

The Library of the Future

A Consultation Document on the Future of the Memorial Library System

April 2005

Prepared for the Senate Advisory Committee on the Library

by

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Explanatory Introduction

Library acquisitions and services have been widely regarded as among our highest priorities as an institution of higher learning. Yet in recent years the effects of inflation, the needs of other academic sectors and the impact of new information and communication technologies (ICTs) have begun to challenge what has been called the intellectual powerhouse of the University. Concerns about the Library's continuing superiority in the promotion of learning have led the Senate Advisory Committee on the Library to ask a sub-committee to conduct a broad public consultation concerning the system's capacity to serve the needs of its users.

This document summarizes what the sub-committee has learned as a result of an initial round of consultation. The request for input from selected groups and individuals is attached as an appendix. We also formulate several propositions that appear to deserve the University community's serious attention. They bear, directly or indirectly, upon the University's budgeting decisions, the pending review of the Strategic Framework and the Library's own strategic plans. For purposes of quick location these propositions are formulated in **bold print**.

The Library is also undergoing intensive self-examination, reviewing its operations using its resident expertise in the information sciences and external opinion of the kind that will be provided through a recently completed Library Service Quality Survey. The present consultation document complements that work and contributes to it in several ways. We have sought to formulate our propositions compellingly by using not only opinion but also data. We bring an external and independent perspective to the discussion. As a result we may be able to communicate central elements of the Library's work more effectively than it has itself done.

The Big Picture

The central question facing academic libraries everywhere concerns a rapidly evolving role in enabling their intellectual communities to keep pace with the increasing output of millions of scholars. Many library professionals see their traditional functions as transformed by the World Wide Web and the modes of exchanging information it has made possible. The simpler days of buying books and journals and making them available in a well-catalogued repository are gone. Access to information remains fundamental, and it must be paid for, but the modalities of these needs are complex and changing in an era of electronic data storage and publishing.

The course of the revolution that has occurred in scholarly reporting appears to have been largely determined. Electronic journals are either supplementing or replacing paper editions. As a result of digitization it is anticipated that libraries will soon stop buying most printed magazines. Although this change applies in the first instance to texts that were created in digital form, to some extent it also applies to works that originated as ink on paper. Technologies now permit books to be transformed into electronic texts for \$10, making vast conversions feasible. Enormous libraries will be available through Google and other providers. More editorially sophisticated (and expensive) digital texts are also being created. Although preference for paper

over computer screen is well established for long documents and books are not obviously the manifest destiny of electronic publishing, original titles are increasing in number. Online encyclopedias and other electronic references sources have firmly established themselves as important resources for teaching and research.

There are three main driving forces of these developments in addition to the sheer increase in information. Notwithstanding serious startup costs, one factor is the set of economies permitted by freedom from the physical necessities of publication, storage and retrieval. Another is simple convenience and speed of access. The third is that electronic publication can be much richer than traditional dissemination, permitting the inclusion of interactive images, auditory segments and other complex data. Of course, taking advantage of these capacities will offset tendencies towards lower costs of production.

For many years, academic publishing has been bedeviled by the paradox that in order to gain dissemination of knowledge the producers of scholarly information have had to buy it back from commercial publishers. It remains difficult to employ ICTs to maximum advantage in higher education because, even as the technologies mature and stabilize, a thicket of ownership and copyright issues complicates ready access to information and renders it expensive. The legal and proprietary complexities of the traditional and electronic environments alike will continue to challenge the worldwide community of scholars for some time, calling for patience, determination, and collaboration.

The enhanced environment has made access to information an ever more exhilarating challenge for education and research alike. The Web is a wealth of information and misinformation. Tools for searching effectively within its vast complexity have become a basic need. The fundamental problems of organizing and locating knowledge without missing potentially valuable sources are not solved by programs that miss information that is syntactically odd or below the horizon of popularity. Assessments of relevance also defy mechanisms, a theoretical and practical problem with which students and scholars will have to continue to contend.

The Local Situation

The context provided by these global issues enables us to focus on those that especially concern Memorial University. We consider them under the headings of pedagogy, research, services and financing. It should go without saying that these headings overlap. They are an organizational convenience only.

Pedagogical Issues

The fundamental business of the University is the education of its students. The advent of many electronic sources of information seriously complicates fulfillment of this responsibility. There may be a tendency for students to neglect better material that is not available through the new ICTs. One casualty is the serendipitous discoveries that come from exploring an organized physical collection unless digital access can come to duplicate freedom to browse library shelves. At the same time, students and their teachers alike may not be fully educated in the use of the new resources. Both finding relevant information within the vastness of the Web and assessing it when it has no dependable imprimatur are needs that must be met.

All professors have their way of dealing with needs for access and assessment, but not all are keenly aware of the traditional role of the University in this respect. For decades the staff of the Queen Elizabeth II Library have offered a Library Instruction Program (LIP). In its contemporary form it specializes in information literacy. Approximately 10 information services librarians meet on demand with classes of students (three-quarters of them at the first or second year level) in order to introduce them to the arts of thinking critically about the information they find and use. They also provide a WebCT-based Library Research Essentials Tutorial.

LIP is growing. There were 4622 participants in 2003/04, but the classes are attended mainly by students in Arts and Business. It is initially puzzling that Education is not a major user, but that may be explained by the fact that most of that Faculty's students only enter an Education program in their third year or are pursuing a second degree. Given the rapid adoption by Science of electronic information, it is also striking that the Faculty's professors rarely introduce their students to the service. In this case a large part of the explanation is that basic course materials in the sciences normally consist of textbooks, so that use of the Library is not expected in the early years of a Science program. Across the University, though, there is a mismatch between patterns of utilization and the fact that nearly 80% of first-year students report feeling less than well prepared in the area of library skills upon arriving at Memorial.

Professors possess the greatest expertise in access to information in their areas of specialization, but responsibility for the rudiments and generalities of accessing information belongs primarily to professional librarians, who have the best overall understanding of the ways in which academically relevant literature generally is organized. Partnerships suggest themselves. Hence our information leads to a clear conclusion: **In consultation and partnership with the relevant academic bodies at the campuses in St. John's and Corner Brook, information services librarians and the academic units should make LIP or its equivalent available to all the University's students in their first year at Memorial.** Discipline-specific training at the upper levels is also desirable.

Academic librarians have always been the principal agents in selecting and organizing information for users. In the era of the Internet they may become even more important in developing appropriate filters for data, especially for students who do not yet have the skills to navigate the waters familiar to scholars. The invisibility of this work can restrict its local benefits and lead to misunderstandings. **As part of its public education services, the libraries on each campus should hold annual information sessions for professorial staff, explaining recent developments in the organization of information and access to it.** We presume that this information will be available electronically through the Library website following a general e-mail message announcing its availability.

There are other important issues pertinent to the Library's role but still distinguishable from it. These include Web-connected courseware and the "smart" classrooms necessary for making it effective. It is easy to foresee further points of intersection between the developing resources of the Library and the requirements of successful instruction. Educational programs will benefit if the Library is kept actively engaged in pedagogical developments that are not directly its responsibility. Such engagement is particularly important in order to maintain a coherent institutional approach to copyright issues that can impact upon course delivery in a major way. In particular, we must come to grips with copyright laws that restrict the use of material owned by the Library in the classroom and impede students' electronic access to materials placed on

reserve for courses. More generally, an unprecedented degree of collaboration between the Library and course support operations will be needed.

Research Issues

Perhaps the single most difficult issue for the Library system is the differential impact of the ICT revolution upon research in the broad areas of the arts and sciences. Both general fields of learning have keenly embraced the advantages of the new technologies for their disciplines, but whereas the arts remain attached to archival and printed material, the sciences have migrated very rapidly to electronic sources. The difference may have an objective foundation in a deep difference between perennial and progressive disciplines (we intend these descriptions non-pejoratively); but the very fact of the disciplinary divide, however it is to be explained, requires the University to provide for two different kinds of needs as long as both persist within the world of scholarship.

Researchers in the arts are accustomed to exploring materials for which key-word searches are impossible or miss crucial information. They thus accept the need for the frequent delays required for searching physical documents and traveling to distant archives. The value of publication is not often greatly lessened by gaps of months or years. By contrast, the capacity of ICTs to transfer information almost instantaneously has radically changed expectations in the sciences. Immediate access to the newest information around the clock is the developing norm, not simply because conveniences come to be experienced as needs but because ICTs have forced a change in the nature of scientific inquiry. When the dissemination of research typically occurred in printed journals, there was no alternative to waiting patiently for its reception by the community. With this restriction removed, a scientist's career may depend upon absolutely current knowledge of all developments relevant to an area of inquiry. For this reason, CISTI Source has not been particularly well received by many scientific researchers as a substitute for core journals.

For the Library these differences mean having to secure two streams of access to current literature. In an era of declining constant-dollar allocations this dual need makes it especially difficult to supply all legitimate requirements adequately. It has contributed to a change in the balance between purchases of books and journals from approximately 50/50 to 25/75. The shift reflects a high priority upon remaining as current as possible in periodical literature required for research. It has not precluded a series of journal-cancellation exercises, the savings from which have been required to support the remaining journals. In virtue of the need to sustain the teaching collection, the overall effect has been a diminishing core of research materials and an increasing challenge to accommodating the needs of new researchers. This direction is difficult to reconcile with aspirations to become a more research-intensive university.

The comprehensive effects of journal cancellations are probably not as serious as these facts suggest. Through various negotiations and arrangements with publishers and suppliers, the availability of periodicals through the Library has increased between 2001/02 and 2004-05 from 11,795 to 22,157 thanks to packages that give access to many electronic journals. It is unlikely that the value of the new titles compensates fully for the deletions, but they do mitigate the disadvantages. At the same time, this extended group is subject to uncertainty because the packages change, justifying concerns that back issues may become unavailable as a result. Because guarantees of access to the additional titles can be slender, the Library is seeking to

house the resources locally and gain control of the files in perpetuity. Managing this complex situation is an ongoing priority.

In order to address the needs of research in all sectors, the Library has developed collaborative arrangements with other universities that will enable all of them to be more selective about purchasing materials in narrowly focused areas of specialization. The need to duplicate materials is also moderated by the increasing availability of major library collections online. In future, scholars will have a greater amount and variety of relevant material available to them at a fraction of the institutional cost of traditional acquisitions. Such initiatives are consistent with the clear view of Memorial's academic community that **the most urgent issue confronting the Library at this time is provision of adequate access to research materials.**

A report from the University Librarian on *Research Support in the Queen Elizabeth II Library* is attached as a second appendix to this report.

Service Issues

With so much personal access to the world of information now possible, it can be plausibly suggested that the need for professional librarians will diminish. On the basis of our evidence, this is a specious appearance. We have already noted the role of Library staff in training students and faculty and in organizing information for easy access. To this we must add the increasing role of the Library in a variety of consortia that make works not held at Memorial available to this academic community. Librarians must sustain the relationships required to make these arrangements broad and stable. As an example, the Atlantic Scholarly Information Network is establishing a regional library portal that will help users locate materials available at other sites. Responsibility for developing clear routes to the available content for the academic disciplines will be divided among the universities, creating another element of collections development, which should be better than Google for our purposes.

CISTI Source is an excellent service for many investigators. For others its relative slowness (despite ever greater automation) and quality of illustrations (despite the likelihood of electronic texts to come) make it an inadequate replacement for electronic journals. Some have recommended discontinuing CISTI and transferring the resources devoted to it to other forms of access. This would not serve the whole community well, and the revenues released in this way would not create enough budgetary discretion to satisfy anyone. We therefore depend upon Library staff to secure further improvements to this service.

Members of the staff also provide a central resource for connecting the Library website with Computing and Communications and for conveying the Library's vision of service to the community. The matter of communication is one we return to in the conclusion, since there is evident room for improvement in keeping academic units advised of priorities for acquisitions, relevant Library policies and decisions about expenditures. A case in point is the Information Commons, the rationale for which has been questioned at a time when journal cancellation programs are being pursued and the physical area devoted to basic reference works is being reduced in order to accommodate a set of computer stations for students.

The degrees of the latitude available to the Library are easily exaggerated. With respect to the creation of the Information Commons on main campus, the Office of Student Recruitment identified the facility as a need. It is also an integral part of the evolving cooperation between

Computing and Communications and QE II and a laboratory for changing modes of instruction. The particular expenditure was a one-time cost rather than part of an ongoing allocation that could be significantly redeployed to address perennial demands such as journals. Greater dissemination of such information might have avoided misunderstandings about funding for the Commons.

Our suggestions about Library services are reported in the Conclusion below. The need for better communication about these services is evident from various sources.

Financial Issues

It is worth noting that the move to electronic subscriptions generates pressures elsewhere in the University. There is an incessant need for increasing bandwidth. Since filing cabinets are being replaced by hard drives containing .pdfs the same is true of electronic storage space. To date, though, it seems that expansion of bandwidth and storage is keeping pace with the average costs of providing these services.

Since demands for access to information are never satiated, a pair of questions arises with impressive regularity. The first is how to allocate fairly among diverse academic needs. Staying with the crude model of competition between the arts and sciences, it is never easy to define a balance that is transparently fair and efficient. The second question concerns the adequacy of consultation with academic units needed to ensure that acquisitions in the largest sense are being made in recognition of the most important academic needs.

There is no clear sense in the community of how to satisfy two competing principles, namely the need to sustain funding to the Library system and the need to protect the resources required by academic units for their own ongoing purposes of teaching and research. Concern naturally exists that meeting the needs of professorial staff will induce further constraints upon faculty replacement and renewal. The logic of the situation is unavoidable however. The academic community considers the Library central to the University's intellectual mission. **If decisions regarding the Library's priorities are to be determined on academic rather than financial grounds, then the Library's budget must be insulated from the vagaries of provincial funding, not merely on a one-time basis but as part of the overall budgetary framework.** Since the greatest impact of these vagaries for the Library is upon materials for research, one way to provide this insulation that has a degree of support is to give the Library a guarantee of a significant portion of the funds provided by the Federal Government in support of the indirect costs of research, assuming that that program will itself achieve some permanence.

If the budget of the Library is to be protected in some such way, the guarantee must include enough flexibility for the Vice-President (Academic) to address a number of complicating factors. On the one hand, inflationary cost increases are sometimes greater for the Library than for other units and less controllable. On the other hand, changes in currency exchange rates and negotiations with commercial publishers can eliminate inflationary effects in particular budget years. Assurances of cushioning given the Library will increase its accountability to the officers and units of the University for its actions and its explanations of those actions.

Conclusion

Since our tentative conclusions are designed to stand out in the text above they need not be reiterated here. Instead we will note a set of issues that cut across the areas of teaching, research, service and financing. All of these concern communication and the capacity of our specialists in access to information to actively inform the community of their contributions to learning. The repeated refrain, “We don’t understand why the Library makes the decisions it does,” should lapse into silence.

As part of becoming more transparent in its actions, activities such as the Library Instruction Program and the benefits of regional consortia will become more visible and presumably more fully used. At a deeper level, the role of the Library in creating filters for information should be understood and supported. These things will happen, though, only if there is some practical way of recognizing that responsibilities for communication fall jointly upon those who make reports and those who receive them.

The rules of Senate include the expectation that its standing committees make an annual report. A report from the University Librarian could be an important attachment to the report of the Advisory Committee on the Library. Through whatever avenue, **we believe that the University Librarian should provide an annual review of activities and decisions through Senate to the academic community.**

The importance of matching the expertise of librarians with the needs of academic disciplines is an ongoing task. Decisions need to be relevantly informed before being made and effectively conveyed to the constituencies in question. It may be desirable to formalize a system of consultations between senior members of the Library staff and the main disciplinary groups. **The academic deans and directors should consider the feasibility and usefulness of inaugurating annual “decision retreats” of representatives of the Library and the principal cognate areas from the three main campuses.**

In recognition of the Library’s fundamental role in the academic mission of the University, we further suggest that the Planning and Budget Committee seriously consider placing the Library system on the roster of units receiving attention under procedures for Academic Program Review.

APPENDIX 1

MEMORANDUM

February 1, 2005

TO: Academic Deans and Directors
MUNSU and GSU Executives
University Research Professors and Canada Research Chairs
3M Teaching Fellows and AAU Teaching Award winners
Winners of the President=s Awards of Excellence in Teaching and Research

FROM: Evan Simpson, on behalf of the Senate Advisory Committee on the Library

SUBJECT: The Future of the University Library

Library acquisitions and services are generally regarded as among the University=s highest priorities. Yet in recent years urgent demands from other sectors at Memorial have combined with inflation to create severe constraints in budgetary support for the University Library system. At the same time the Library has had to cope with new information and communication technologies (ICTs) that increase demands upon the system.

These well-known issues are being addressed in many parts of the University, but a synoptic view is lacking. The Senate Advisory Committee on the University Library has therefore struck a sub-committee to carry out a broad public consultation concerning the library system and the needs of its users. As appropriate to Memorial the sub-committee will investigate the following matters, *inter alia*:

- § the impact of ICTs on research and scholarship and the operations of the Library
- § the nature of support required for research and scholarship in the ICT environment
- § the support required for undergraduate teaching and learning in this environment
- § the role of traditional activities relating to collection development and services.

The results of this consultation should inform the University=s budgeting decisions, the pending review of the Strategic Framework, the Library=s own internal review of operations and its strategic plans. In order to be as useful in these connections as possible, the sub-committee will work towards publication of its findings in June of this year. In order to meet this objective, the sub-committee would be grateful for your response to the attached questions by February 28.

Based upon these responses, the committee will be in a position to determine and publish details of further mechanisms in support of the most effective possible public consultation.

cc: Vice-Presidents
SEACIT

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Please respond to the following questions by February 28, returning your answers to
SACL Sub-Committee on the Future of the Library
C/o the Secretary of Senate, A2002.

IMPORTANT NOTE: DIFFERENT SECTORS OF THE UNIVERSITY HAVE DIFFERENT NEEDS. PLEASE PROVIDE THE INFORMATION REQUESTED BELOW IN SUCH A WAY THAT THE ENTIRE RANGE OF USERS CAN UNDERSTAND YOUR PARTICULAR CIRCUMSTANCES AND REQUIREMENTS.

How are information and communication technologies (ICTs) affecting your research and scholarship, teaching and learning? What new needs are they creating? What trends can you foresee over the next five years?

What information can you provide about the growing impact of ICTs on your requirements with respect to Library collections and services?

What is still valuable and necessary in the library system=s traditional offerings? What modifications to these offerings are feasible and desirable in the light of ICTs?

Where might the needs of teaching and learning, research and scholarship be addressed through a transfer of traditional services and procedures to activities appropriate to the new environment?

How should budgeting for the library system be structured? For example, should the Library be a priority for federal funds directed to the University in support of the indirect costs of research?

What advice do you have for concluding an efficient and timely consultation about these matters?

RESPONDENTS

(In order of receipt)

Dr. Don Deibel
Anonymous
Dr. Peter Pope
Ms. Martha MacDonald, for Labrador Institute
Dr. Neil Bose
Dr. Brad deYoung
Dr. Sean Brosnan
GSU Executive
Dr. Robert Adamec
Dr. Steven Wolinetz
Dr. Josept Cherwinski
Dr. Beverley Diamond
Dr. Tran Gien
Dr. Michael Collins
Faculty of Engineering
Dr. Jeffrey Parsons, for Faculty of Business Administration
Dr. Alice Collins, for Faculty of Education
Prof. Kjellrun Hestekin
Prof. Geoffrey Farmer
Dr. Brian Veitch
School of Music
Dr. John K. Lewis, for Faculty of Science
Dr. David Graham, for Faculty of Arts

APPENDIX 2

Research Support in the Queen Elizabeth II Library

Submitted by the University Librarian to
Subcommittee of the
Senate Advisory Committee on the Library
on the
Future of the Library
March 31, 2005

Quantifying research support in a library's budget poses some definitional problems. These problems can never be entirely surmounted, but the attempt which follows is at least explicit about the underlying assumptions.

In the summer of 2002, the Collections Development Division was asked to review its purchasing of monographs for the fiscal year 2001/02, the current list of serial subscriptions, and the current expenditures on irregular serials and series of monographs in order to determine the extent of purchasing that supported research. The query was framed thus:

Suppose that Memorial offered programmes in all the present disciplines and programmes, but at the baccalaureate level only; further, suppose that there was no obligation on faculty to pursue research, but an obligation to stay current in their field for the purposes of teaching; under these conditions, what percentage of present expenses in each of these categories could be foregone?

The results of this exercise are summarized below. They indicate that the support for research so defined varies both between disciplines and between formats. The definition may understate the support for research in areas where both undergraduates and more advanced researchers use the same material. Of course, it may overstate the separation of research and undergraduate use in some areas as well.

Research Proportion of Materials Expenditures Summary

Academic Unit	Continuations	Standing Orders	Monographs
Arts	26%	36%	29%
Prof Schools	36%	21%	19%
Sciences	89%	80%	58%
Library (Reference)	16%	26%	0%
Total	56%	58%	31%
Overall	50.06%		

Since this estimate was undertaken, there have been two rounds of journal cancellations that might affect the calculation. A cancellation project in the Fall of 2002 took place with a net decrease (after document delivery costs were subtracted) of \$400,000. Further, in the Fall of 2004 a series of journal cancellations took place, amounting to approximately \$150,000.

It is sensible to assume that these cuts primarily affected journals supporting research rather than teaching. Since they are largely found in the disciplines in Science, and since the journal collection in that Faculty was generally found to be 89% in support of research, we can assume that the journals cancelled also contributed to research to that extent. The titles cancelled were included in the exercise undertaken in 2002 and therefore form part of the overall 50.06%.

Other costs

The Library's expenditures also include salaries, general operating and capital. As many of these expenditures are in support of the purchases dealt with above, they have been allocated accordingly. A small portion of these costs has been arbitrarily assigned in accordance with the overall assignment of costs where a rationale was evident. The table below summarizes all costs.

Summary Table from "Research Support in the Queen Elizabeth II Library, March 31, 2005"

	Projected 2004/05	2003/04	2002/03	2001/02	2000/01
Total Other Expenditures	\$ 6,834,010	\$ 6,324,062	\$ 5,891,597	\$ 5,276,106	\$ 5,019,531
Research Expenditure	\$ 2,291,444	\$ 2,120,458	\$ 1,975,453	\$ 1,769,078	\$ 1,683,049
Total Library Materials Expenditures	\$ 4,350,474	\$ 4,464,244	\$ 4,660,213	\$ 4,483,986	\$ 4,617,060
Research Expenditure	\$ 2,177,847	\$ 2,234,801	\$ 2,332,903	\$ 2,244,683	\$ 2,311,300
Total Research Expenditure	\$ 4,469,291	\$ 4,355,259	\$ 4,308,355	\$ 4,013,762	\$ 3,994,349
Total Library Expenditure	\$11,399,750	\$11,161,013	\$ 9,868,657	\$ 9,753,446	\$ 9,869,969
Research as percentage of Total	39.21%	39.02%	43.66%	41.15%	40.47%

Copies of a fuller version of this report are available from the Office of the University Librarian.