Libraries and Faculties in Partnership: Delivering Appropriate Information Resources and Services to Science Faculties

Gaynor Austen

Queensland University of Technology
Increasingly in recent years, the role of university libraries in delivering information resources to their users has been challenged. The advent of user directed online access, and of unmediated document delivery, has caused many libraries to question the nature of their long term role within the higher education environment. If university libraries are to survive as an integrated part of the academic process, then it is essential that they develop partnerships with faculties to determine and provide information resources relevant to academic needs. In order to ensure that appropriate learning experiences occur within the academic program, the library and faculty must together develop models of information resource access and use.

This joint process is nowhere more critical than in libraries’ relationships with their Science faculties. Most Science disciplines emphasise currency of information. In this context, it is the journal article which constitutes the critical information source, and, as a result, document delivery becomes a viable alternative to ownership of print sources of information. Electronic access increasingly provides the speed necessary for efficient delivery of this information. How can university libraries deliver resources efficiently to meet information needs in such a context? Only by working with the faculty can the most appropriate mix of resources be determined and provided.

**Background**

At Queensland University of Technology in Brisbane, Australia, this issue has become a critical one in the evolution of the university library service. QUT was designated a university in 1989. The University had formerly been the Queensland Institute of Technology, and, like most technological institutes in Australia, had emphasised undergraduate and basic postgraduate education, rather than faculty research and doctoral study. The attainment of university status meant that the information resources previously provided by the library were inadequate for the new research emphasis of the University. Available financial support was further stretched by a major amalgamation in 1990 with the Brisbane College of Advanced Education. This amalgamation required information resources to be brought to university research standard for yet a further group of faculties.

As the research capabilities of the University expanded, it was the Science Faculty which developed the greatest number of Research Centres and research concentration areas. This fact meant that the provision of adequate scientific research information became one of the most critical needs for improving university library service.

During the five year existence of the new University Library, a series of strategies has been developed, in conjunction with the University community, to ensure optimum
The Library Acquisitions Plan

In a paper delivered to the IATUL Conference in 1994, Tom Cochrane, QUT’s Director of Information Services (now Pro-Vice-Chancellor (Information Services) ), outlined a proposal for a strategic approach to university library acquisitions. The current Library Acquisitions Plan within QUT is the outcome of a process based on that approach.

Within the University’s strategic planning process, three key University plans exist, and are revised annually. These are the University’s Teaching Plan, Research Plan and Community Service Plan. At a second layer in University planning, other key support strategy documents are formulated and approved by the University’s governing structure. These Plans include the University’s IT Plan, Human Resources Plan and Equity Plan. From 1995 these strategies have been joined by a Library Acquisitions Strategy, which was formally debated and adopted by the University’s senior committees.

The format the Library Acquisitions Plan adopts is as follows:

1. Context - a statement outlining the background to the current status of the University’s library collection. This statement emphasises:
   - the inadequate resource base from which collections and services were initiated.
   - the difficulties experienced in maintaining the flow of resources required to support research and teaching, due to rapid price rises in science and technology journals and the fluctuating exchange rate of the Australian dollar (most journal titles being imported from overseas).
   - the impact of the development of the Internet on research resources.
   - the importance of cooperative arrangements, both regional and national, to expand resource access.
4. Strategies 1996 - 2000 (to achieve the stated objectives)
5. Resourcing strategy (a statement outlining the ways in which support for the strategy will be provided.)
6. Targets (Specific targets which can be used to measure successful implementation of the Plan).

In summary, the key Objectives of the current Library Acquisitions Plan are:

- To cater effectively for the great majority of undergraduate library needs.
- Within defined areas of research selectivity and concentration, to cater for the great majority of postgraduate student needs and research needs of staff.
- To refine systematic resource assessment for the establishment of new course areas, in conjunction with the relevant faculty.
• To develop collections in accordance with recorded and accessible collection development policies.
• To develop and promulgate a policy of progressive re-allocation of resources from traditional investment in collections to electronic information and document delivery.
• To develop a suite of automated/electronic services to augment and/or replace existing library services.
• To provide adequate capital facilities and student access to workstations, and professional assistance to support these objectives.

In order to attain these objectives, the Library has committed itself to the following strategies:

• To sustain a resource allocation equivalent to at least 3% of the University’s operating budget.
• To move the subdivision of this resource allocation from total dependence on acquisitions, to a ratio of 80% ownership : 20% document supply/electronic provision, within a period of five years.
• To implement an agreed subdivision between faculties of the acquisitions component of this resource allocation.
• To develop a phased approach to the introduction of automated/electronic library services (this to include the piloting of services with particular faculties).
• To provide an electronic reserve collection for a minimum of four faculties by the year 2000.
• To develop an agreed approach for the provision of study facilities for undergraduate and postgraduate needs.

Measurement of collection adequacy, and efficient targeting of available funds, has been facilitated by extensive use of the Conspectus methodology. In addition, as part of the implementation of the Library Acquisitions Plan, it was agreed to pilot the move to the new “mix” of acquisition, electronic access and document delivery on two faculties - the Faculties of Science and Law. As part of this strategy, online access and document delivery budgets, formerly maintained separately, were incorporated as segments of an overall Library Resources budget.

**Use of Conspectus Analysis**

QUT maintains an overall policy of research selectivity and concentration. Funded research work is confined to specific Centres, which must meet predetermined criteria for approval. Although unpopular with some members of faculty, this policy has greatly assisted the library by enabling it to target resource development for research support. In order to target these library resources effectively, QUT Library has, over the past five years, utilised the Conspectus methodology to pin-point the quality of library collections within specific discipline areas. Initial Conspectus analysis of collections was undertaken in 1991-92. In addition, through access to special university funds, a detailed Conspectus analysis of each School Research Centre and research concentration area was repeated by the Library in 1995. The findings of these analyses have enabled the Library to isolate areas of particular deficiency in its provision of research resources.
Conspectus analysis has provided a useful political tool which the Library has used in obtaining funds to improve research collections. It is seen by university administrators to provide an impartial assessment of collection adequacy, and a readily understood measure of collection improvement over time. The Australian Government, through the Department of Employment Education and Training, provided financial resources in the early nineteen nineties to enable former Institutes of Technology and Colleges of Advanced Education to improve their research infrastructure. 10% of the funds received by QUT for this purpose between from 1991 and 1994 was allocated to strengthen the provision of library research information. When special Government funding ceased in 1995, the University undertook to continue to provide specially earmarked funds to continue this strengthening of research collections. Working with the faculties, the Library was able to target these funds to areas identified by Conspectus analysis as deficient for research support. Re-evaluation of the collections first analysed in 1991-92, which is being undertaken progressively, has established that the Conspectus level of most of these collections has improved considerably over the last five years.

**The Science Faculty Pilot**

In mid 1995, the Library approached the Science Faculty to pilot a new model for information resource delivery. The Head of the School of Chemistry, who acted as the Faculty’s principal liaison with the Library, agreed to coordinate Faculty input to the model. The result of the negotiations between Library and Faculty was the development of a Decision Table to inform decisions regarding the appropriateness of print subscription, versus online/CD ROM subscription, versus mediated document delivery to meet the Faculty’s information needs.

A number of elements comprise this Decision Table (See Figure 1 Not yet available!). For each title, basic information, such as the call number, ISSN, and fund code, are recorded. Six decision elements are then incorporated into the table. These are:

- the cost of the subscription
- the format in which the title is available e.g. print/electronic
- the usage (derived from survey data)
- the access needs of the Faculty
- alternative availability
- the refereed status of the journal

In order to inform its collecting decisions, the Library undertakes occasional surveys of in-house usage of particular collection areas. In 1994, a whole year survey of usage of scientific periodicals was undertaken. Usage statistics from this study were incorporated into the usage segment of the Decision Table.

The Science Faculty was requested to develop a categorisation which would reflect its access needs for information contained in each title. Originally, the Library suggested that titles be categorised as either “core”, ie critical to the teaching and research function of the discipline, or “secondary”, in which case information would be required from time to time, but need not necessarily be held locally. However, the Faculty suggested that, from its point of view, the most appropriate categorisation of access needs was to determine those needs as either:
1. to browse
2. to obtain abstracts and contents pages, or,
3. to require access to the index only

It was this categorisation which was agreed to be incorporated into the final Table.

The two parties also agreed to determine alternative availability of information contained within the journal. This incorporated two aspects:

1. whether the information contained was available via commercial document delivery. and
2. whether the journal was available within the local region for interlibrary loan/photocopy supply.

The final element included in the Table related to the “status of the journal” i.e. whether or not articles contained in it were refereed.

The Decision Table, as finally agreed, is currently being used to determine the status of journal subscriptions relevant in the Faculty, and to consider decisions on the possible cancellation of journals, in order to release funds for the alternative provision of information via document delivery or electronic access.

**Other resource access initiatives**

As an extension of the cooperative in-house work being carried out with the Science Faculty, the Library and the Head of the School of Chemistry have both taken leading roles in developing regional coordination of chemistry research resources, and in coordinating a nation-wide examination of a possible Distributed National Collection for chemistry research material. A Working Party has been established under the sponsorship of the National Library of Australia to examine issues on Australia-wide cooperative access to chemistry resources. This Working Party includes Science Librarians from some of the libraries with the largest chemistry collections in the nation. The QUT Head of the School of Chemistry is representing the Royal Australian Chemical Institute on this working party, and has agreed to chair working party discussions. This is one of few examples within Australia of a professional body working closely with the library community to develop resource sharing arrangements which seek to solve the on-going problems of provision of research information across the nation.

The Library is working closely with its faculties to develop and implement strategies which will enable a seamless transition to new forms of information. However, it is important not only to ensure that current courses and research areas receive support, but also that the Library has input into decisions regarding adoption of new courses and new research areas. In this context, the QUT Library has also gained University administration acceptance of a process whereby Library Impact Statements are composed for any newly proposed course or research centre. These Impact Statements, which evaluate the current collection strengths using Conspectus methodology, draw conclusions regarding the Library’s capacity to support the proposed course/research area. Such statements play a role in decision processes adopted by the university. At Times, where the Library has indicated its inability to
provide adequate support for such courses or research activity, central funds have been made available to ensure that adequate resourcing is available. Occasionally, a negative Library Impact Statement has been one of the factors contributing to the University administration’s decision of refuse approval to proposed initiatives. In every case, the requirement for the Faculty to obtain a Library Impact Statement to be included with its course/research centre proposal has ensured more effective communication on resourcing needs between the Library and the Facilities.

Conclusion

All these initiatives by the QUT Library are based on the principle that resource provision must constitute an agreed University strategy. The Library must not work in isolation from its faculties in attempting to provide effective resource support for the academic process. Only through cooperative partnership between libraries and faculties will the most effective use be made of continually stretched financial resources.

At QUT, the development of a University agreed Library Acquisitions Plan, and the piloting of decision models with the Faculty of Science, have ensured that these principles of partnership and cooperation have been utilised. We believe that such actions are important in ensuring the provision of the best resource “mix” for support of research and teaching within the Science disciplines.