Library Services: Designing the Digital Reading Room to Support Online Learning

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Athabasca University (AU), Canada’s Open University, delivers distance and online education across Canada and internationally to over 25,000 students and offers over 500 individual courses and approximately 60 programs at masters, bachelors, diploma and certificate levels.

Course Reserves Models

Course reserves is a key area of learner support, in which the library provides access to faculty selected resources. Some of these resources may be required for student success in a course and others may be supplemental, intended to enhance learning and familiarity with a subject. Delivering course reserves to distance learners creates challenges as well as opportunities to be innovative as libraries strive to provide services comparable to those available to on-campus learners who generally have physical access to a library’s collection.

Rapid advancements in information and communications technologies, particularly the World Wide Web, make possible a new breed of course reserves desk. Not so much a “desk” as a “desktop”, electronic course reserves (e-reserves) permits the delivery of reserve material anytime, anywhere, freeing students from the frustrations of limited copies, short loan periods and high late fines. E-reserves permit the inclusion of digital content limited only by one’s imagination: journal articles, e-books, graphics, audio clips, video clips, discussion forums, Web sites, lecture notes, games and simulations, etc. Copyright laws guide the scanning and mounting of print based publications. San Diego State University pioneered e-reserves in the early 1990s (http://ecr.sdsu.edu) and many other educational institutions have implemented their own projects. The Association of Research Libraries (ARL) maintains the Electronic Reserves Listserv and an archive of the discussion is available at http://www.cni.org/Hforums/arl-ereserve/.

Historically, Athabasca University has used the postal system for the delivery of course and supplementary materials to distance learners dispersed across Canada and, increasingly, the globe. The Library maintains a master file of faculty-selected articles and documents that are duplicated for students upon request, a collection of audio-visual materials reserved for registered students, and multiple copies of texts required for coursework. These materials are listed in the study guide that students receive with their course package. Students may also receive bundled readings as part of their course package.
The Digital Reading Room

As AU takes advantage of expanding online infrastructures to support learning and improve student access, technologies are increasingly being integrated into course development, delivery and support. The Library’s role in facilitating access to and use of digital resources by learners and course developers has grown, and it is in this context that an electronic solution to the delivery of course and supplementary materials has been developed. In the fall of 2002, the Library initiated a project to deliver and handle such materials, the Digital Reading Room or DRR (http://library.athabascau.ca/drr/).

An in-house retrieval system was developed for the DRR, with all data stored on a SQL server capable of supporting large user loads and database queries. The DRR exists alongside the print-based course and supplementary materials model. As new courses are developed and older courses are revised, DRR based reading files or “digital reading files” are built into course structures. The digital reading files and some of their contents are available to the public, but licensed items such as articles available through journal database subscriptions require authentication through the Library’s proxy server, permitting only the AU community of users to access them. The DRR accommodates the inclusion of non-digital resources through forms that facilitate student requests for print materials from the Library. By encouraging the inclusion of resources in a variety of formats the DRR supports a wide range of learning objectives and styles. A search engine permits users to search across digital reading files, providing a multidisciplinary aspect that is not typically encountered in course reserves systems. The DRR supports a number of enhanced functions such as a broken link checker to ensure the validity and currency of hyperlinks and a statistical tracking mechanism for recording student use of DRR based resources.

At the time of writing, the DRR supports ten undergraduate courses and thirteen graduate courses, with links to over 1500 online learning resources. Seven of the graduate courses are from the Campus Alberta Graduate Program in Counselling, a tri-institutional collaboration involving Athabasca University, the University of Calgary, and the University of Lethbridge. Most of the courses are offered entirely online, with several face-to-face residency requirements, including a summer institute. Students in the program rely heavily on the Digital Reading Room to supplement the course texts and reading packages they receive through the mail. The digital reading files for these courses include a range of media types and resources: an online Graduate Student Handbook, audio clips, persistent links to journal database articles, links to Web sites, and Web forms to order print-based articles from the Library.

The DRR model encourages collaboration among course content creators, educational media developers and librarians in the development of a multidisciplinary knowledge database. With funding from eduSource Canada (http://www.edusource.ca/english/home_eng.html), the project is expanding from its original conception as an enhanced electronic course reserves system into the environment of learning object repositories. As a metadata-compatible digital repository, interoperable with other repositories such as MERLOT (http://www.merlot.org/) and CAREO (http://www.careo.org/), it is expected that the DRR will contribute to the inter-institutional sharing of high quality learning objects.

The AU Library Information Gateway

The DRR was developed as a component in AU Library’s Information Gateway, the intent being to promote information literacy and foster independent learning. Learners experience growth and empowerment when they have the opportunity to seek out and discover resources on their own, rather than merely digest pre-selected resources. The DRR is positioned on the Library Web site in such a way that it is integrated with other library resources and research tools in The Digital Reference Centre (DRC).
The Digital Reference Centre offers an online version of a library reference collection, including almanacs and directories, atlases and maps, data and statistics, and dictionaries and encyclopedias. It links to other components of the information gateway such as library catalogues, journal databases, e-journals, e-books and the online Help Centre. AU Library has compiled and created these resources with our geographically diverse student population in mind. Many AU students do not have access to other university or college libraries in their communities, and indeed some do not have immediate access to public libraries either. The Help Centre was developed as a starting place for research: it provides tools in which students can do background reading, but also provides links to help on how to write papers, cite references, search journal databases, library catalogues and the Internet, and also provides detailed research assistance for subjects including Women’s Studies and Psychology. Links have been provided to guides created by AU Library, and also to high quality guides created at other institutions.

Faculty/Librarian Collaboration

The DRC is continually growing. As new web resources are located AU Librarians evaluate them closely and determine their suitability. Resources in the DRC are not all librarian selected: faculty and staff are encouraged to send resources they find particularly useful to the Library for inclusion. Faculty/librarian collaboration is key at Athabasca University. As a distance education university it is extremely important to provide a cohesive system of support for students. When studying at a distance, and particularly in individualized study courses, it is easy for students to feel disconnected from the institution because of the geographic separation. A good working relationship between faculty and librarians facilitates open lines of communication and a stronger support network for students. One of the ways that AU Library has attempted to build strong relationships with faculty is through collaboration on subject specific research guides. The level of collaboration is often dependent on workload, but even minimal consultation or collaboration seems to breed good will between the departments. Collaboration on research guides has been particularly successful for several reasons. First, it brings together both librarian and faculty expertise and helps to ensure that both the library aspects (searching for information, locating materials) and the subject are appropriately represented. While librarians often have upper level degrees in a particular subject, it is impossible to be a subject matter expert in every subject. The inclusion of faculty in these projects can help identify specific areas that should be focused on, as well as key sources in the subject. As a result, the guides are richer in content and meaning. Second, collaboration has resulted in increased visibility of the Library within the institution. Collaborative projects not only showcase librarian expertise but the wide range of services provided by the Library to students and staff and demonstrate a willingness to work together to provide learner support. In addition, faculty are more likely to use and recommend resources when they have been involved in their creation.

Information Literacy

Creating an information literate learner population is a goal of most libraries, and AU Library is no different. Staff strive constantly to meet this goal. As the majority of students at Athabasca University are located elsewhere in Canada and across the globe, it is rare for librarians to be able to provide face-to-face library instruction classes for students. To help compensate for this, reference librarians regularly provide individualized instruction sessions via email or the telephone. Normal reference practice at AU Library is to do a search on the student’s topic to help determine the type of material available, and then provide a couple of sample articles to help the student see what type of material is available, along with detailed instructions on how to construct the best search, explanations of Boolean operators, lists of the best databases to search for the topic, and instructions on how to search the library catalogue for material. The online Help Centre supplements the instruction provided by reference librarians during reference transactions. One of the biggest barriers students face in courses appears to be a lack of knowledge of how to start researching a paper. This lack of knowledge is partially born of fear; students are often afraid to ask how to do something or what a periodical is because they do not want to appear stupid. To aid
students in this regard all research guides created within the Library include a section on beginning a research project, from breaking the topic into manageable concepts to determining the number of sources needed and how to create the best search strategies. The examples used in the research guides are taken from existing assignments from various courses in the discipline, in an attempt to provide a more meaningful link to the courses offered. Of course there is more to information literacy than just being able to break a topic down into manageable concepts and deciding on appropriate search strategies. Learners must then be able to search the databases and library catalogue to locate material. This can be a daunting task. Built into the guides are instructions on how to search databases appropriate for the subject, along with screen shots. By providing both textual and visual instructions librarians hope to lessen the anxiety that accompanies this part of the process. Also included is a section on evaluation of books and journals as well as the World Wide Web. By identifying the criteria by which to evaluate resources learners begin to think critically about the sources they are using.

References


Biographical Sketches

**Elaine Magusin**, Reference Services Librarian, Athabasca University, BA (Music), MLIS. Elaine’s career focus has been on providing reference and bibliographic instruction services to patrons in a variety of environments, including government, public and academic libraries. Recent projects have included the creation of research guides and journal database tutorials, and the promotion of library services to both students and staff through a series of FAQ’s and news releases published in the student and staff newsletters. She currently serves as a consultant on the Digital Reading Room project.

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**Kay Johnson**, Head, Reference & Circulation Services, Athabasca University Library, BA (History and English), MLIS. Kay has specialized in providing library reference services and bibliographic instruction to adult learners. She has been actively involved in the development of the digital library at AU and serves as a consultant for the Digital Reading Room project. Current projects include revising an information systems course for AU and co-authoring a chapter for an AU guide to online learning. An
active promoter of the library’s digital resources, she was a co-presenter at the International Conference for Distance Education/Canadian Association for Distance Education in 2002.

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Tony Tin, Electronic Resources Librarian Athabasca University, BA (History), MA (History), MLIS. Tony currently maintains AU Library’s Web site and online resources and is the Digital Reading Room project leader. Tony’s presentations have focused on digital resources in libraries and resource-based learning. He has presented at the 2002 International Conference for Distance Education/Canadian Association for Distance Education Conference, the 2001 Athabasca University Learning Services Conference, and served as the Saskatchewan Education Representative on the 1999 Council of Ministers of Education’s Canadian Forum on Professional Development of Educators in the Use of Information and Communication Technologies for Teaching and Learning, Ontario.

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