The OU goes digital

The Open University Library’s extensive use of technologies facilitates its distance services and electronic library work. Support for virtual learning communities is also evolving through new initiatives: 24/7 enquiry service and real-time instant messaging; information literacy skills courses; improvements in accessibility of services; collaborative library/learning technology partnerships; and a just-in-time approach, with a new personalised library service for time-constrained students.

The OU is the UK’s largest university with more than 200,000 students. There are more than 360 undergraduate and postgraduate courses on offer and nearly half of these have a Web presence. This takes the form of a course e-desktop via which the students can access study calendars and schedules, course readers (PDF-based e-books), study guides and discussion forums provided by the asynchronous FirstClass conferencing system.

The increasing pervasiveness of network technologies is giving the OU the opportunity to rethink its traditional course production model. Drivers are competition from other universities, e-learning and global delivery, the government’s life long learning agenda and the demand for transferable skills. Paul Clark, the University’s new ProVice Chancellor for Learning & Teaching, spoke at the recent CITE (Centre for Information Technology in Education) conference of the need for new course models if the OU is to remain successful.

More than 150 OU courses are using IT to enhance learning in various ways and 14 are currently delivered almost entirely online. One of the first web-based online courses, T171 ‘You, Your computer and the Net’, became the most popular computing course in the world in its first year of operation (2000) when 10,000 students enrolled. The latest course, a pilot under the UK eUniversities (UKeU) initiative, ‘Learning in the connected economy’, is to be
launched in February 2003 and co-produced under the Open Cambridge partnership.

Until recently, however, OU courses have made little use of online learning resources. The challenge for the Library is to ensure that course teams work closely with Library staff in the selection of these resources and make use of existing electronic library resources where appropriate.

**Opening up the Library service**

The Library was originally established to support on-site staff, but since 1999 it has offered services to students. At least 160,000 students and their tutors are now online and the Library’s own student survey shows increasing demand for a range of quality electronic library services.

Unlike other academic libraries, the majority of Open University students live too far from Milton Keynes to make physical use of our services. As a result, the Open Library website was developed to provide access to a considerable online collection of resources (100 searchable databases, catalogues, 6,000 electronic journals, 500,000 electronic texts, 3,000 quality-assessed websites for teaching and learning). It provides added value in terms of aggregating online content according to course requirements, improving student access and navigability.

**Expanding the role of the Library**

With the increasing development of an online collection, the Library is now in a position to provide remote student access to resources as an integral part of online course delivery, and at no incremental cost to the OU. A study was undertaken recently to understand both the value and cost of the provision of course support resources. Rightscom, strategic consultants for digital content, carried out the investigation. The issues were explored through workshops and interviews, and an extended attitudinal questionnaire was sent to more than 400 OU academic staff.
The findings showed staff recognised the potential advantages to students through access to a broader range of resources, easy replacement of outdated resources, and effective use of feedback mechanisms. There was also a clear sense that course teams and academics should encourage students to make more (and better) use of the Library, and that the Library has a role in providing students with guided access to resources, something which had not been possible until the creation of Open Library. Furthermore, there was strong support for all OU students to be offered information literacy skills courses at least as an option. Improved coordination between the Library collection and the content of course support materials was proposed and it is hoped that this will lead to better procedures and technical infrastructure for access to online course support material.

About 80% of OU students are in full time employment while studying, so time is critical. Several new library initiatives exploiting new technologies are underway to provide enhanced, just-in-time support for the students.

**Personalised library service**
The MyOpenLibrary project aims to develop a personalised library service for individual library users and groups. Such a system will provide a portable library web page identifying the user and aggregating relevant resources for focused study and research. They will also be able to create their own personal links. The benefits are that it will save the users’ time and they will be less likely to succumb to information overload.

The first stage is to implement a pilot menu-based system, based on the MyLibrary software developed at North Carolina State University and hosted at Notre Dame University. This 18-month pilot will provide evidence of efficiency, scalability and cost-effectiveness in six different learning settings in two faculties (Health & Social Welfare, Arts). Funding for the project came from the OU’s eUniversity system, which is supporting a number of initiatives to bring about organisational change and e-learning developments.
It is equally important that our users have a seamless view of the University and should not have to cope with multiple “mypages”. The OU is therefore embarking on an institutional portal project, which will offer channels of information for individuals and user groups – including study calendars, schedules, learning environment, student services, links to online library resources, administration etc. This will provide scope for broader integration of personalised library services across the University - as the portal becomes the primary access point for all library users.

**Library/Learning technology partnerships**

Re-use of existing course materials is a valuable way of reducing the costs for new courses. Digitisation and proper archiving of text, audiovisual and software material will make re-use feasible. The Digital Video Applications (DIVA) initiative, a collaborative venture between the Library, technical course production staff and media experts, will investigate the use and potential of a networked digital video archive in this complex university environment. The main users of the system are expected to be course staff, who will benefit from being able to carry out comprehensive searches on video material to locate clips. Long term it could be a valuable resource for students. The evaluation will be completed in the Autumn 2004.

Another library/learning technology partnership project aims to facilitate the integration and embedding of e-resources into the e-curriculum. The Library and media experts in the Institute of Educational Technology (IET) are participating in DEVIL (Dynamically Enhancing VLE Information in the Library)\(^5\). This project is led by the University of Edinburgh and funded under the JISC’s Linking Digital Libraries with Virtual Learning Environments programme. The Library is working on the resource discovery requirements, while IET is carrying out the evaluation for identified courses, and of the functionality and performance of the “middleware” systems layer developed by ANGEL (Authenticated Networked Guided Environment for Learning)\(^6\). Piloting will focus on evaluating the system for pedagogic impact and usability. DEVIL runs until 31st July 2003.
Accessibility of electronic library services

Many of the e-resources are proprietary and therefore require authenticated access by the students. This can be done through the University’s own authentication system (SAMS) or by HE’s Athens system. With SAMS students enter their network username and password, and are then directed via a proxy server to many of the e-resources, without the need for further details. However, for some resources, remote access passwords are required, and this is managed using the Athens authentication system where possible, and with individual passwords where not. Students are automatically registered for library passwords on course registration, at which point they sign the necessary copyright agreements. They then obtain the library passwords by using their student homepage. This means that all students have the opportunity to access the full range of electronic resources that the OU provides.

Most of the resource licences are negotiated through CHEST and JISC, but it is sometimes necessary for the Library to develop unique arrangements with e-journal and database suppliers, as the OU is the only UK university for which remote access is the predominant method of access. In addition, we aim to clear resources for access by all 200,000 students as well as academic staff, a significantly larger number of users than other institutions, although in practice much smaller numbers will actually make use of the resources.

To ensure that the Open Library service is "open" to all students, the Library initiated an accessibility study, which identified the needs of students with disabilities and made recommendations for the future development of the service. The website has been redesigned to ensure it meets accessibility criteria.

The Library’s information literacy skills course was launched in May 2002. MOSAIC (Making Sense of Information in the Connected Age), developed in partnership with the Faculty of Education and Language Studies, is an online course for identifying, searching for and critically evaluating information
24/7 enquiry service
The key characteristic of distance learners is that study time occurs in the evenings and at weekends. An analysis of email enquiries and online conferencing contributions in 1999 found that 50 per cent were made out of hours. The Library is developing an automated enquiry service to provide constant, low-cost effective support. An early prototype system was developed and provided a useful test bed for student feedback. The current phase is focusing on the implementation of a natural language question-answer service, based on the Inktomi search engine. The approach is to match the keywords in the question with metadata in the Open Library web pages to find the right page or resource. Inktomi will log what queries users are submitting, so it is possible to analyse patterns of user questions.

From March to May 2002, the Library ran an experiment with a real-time instant messaging enquiry service, called “Librarians On Call”, where the student could chat online to a librarian while being guided to the resource they needed. The LivePerson Corporate software was purchased for the experiment and the service was staffed during office hours. In total, 304 people used the service, with 172 engaging in live chats (around 14.3 live chats per week), with the remaining 132 sending out-of-hours emails via LivePerson while the service was offline. With the software’s in-built exit survey functionality, it was possible to gather user feedback to set questions. Of those completing the exit survey, 97 per cent said they would use the service again, with 88 per cent saying they found the service better than email, and 67 per cent better than the telephone. In October 2002, Librarians on Call was launched as an operational service

Conclusion
The move towards electronic resources by the Library service will enable OU students at last to have access to learning resources and services on a par with their peers in other universities.

2 http://www.rightscom.com
3 http://library.open.ac.uk/aboutus/myolib/index.htm
4 http://dewey.library.nd.edu/mylibrary/
5 DEVILish Library/Learning Technology Partnership
7 http://www.angel.ac.uk
8 http://www.athens.ac.uk
9 http://library.open.ac.uk/help/Librarians_on_call_info.html