ABSTRACT

Introduction
The Ecosciences Precinct (ESP) in Dutton Park, Brisbane opened in late 2010 providing a facility for researchers from Queensland Department of Employment, Economic Development and Innovation, Queensland Department of Environment and Resource Management and CSIRO. This landmark building has won numerous awards for its innovative and sustainable design. The building incorporates ‘green’ energy and recycling initiatives, and is designed to encourage interaction and collaboration amongst occupants.

A purpose built Library is at the physical and intellectual heart of the building and provides clients with an open, modern, collaborative space.

This paper describes the planning process, physical occupation (involving relocating collections from more than eight different locations), the ongoing service operation, client satisfaction levels and future initiatives.

Methods
Library clients at the facility work in diverse areas including animal science, climate change and adaptation, agricultural sustainability, soil science, and weed management.

In the spirit of collaboration that the centre is designed to encourage, library staff from the three agencies work together to provide services to over 1000 ESP staff and researchers. For example, training sessions have been offered to staff from all three agencies for common database platforms.

This paper describes some challenges, including separate networks and catalogues, and how services have been adapted to overcome these barriers.

The Library has successfully positioned itself as a community hub for the facility, with clients using it for journal clubs, meetings, and as a space for quiet research.

Outcomes
A survey has been carried out to determine client satisfaction with the new Library. Results are discussed and future plans based on the findings are outlined.

A real benefit for library staff has been the cross-fertilisation and the resultant sharing of information, ideas, skills and broadening of knowledge.

Conclusions
Plans for future integration and collaboration in the ESP library service include the creation of a union library catalogue and possible shared access to electronic resources. A shared site intranet would also be a welcome development, enabling the Library to project a more unified presence to clients.
It is hoped that Wi-Fi networks will further encourage client use of the Library and its surrounds.

**PAPER**

**Background**

Planning for the Ecosciences Precinct (ESP) in Dutton Park, Brisbane began in 2005 when it became apparent that many of the existing science research facilities of the Queensland State Government and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) were aging and unsustainable in their current locations. Executives saw a need to bring 1000 scientists together to collaborate, and share resources, equipment and knowledge.

It was considered that bringing together communities of scientists produces greater innovation and creativity. It was argued that investment in a new Science Precinct would support the research efforts of staff by providing a highly collaborative working environment with state of the art facilities which could be shared and collectively maintained.

**History and Design of Precinct**

The site for a new cross agency Scientific Precinct at “Boggo Road” in the inner city suburb of Dutton Park was decided after several other options were discarded as a result of protests by local residents. The traditional owners of the land on which Ecosciences Precinct now stands were the Turrbal People and the Jagera People. Boggo Road was the colloquial reference to Brisbane’s main men’s and women’s prisons which were in operation from 1883 to 1999. The century old Division 2 prison, also known as the Women’s prison, remains on site as a historic location and has been integrated into the new development with a beautiful mural which commemorates its part in the history of Brisbane. The area now occupied by ESP was once occupied by the Division 1 prison and associated workshops.

The overall vision for the site was one of innovative modern buildings, with green energy and passive design features including the long east west floor plans of the three tower blocks, the four atria, and generous sun-shading. The objective is to minimise direct solar heat gain while encouraging diffuse natural light into workspaces. Windows are double glazed and tinted for improved thermal performance.

The project architects, Hassell aimed to “achieve a significant innovation by creating a new facility ‘without walls’, encouraging knowledge exchange and discovery through use of shared spaces and resources”. Three north-orientated wings are linked by an internal multi-level street which optimises vertical and horizontal connections via atria, lifts and open staircases. The idea was to create a “central street [which] draws staff out of their quiet work zones into a lively hub comprising common areas and meeting rooms”.

External walkways and stairs define courtyard ends and provide access to the network of offices located parallel to the main street. The lab zones are situated to the north and south allowing unimpeded staff interactions between office areas. ESP has been designed for ease of access with distinctive signage to assist in way-finding. Large letters, A, B and C identify each block. Signage is enhanced with graphics and colour-coding to identify each floor – olive for ground and fourth floors, orange for first
floor, lime for second and blue for third. These colour schemes were chosen to reflect the scientific themes of the Precinct itself being land, sky and water.

This landmark building has won several awards including the 2011 Australian Institute of Architects Harry Seidler Award for Commercial Architecture for its innovative and sustainable design. The jury noted the particular strength of the award and said 'the building purposefully unites the complex, high performance requirements of laboratory space with social, people orientated environments filtered by a light garden ambience.'

ESP is well situated for staff and visitors being strategically located for connections to the city, the three Brisbane universities and the research facilities of three major hospitals. There is no private staff parking available on site. However, the ESP transport hub is connected with a number of public transport options and there are excellent facilities for cyclists including links to cycleways, safe lockups and even Brisbane City Council’s City Cycle scheme.

Shared social hubs (including tea making, fridges, freezers and dishwashing facilities) are provided on each level and staff are actively encouraged to make use of these areas. The architects saw these hubs as essential to encourage networking and to foster creativity and informal communication across all agencies.

The three Queensland government departments to move to the new facility were Natural Resources and Mines (NRM), Primary Industries and Fisheries (DPI&F), and the Environmental Protection Agency (EPA). CSIRO agreed to join the initiative creating an Australian first with both State and Federal agencies co-locating to a new purpose built research facility.

By the time ESP was opened in late 2010, there had been two Machinery of Government changes, and the facility was occupied by researchers from Queensland Department of Employment, Economic Development and Innovation (DEEDI), Queensland Department of Environment and Resource Management (DERM) and CSIRO. DERM staff moved from one location to the new facility. DEEDI staff moved from four locations. CSIRO staff moved from three locations.

Scientists at ESP work in natural resource sciences, landscapes, soil and water science, marine and atmospheric science, climate impacts, plant pathology, forestry, entomology, fisheries, animal science, biosecurity, air pollution, wildlife ecology and sustainable agriculture.

**Planning and Design of ESP Library**

A purpose built Library is at the physical and intellectual heart of the building and provides clients with an open, modern, collaborative space. Library Managers were ecstatic to learn that the Library would be positioned on the Ground Floor of the middle tower in a highly visible, central location bordered by glass atria with landscaped courtyards on both sides and immediately adjacent to the main entrance and security desk. Proximity to the Precinct’s open plan foyer café is a bonus both for staff and clients.
Four cross agency user groups were set up in August 2005. The Ecosciences Library User group was one of these and included Library Managers from each agency, representatives from the architects and those with a departmental planning role. Early in discussions, Library Managers of the four agencies (NR&M, DPI&F, EPA and CSIRO) recommended that the Library should play a central role in supporting the collaborative working environment at ESP by providing one space for all groups rather than separate libraries.

It was considered extremely beneficial to bring the libraries together thus maximising research skills, creating potential for collaboration between Library staff, savings in space requirements because of rationalisation of holdings and shared access to print collections. The concept of shared library facilities for the Boggo Road Ecosciences Precinct was supported by the Boggo Road Executive Project Committee.

Initial meetings of the Library User Group agreed with the recommendations of the architects and interior designers that the Library’s physical appearance should have a “Qantas Club” feel with a very open atmosphere with minimal shelving, discussion and display areas with a clean modern lines and quiet work areas for clients. There would be on-site storage for long runs of journals and low usage material away from the Library itself on level 4 of the same tower. Easily accessible open plan Library staff work pods were designed to enhance workflow and collaboration.

By November 2006 indicative drawings of the library space had been completed and 2007 saw several meetings about the mechanical, lighting and electrical services resulting in detailed plans of the library area, work stations and collection spaces.

**Transition**

With scientists moving from large offices to much smaller open plan work areas, huge efforts were made to decrease the print materials which had been collected over many years. Strategies to assist in this task included provision of advice from Records Management experts, training in bibliographic management software such as Endnote and RefWorks by Library staff and acceptance by the Library of large amounts of donated material which was assessed for retention.

In 2010, Library Managers began discussing how the Library would operate, with IT networks as one of the key influencing factors. A literature search was undertaken to identify other joint use libraries, to gain insight into best practice for the ESP Library. (See Appendix B.)

The decision that each agency would retain its own network meant that there would have to be three separate catalogues, library management systems and physical collections. Staff from all agencies are able to borrow from all print collections. However because of vendor license agreements, access to online journals and literature databases depends on departmental affiliation. Space allocation of shelving was based on the proportion of staff from the three agencies and Library Managers met to work out the details before any occupation of the Library.

DEEDI moved in first in October 2010 followed by DERM in November and CSIRO in early 2011.
**Working in the Collaborative Space**

The shared Library has been a huge success. Scientists were very concerned that the new style of open plan office would not allow them the same level of quiet concentrated work areas for their research. The Library provides a quiet space away from their colleagues and phones.

A survey was undertaken in March 2012 for feedback about the joint Library from the scientists at the facility. We were pleased with the 20% response rate, and overwhelmed by the positive comments confirming the success of the architects’ vision for a space which enhances innovation and creativity. Many responses also reflected the benefit of easier access to resources by co-locating several collections in the new library. Another strong theme of the feedback was the fact that scientists now have access to a librarian at all times (whether from their own or another agency.) The survey questions and some sample responses are in Appendix A.

A real advantage for library staff has been the cross-fertilisation and the resultant sharing of information, ideas, skills and broadening of knowledge. Interviews were held with library staff in April 2012, and in many ways their comments mirrored those of the scientists. Benefits highlighted were –

- access to print collections from all agencies
- broadening of professional knowledge in information management practices and subject content
- availability of immediate back-up
- collaboration in assisting clients from each others agencies
- one display for new books and journals
- joint marketing.

The fact that the catalogues of the three agencies are on the internet facilitates title checking and resource discovery, and negates the need for a union catalogue.

The organisational structure is that Library staff report to their own agency managers and work together using informal meetings to discuss operational processes, collection management and promotional and training opportunities. Any issues are dealt with as they arise, or escalated to managers as necessary. Library staff have been able to work successfully with a large measure of autonomy and this has enabled them to develop their own self-managed team.

The other main area of collaboration is promotion of the ESP Library service, including organising events such as -

- Library and Information Week
- vendor demonstrations
- use of the library space for other activities, including lectures, special interest group meetings, art displays and Science Week.
The Future

The EcoSciences Precinct Library space has been an overwhelming success for all stakeholders including Queensland Government and CSIRO executives, scientists, staff, visiting scholars and library staff, in terms of:

Physical space – welcoming, open, light, airy, multipurpose, highly visible, resource sharing, efficient storage, helpful

Virtual space – immediate desk top resource access, communication, knowledge management, information and library awareness

Mind space – innovative, encouraging creativity, positive energy, meeting place, quiet, contemplative, lively, social, supportive

What does the future hold for ESP Library? Plans for further collaboration, sharing and service expansion include:

- integration of a training room within the Library space
- creation of a union library catalogue
- possible shared access to electronic resources (subject to license restrictions)
- shared site intranet to enable the Library to project a more unified presence to clients
- wireless network access
- higher speed data services such as AARNet, Eduroam
- more cross agency training such as bibliometrics courses
- more cultural displays and special interest group support.

Clearly the architects’ vision for a place of collaboration, creativity and knowledge exchange has been realised in the Ecosciences Precinct as a whole. We feel the ESP Library fits perfectly with this concept and works successfully to meet the needs of all clients. We believe that our prime location within the Precinct, the beautiful and functional work, collection and service space and our enthusiastic, energetic and professional staff will see ESP Library continue to be an essential and highly valued component of our scientists’ research work in supporting the ongoing success of the Queensland economy.
APPENDIX A SURVEY RESULTS

Q1 Did you know there is a library at ESP? Yes/No
100% Yes

Q2 Do you use the physical library space? Yes/No
85% Yes

Q3 If your answer was No, go to question 7. If your answer was Yes, how do you use the physical space?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read print journals</td>
<td>28%</td>
</tr>
<tr>
<td>Read newspapers</td>
<td>23%</td>
</tr>
<tr>
<td>Borrow books</td>
<td>51%</td>
</tr>
<tr>
<td>Elicit help with research from your librarian</td>
<td>42%</td>
</tr>
<tr>
<td>One-on-one training with your librarian</td>
<td>9%</td>
</tr>
<tr>
<td>Quiet work/study</td>
<td>14%</td>
</tr>
<tr>
<td>Attend informal talks/lectures</td>
<td>55%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
</tr>
</tbody>
</table>

Q4 Has access to the joint library facility at ESP benefitted your work/research? Yes/No
85% Yes

Q5 Please briefly outline your reasons for your response to question 4

Sample responses –

- Access to **multidepartmental resources and assistance** has helped in **information gathering** and **researching tasks**. Talks and other events held in the library have been great opportunities for **information sharing, learning, networking and horizon broadening**!

- I think having the **different librarians work together** seems to have **improved knowledge of and/or access to research materials**

- my job requires **up-to-date knowledge** of various fields in water sciences and a **work environment conducive to thinking** - the **library provides both of these**

- The **joint library** has been of **great help** because of **access to more books** that would otherwise have to be loaned on interlibrary loans wasting valuable research time

- The librarian found the book I was looking for was not in the collection. She was **immediately able to consult someone from CSIRO** and informed me that I could borrow from them

- **Getting information quickly by simply walking into the library** and asking for help in locating the information has been a **big aid with a court case** that the department is involved in

- **Close proximity to workspace** makes access easy to resources

- This is the **perfect place** to catch up on some reading or complete work online in **quiet time** or listen to one of the **interesting lunch time science presentations**

- **Bigger space for quiet study and more "street frontage" to impress visitors**
The quiet space to work is fantastic, when I have been struggling to concentrate in the office it is a good change of space. Also we didn't have a librarian for a long time so it is nice to be able to pop down and see the librarians.

It's great to have a different space you can go to when the stuffy open plan office space is limiting your thinking ability.

A physical library remains an integral part of an effective research program. While the desk-top library is now my main access point, I still need a physical library.

There's always staff in the library, be he/her is DERM or CSIRO or DEEDI - all staff of which are very helpful.

Journals subscribed to by other organisations can be read while they are on display.

The library is a very accessible, large public space and having to pass by every day as we walk to our office/labs reminds us it is available to us.

Combining several smaller libraries means a better resource and less likelihood of waiting for requests.

The library space helps to make up for lack of large seminar rooms at ESP. The library is bright and attractive and improves my state of mind.

I do love the displays of photos etc and looking forward to the creative arts display coming soon.

Q6 Is the library at ESP an improvement on your previous library facility?
Yes/No
93% Yes

Q 7 Thank you for completing this survey. To go in the draw for a tasty prize from the café, please enter your name.
In The Field - Melbourne Brain Centre
In The Field visits the new Melbourne Brain Centre and discovers that light - a light-filled environment - is a key design element encouraging sharing and collaboration in science research. Another essential ingredient in this mix is the cafe and casual meeting places.

Flemming, C.
A joint university library: Vision and reality

Hart, G.
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The third place: The library as collaborative and community space in a time of fiscal restraint

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Why do Staff of Joint-Use Libraries Sometimes Fail to Integrate? Investigating Cultures and Ethics in a Public-Tertiary Joint-Use Library

Bryant, J., Matthews, G., Walton, G.
Academic libraries and social and learning space: A case study of Loughborough university library, UK

Marzal, M.A., Parra Valero, P.
The school and public library cooperation: Information literacy, "joint-use" and virtual world [La cooperación de la biblioteca escolar y la pública: Alfabetización en información, "biblioteca integrada" y el mundo virtual]

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Marie, K.L.
One plus one equals three: joint-use libraries in urban areas - The ultimate form of library cooperation

Robinson, C.
Working at a joint-use library
Green, S., Gunnels, C.
Voices from the trenches: librarians reflect on the joint-use library

Hansson, J.
Just collaboration or really something else? On joint use libraries and normative
institutional change with two examples from Sweden

McDonald, A.
The ten commandments revisited: The qualities of good library space
(2006) *LIBER Quarterly*, 16 (2)

Mcnicol, S.
What makes a joint use library a community library?

Dalton, P., Elkin, J., Hannaford, A.
Joint use libraries as successful strategic alliances

Bauer, P.T.
Changing places: personnel issues of a joint use library in transition

Sophia, L.E.R., Hendrikz, F.
Joint use libraries: implementing a pilot community/school library project in a remote rural area in south africa

Dorrington, L.
Health libraries as joint use libraries: serving medical practitioners and students

Library As Place: Rethinking Roles, Rethinking Space (2005)
Washington, DC: Council on Library and Information Resources (CLIR pub 129)


Breivik, P.S., Budd, L., Woods, R.F.
We're married! The rewards and challenges of joint libraries

Shepherd, M.

Schwanz, K.
Thinking about a joint-use library?: A Memorandum of Agreement and timetable can ensure success

Gleeson, T., Russell, G., Woods, E.
Creative research environments: environmental factors affecting creativity in agricultural research in Australia (1999), Rural Industries Research and Development Corporation RIRDC Publication No 99/128 RIRDC Project No SYC-4A