to "eat-in", working on campus individually or with colleagues; some come to the library to attend classes and then "take-away" information and materials; some "order-in" using dial up services via the web from home or places of employment. As time becomes more precious, more clients want "take-away" options with minimal on-site interaction. Many want to work or complete tasks at home. Some may even want "Home Delivery" for non-electronic resources.

An extensive range of web-based resources and information enables students and staff to work from home or office at their own pace as well as in the Library. The campus experience is still central to learning and student life at University and those who want a "dine-in" experience require services on-campus. For these clients, trained professional staff provide on-site assistance and a range of physical facilities must also be provided.

To support the range of user needs, the Library must offer opportunities for a variety of learning styles and work patterns, including quiet graduate areas utilising hot-desking technology and connections for laptop access, spaces for large groups to meet and collaborate, small group study rooms and quiet retreat areas for individual work or one-on-one consultation. Wireless technologies will play an increasingly important role in information access with a range of new products scheduled for release within the next few years. Most technologies are not "powerless" although improved batteries are changing the situation.

Although most library users are IT literate and can use most technologies with ease, many are not information literate and find it difficult to locate and evaluate information. Most libraries are investing considerable time in providing classes related both information technology skills and library and information skills. Libraries must provide facilities to support these activities.

The expansion of new technologies and the growth of the "virtual library" have not diminished the importance of attractive and comfortable physical surroundings to support research and teaching and learning. While new approaches to both research and teaching and learning and the rapidly changing environment of information and communications

technology are transforming the nature of information use, and the way in which space is used, appropriate and attractive design remains critical to the success of research and learning experiences and to meeting the high expectations of staff and students. Effective learning using "high tech" also requires "high touch". Shaping the environment to meet individual needs allows Library staff to deliver a tailored service with a cost effective approach.

Each type of library serves a different function which assists in determining the experience for each library user. The function of the library has remained predominantly the same of the last fifty years (see table below) however use of the space has changed. For example in the learning environment there has been a marked shift from individual study to group work. In most university communities the library has felt this change the most as they attempt to provide areas for group work away from those wanting a quiet study or reading space.

Library Type	Characteristics functions
National Library	Legal deposit Comprehensive book and journal collection Attached special collections Reference rather than loan Wide range of supporting activities
Public Library	Loan rather than reference Supporting community or social activities Mainly book-based Special libraries for children, elderly, local study
Academic Library	Emphasis upon supporting learning Extensive research material Large journal collections Extensive electronic/computer systems Networks to departmental libraries
Virtual Library	Electronic/IT-based Can be associated with cybercafes or traditional library Exists independently of buildings Requires home or office based computer network
Special Library	Collection based on famous individual, topic, event or place Not normally for loan Mainly research-based Provides archive and conservation function Visits often by appointment
Professional Library	Special collection to serve professional body Material not normally for loan Often associated with exhibition area Extensive archive and journal collections Contains a wide variety of material (photographic, letters, plans)

Table 1. Library types and functions. Adapted from Edwards and Fisher (2001, p. 20).

# **Gaining Inspiration**

No one design nor building can meet all needs – inspiration is often gained from several different sources or select features are considered (Wooliscroft 2003). Looking at library buildings will lead to new ideas but visits to all kinds of service providers will help gain true inspiration and set the creative juices flowing. Looking at hotels, retail outlets, video shops and banks can provide greater understanding of how good service industries look and operate.

As libraries increasingly compete with other service providers, it is important for libraries to adapt and change their styles and approaches. Some museums provide ideas. Browsing through websites and architectural journals can also help. Let one's fingers do the walking.

Attending both library and architectural conferences provides a suitable forum for sharing and acquiring new ideas. Many conferences specialise in library design. Most conferences provide information on who has completed or is embarking on a refurbishment or design of a new library building. Following all the awards in the various architectural and library journals is also an important source of new ideas.

## Plan, Plan and Then Plan Some More

The process of design begins with the selection of an architect and this process begins with the preparation of a design brief. This step is critical. The brief will include all essential and desired requirements for both the interior and exterior of the library and careful documentation will ensure every aspect is covered, particularly for future space and planning needs. Planning for the future of the library is essential. (Boone 2002). Architects, though brilliant, are not mind readers. They cannot provide for future needs if they have not been clearly identified and expressed. Planning for growth poses several difficult questions. Is future user growth expected? All library projects experience huge growth in use post completion. Coping with collection growth is challenging. Will electronic resources increase and as a result print resources be cancelled or reduced in number? Should off-site storage be used for lesser-used material? Alternative options should be identified for communication to the architect.

The choice of renovating an existing library or building a new one is generally based on cost and available space (Boone 2002). If the decision to renovate is the most appropriate then additional choices arise. Managing staff, the collections and work processes in a renovated building can be challenging. Finding the best time to begin renovations is not easy. Increasing demands on use of physical facilities seems to mean that no time is a good time.

Statistics of use and expected growth can usually be established. The demographics are important. Any operational and strategic plans should be reviewed and incorporated into the building plans. Everyone wants to get involved including the users! This can be advantageous or a complete disaster as everyone feels s/he knows best.

## **Choosing an Architect**

Once the initial design brief or concept brief is completed, the search begins for the "right" architect. Finding the architect who fits the needs is essential to the success of any building project. Selecting an architect can be achieved in several ways. Architectural competitions are quite common. Prospective architects are requested to submit their designs for assessment. On occasions the public can vote for the winning design but generally a nominated selection panel has the final say.

Requesting the services of a renowned architect is another popular mechanism for finding a designer. This is common in many large building projects where world-renowned architects known for significant buildings are contracted for specific projects.

Sometimes the architect choice involves many people with different views and perspectives. Developing criteria for is essential. Some characteristics include:

- Previous work
- Understanding of the concept
- Company reputation, sustainability, length of time in business

- Understanding of client needs
- Reputation for innovation
- Technical consultants used
- Value for money
- Ability deal with budget constraints
- Ability to work with client

Part of the selection process usually involves visits to previous projects with the architect and speaking to previous clients to determine satisfaction. Embarking on a national or overseas tour of libraries can be useful as long as the research is done before embarking and budget constraints are well understood. Having the perfect library building is everyone's dream but designing an efficient and effective library with the imposed financial constraints is the hard part. Look at the good and the bad. Find out what does and does not work in each library and speak not just with senior library staff and the director but also to the staff who work in the various service areas daily. Learn from the mistakes of others. Above all, it is important that the architect and the librarian believe they can work together – and work with the project manager as well.

Most organizations have rules about what architectural firms can be used. Some have lists. Many projects involve teams. On some occasions, previous architects may be retained for future building projects. This may be an advantage or a disadvantage. Some architects find it difficult to take new approaches.

## **Communication is the Key**

Open communication is the key to any good relationship and is equally important with the architect/ librarian relationship. All forms of communication must be used but establishing a good interpersonal relationship is an excellent beginning. Some architects work in teams and teleconferences can be very effective and same considerable time. Email and exchange of online document coupled with CAD/CAM have made all the difference to communication exchanges.

One may be familiar with architects who have been involved with previous joint projects. It is still just as important to communicate. Familiarity may breed contempt and environments all change. Any changes must be noted and fully discussed.

## **Essential Design Elements**

Harrington (2001) discusses six design trends: self-service and operational efficiency, extreme flexibility and integration of technology, green/sustainable buildings, collaboration between public and school or college libraries, renewed interest in aesthetics and customisation of services to the local community. These trends highlight some interesting ideas, including:

Adopting a branding or badging practice both on the interior and exterior of the building to simplify library usage

Appropriate placement of self-checkout machines throughout the building

Multi-use space – foyers can double as art galleries

Re-using material from the original building

Documenting the essential design elements for the library can help to create the big picture for both you and the architect. Taking into consideration that when designing libraries they should be "functional, easy to use and economical to operate" (McDonald 2000). All design principals should be included in the design brief to provide the necessary information for the architect to create the library. Outlined below are some of the requirements necessary for

good library design, however each list will be specific to each individual library.

## Entrance

The entrance must be attractive and welcoming. It must be in a position that is easy to locate. The use of grand foyers is optional – often this will be dependent on suitable space and available money. The entrance is one of the most important parts of the library and because of this careful thought and consideration must be put into the design of it.

# Wayfinding

Use signage appropriately and elegantly. Use of directional colour to guide customers can be a useful alternate to signs. Directories and friendly staff need to be visible as soon as customers enter the building. Good signage can reduce the number of directorial questions received at information or other service desks thus reducing the pressure on staff to assist users to adjust to a new building (Wiley 1997).

# • Service points

The number and arrangement of service points will be proportional to the space and number of staff available. New concepts are replacing old ideas. Removing the information desk and replacing them with roving staff can save on space. On occasion combining service points is advantageous. This combination is not only for library service points, like information and loans or circulation desks, but other university services like information technology help and student services.

## Seating

Not everyone study's or reads the same way. Different types of seating and study spaces offer both staff and students variety in choosing an appropriate study environment to meet their individual needs. Lounge seating, ottomans, carrels, group study rooms, single study rooms, postgraduate areas and more. The newly built University of Otago Information Services Building has 20 different types of study spaces (Wooliscroft 2003). Current trends in teaching and learning have placed greater demands on libraries to provide group study spaces. These can be a fixed, closed room or for a more flexible approach this can be in an open plan area where students are allowed to be noisy.

Globally connected learning spaces, information or learning commons, training rooms, eZones all have different names but generally translate to the same thing – a designated area populated with large numbers of computers with various applications and internet and email access for student use. With many libraries attempting to provide twenty-four hours, seven days a week library service, the seating layout needs careful planning. It might be wise to separate noisier computer areas from quiet study areas. Younger students may prefer a noisy environment in which to work. Multilevel libraries can be suitably designed with noise generating areas on the lower or entrance levels.

## Lighting

Using natural light where possible is desirable and sustainable. Glass partitions can be used to increase the amount of natural light in the library. Not only are there aesthetic benefits of windows and glass partitions that let the natural beauty and university surroundings be viewed from within the confines of the library building but the cost saving benefits of reducing power to operate artificial lighting and reducing ongoing maintenance costs. Using many windows also enables customers to view the contents of a building (Jones 1997), helping to connect the outside with the inside (Harrington 2001) and create that sense of community that all libraries strive for.

#### Colour

Colour in the library can be used for a variety of reasons. It can be a substitute for signs as different coloured flooring can guide customers around the library. It can help brighten and freshen bleak rooms and spaces. It can be used thematically, badging different spaces in the library, for easy identification. At the University of Queensland (UQ) Library each one of the 13-branch libraries is branded with the same colour theme. The wall behind the information desk is always blue whereas the wall behind the loans area is red. Thus if a customer goes into another UQ branch library services points are easily recognisable.

## • Shelving and storage

Consider how materials are used in your library and what is the appropriate shelving or storage facility for them. Open vs closed stacks; compactus vs standard shelving. Use of robotic automated library retrieval system as is in place at University of Nevada Las Vegas Lied Library (Boone 2002), might be an attainable option for low use material.

# Security

Appropriate security needs to be in place for staff, users and the collections. External lighting, availability of internal phones and prompt access to campus security offer discrete solutions to making clients feel safe especially outside usual business hours. Occupational health and safety guidelines need to be followed.

## Displays and exhibitions

Some features are not essential and can often be a result of current trends like atriums, fish tanks, monitors, etc. Space and financial constraints will be the determinants of choosing such features. Bringing nature inside gives the library "vitality" (Demas & Scherer 2002). Fish tanks at the Cerritos Public Library, Californi, line the walkway of 'Main Street' and the Ipswich Campus Library at the University of Queensland contains a garden and water feature in the library. These features provide libraries with a welcoming space and environment for learning, and a social interactive place that serves the community.

## • Technology infrastructure and computing facilities

Technology and computing has had the biggest impact on library design in the last decade (Boone 2002). Finding the right mix of data access points with wireless is important and provides flexible planning for future needs (Nelson 2003). In a financially unequitable society providing all wireless is not appropriate for not every student has his or her own laptop.

# Making it Your Own

The library building is no longer just for books and computers. Adding value to the library design and creating a user experience are extremely important. Including cafes, galleries and bookshops is a simple and effective way of doing this. The extra services can be outsourced to contractors or managed directly by the library. The incoming revenue is also a means to an end. Other less business-like alternatives include conference rooms or amphitheatres that can also be hired out.

Badging the library is a reliable method for easy library use by the customers. It is also a successful mechanism to distinctly create a unique library and an effective marketing tool.

## **Remember the Exterior**

Design of the new building or refurbishment does not stop at the exterior walls and considerations for landscape gardening and directions to the library are just as important. The library needs to be easily found and the entrance obvious. The gardens around the library

must be attractive and where there are windows looking out to the exterior, careful thought for the design of individual garden space is important.

## **Expect the unexpected**

A new or renovated library can lead to significant changes that have not been planned for. Change in work processes is quite common. Staff can often be prepared for changes in work process during the construction but rarely consider that it will change their future work processes. New staff areas can be remodelled to make material process handling more efficient. Staff need to be flexible and adaptable during and after construction.

Most new library buildings have had an increase in patronage after construction or refurbishment (Wiley 1997). The UQ Ipswich Campus Library had an 80% increase in customers after the new library was built, whereas usage in all 13 branch libraries at the University of Queensland increased by a total of under 1%, in the same period.

Building never runs smoothly. Delays are to be expected. When refurbishing an existing library, decisions need to be made on where staff and collections will be housed during the construction phase. Disruptive work conditions and excessive noise can be exhausting.

# **Accommodating Future Needs**

Predicting future needs, especially technological ones is nearly impossible. Wild predictions of the 'library without walls' have been unfounded. Printed collections have not yet disappeared and continue to remain a large component of many libraries.

Flexibility and flexible space have been popular terms in designing new library buildings. They have significant importance for future space planning. When tables, chairs, and shelving are not bolted to the floor they can be easily moved and space allocated for another use (Nelson 2003). Use of open plan design can helps make space more flexible. As services and trends change, the surrounding facilities can change with it. A periodicals room at Cornell University was not overly used until it was change into a wired café. Buildings should be designed to be "responsive to user needs: comfortable, workable, exciting human spaces" (Ludwig et al. 2001).

Staff will also change as the role of the library changes. They will move from the keepers of knowledge to the navigators of information. Managers will spend more time negotiating new joint services with outside providers.

#### Conclusion

A library is more than books and bytes. A successful library supports a sense of community within its users, constitutes an archive of past collective knowledge and provides a resource for the future (Lyman 1999). Though Patricia Nelson was referring to health libraries she aptly summarised the strategy that good planning and design can create libraries with a sense of tradition as well as a place where information is available at users' fingertips (2003).

## Keywords

Architects Library Buildings Interior Design Library Planning Academic Libraries

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