The Remote Library and Point-of-Need User Education:
An Australian Academic Library Perspective

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ABSTRACT. This paper discusses information literacy instruction from the perspective of Charles Sturt University, an Australian university with a high proportion of distance learning students. Topics covered include e-mail, Ask-A-Librarian services, online forums (a form of newsgroup developed at Charles Sturt University), online Chat, NetMeeting, Web-ezy (a Web tutorial), Camtasia Studio, an animated screen capture tool, and the embedding of information literacy instruction tutorials within the curriculum. There is some discussion of programs at other tertiary institutions, especially Australian universities. It is argued that in the field of information literacy instruction the role of the librarian is changing significantly, and that university librarians must both adapt to new educational paradigms and seek out new partnerships.
KEYWORDS. Information literacy instruction, distance learning, remote students, Web-based library tutorials, synchronous and asynchronous communication, e-mail, Chat, NetMeeting

INTRODUCTION

In the past, information seekers have come to the library, where librarians have guided them in their use of the best resources to satisfy particular information needs. The process has been one of information professional and client working together, with the skills of the former particularly evident in the area of information retrieval. These skills became critically important to library clients in the 1970s with the growth of remote databases, which presented significant costs for the library and command-driven user interfaces that were difficult for clients to navigate. The development of CD-ROM databases in the 1980s enabled library clients to search databases for themselves, as they had previously trawled through paper-based resources, thus making them less reliant on librarians as intermediaries between themselves and the world of information. This process of client “independence”—if not empowerment—was reinforced in the 1990s by the spread of the Internet, which facilitated access to remote resources, and the World Wide Web, which in turn encouraged the development of relatively user-friendly interfaces such as those that characterize the ubiquitous Web catalog. Finally, even before the development of intranets, many libraries attempted to deliver resources and services directly to clients’ desktops, further enabling the latter to identify and access information resources for themselves.

The role of the librarian has shifted from that of information gatekeeper to one that encompasses a far greater responsibility for the empowerment of the client through one-to-one instruction, or through user education classes, on the use of Web-based resources. This paper examines the provision of library-based educational programs and instruction from the perspective of Australia’s largest distance education provider, Charles Sturt University. The fact that two-thirds of the student body is external to the University—studying elsewhere in Australia in Distance Education mode or, increasingly, in one of its offshore programs—has prompted the University’s Division of Library Services to be especially proactive in going beyond the “traditional” user education class and providing alternative strategies for the delivery of user education and instruction. As already indicated, the information retrieval
environment has changed substantially over the years. Moreover, the student body is increasingly diverse, for instance, in terms of age, cultural background and life experience, and even school-leavers, who (according to a popular misconception) are held to be much more capable than their seniors in terms of computer-based searching. All generally lack the level of information literacy required to be self-sufficient learners studying in distance mode.

As universities move into distance education, university librarians, like academic staff, therefore, have been prompted to re-examine their educational programs. One outcome of the increased emphasis on distance education has been a shift in the educational paradigm, with the role of the lecturer (whose very title reflects the older paradigm) changing from that of the “sage on the stage,” in which students listen passively to their academic mentor, to that of the “guide on the side,” in which the teacher attempts to direct and support the student’s learning experience. The emphasis, as Maurice Line put it a few years ago, “is gradually but relentlessly shifting from teaching to independent learning,” which carries “implications for the structure and nature of higher education” that, Line felt, were “yet to be fully grasped.”¹ Over the past few years, however, university librarians have responded to this shift, as they have attempted to supplement “traditional” class-based instruction, which is generally inappropriate in the distance education environment, with electronic solutions to user education, such as use of NetMeeting software and online tutorials, in which the focus is on finding ways in which to support student learning.

Before the delivery of resources and services directly to clients’ desktops, the most common enquiry from distance education students were either requests for specific information resources that had been recommended by academic staff or requests for searches to be conducted on their behalf. As the library was taken to the desktop, however, the onus fell on students to conduct their own searches, and, indeed, they were generally encouraged to do so. With careful guidance from distance education library staff, students become empowered lifelong learners. Despite improving interfaces, however, there is still a perception on the part of students (including on-campus students) that there are barriers to their successful use of library resources. As recently as 2002, an OCLC White Paper identified these barriers as problems accessing library databases because of “password requirements and/or license restrictions,” problems “searching and navigating within the library and its Web site,” copying and printing costs, shortage of “knowledgeable librarians,” and lack of “customer orientation.”² Librarians continue to
play a critical role in user orientation. Case studies based on Charles Sturt University’s establishment of an Interactive Learning Centre on its Dubbo campus (a regional centre) identified the critical need for library staff to be involved in the program. As one participant put it, “It is very important for students to overcome their fear of electronic searches and to learn how to access library resources.”

The continuing problems associated with accessing library resources has meant that those information librarians who deal directly with remote students have been increasingly faced with requests for help from students who have not necessarily had the benefit of face-to-face user education classes. A significant proportion of distance education programs at Charles Sturt University, at least amongst the onshore ones, have residential school requirements (on-campus or at appropriate off-campus locations), which provide opportunities for otherwise remote students to receive user education classes. It is worth pointing out, however, that there is no requirement that academic staff include library classes in their residential schools and that a significant proportion of distance education students never visit a university library. As well as providing on-campus distance education orientation programs at the beginning of the year, Charles Sturt University takes orientation sessions to students in major cities via its distance education Road Show program, which includes presentations by Library, IT, Student Services, and Learning Materials staff. Neither strategy reaches all students, however, especially the growing number of offshore students—although librarians would have been all too happy to accompany academic staff to offshore study schools such as those run in Hong Kong and Mauritius. Moreover, even if all remote students could be reached, user education classes, as discussed below, are not in themselves the answer to students’ information literacy needs.

Early applications of information and communication technologies to the educational needs of remote library clients generally focused on one-to-one instruction and were a response to specific problems associated with information access. As the 1998 ACRL Guidelines for Distance Learning Library Services recognize, there is a need for on-campus and off-campus programs to be “equivalent”:

Because students and faculty in distance learning programs frequently do not have direct access to a full range of library services and materials, equitable distance learning library services are more personalized than might be expected on campus.
One-way of addressing the unavoidable inequities between on-campus and off-campus students is to provide services to distance students that are not provided to on-campus ones: for instance, conducting database searches for them. With the growing emphasis on life-long learning, however, and the need for students to be information literate—not to mention the pressure on library staffing—there has been a move over the years to encourage students to conduct their own searches and to provide them only with instructional backup. The Chinese maxim “give a man a fish and feed him for a day; teach a man to fish and feed him for life” became the order of the day. Professional bodies, such as the Australian Library and Information Association, in their promotion of lifelong learning and the view that democratic societies need an information literate citizenry support this strategy. Indeed, many universities are identifying Information Literacy in their graduate attributes.

**LIBRARY INSTRUCTION AND REMOTE STUDENTS**

Prior to computer-based solutions, many university libraries relied on the telephone to provide individual tuition, and the provision of a toll-free number for students became an important part of their support for distance learning students. Telephone is not an ideal medium for teaching information literacy. Students can be talked through a search, but neither librarian nor student can see what is on the other’s computer screen. Indeed, unless students have broadband or two telephone lines they are not likely to see any computer screen while they are on the telephone to a librarian. The library community has referred for years to the problems of the so-called reference interview, with all its non-verbal cues and so on, but the growth of distance learning library services has brought fresh challenges. Moreover, only a small percentage of students telephone their information librarians, with the result that the Library is not reaching the whole student body and many are being left on their own to handle what appear to be complex information resources.

By far the most popular medium of communication now among students is e-mail, and most academic libraries have been fairly quick to respond with Ask-A-Librarian services. At Charles Sturt University, off-campus students have taken up this option largely, but not entirely. E-mail, however, brings fresh challenges to bear. Quite apart from the fact that responses to search enquiries are time-consuming to construct—long gone are the days when typing was part of the librarianship curriculum—they lack the synchronicity of telephone. While a form of the re-
vered reference interview is possible by telephone, with immediate feedback from the other communicant, it is problematic in the case of e-mail, because feedback is missing—or at least the immediacy of feedback, and very often that immediacy is important. This has required librarians to acquire different skills from those employed in the “traditional” face-to-face reference environment. It is generally assumed that any librarian can answer telephone or e-mailed enquiries, but they do need experience and guidance—and a lot of patience. To a certain extent librarians have been able to address the challenge of non-synchronicity by anticipating student enquiries or by building up a kind of ready-reference file of previous enquiries and responses, and sending students a pre-prepared response, duly customized. One technique is to build such responses into e-mail signatures, which are easily pasted into a reply. Another response to the non-synchronicity of e-mail communication is the design of online request forms that anticipate the interview by asking pertinent questions such as “When do you need this?” or “What do you need it for?”

Other variations of e-mail include discussion lists and forums (a form of newsgroup developed by Charles Sturt University), in which enquiries and responses are not simply exchanged between two individuals but are posted to groups. Charles Sturt University opted for the latter, online forums, in which messages are posted to a space on a server—the “forum”—rather than to people’s e-mail accounts. Participants have the option of diverting copies of forum postings to their accounts, which means that students have the choice of logging on to the forum or disengaging with it. Forums are an important part of the University’s strategy of providing online support and resources for every subject that it teaches. They are also seen as an important resource in the effort to overcome the isolation of distance learning, and have been embraced by many of the off-campus students for social, as well as academic, interaction. To date, the Library has not developed its own forums, but the subject-specific forums (those used within specific program or course units) can be accessed, with the approval of a Subject Coordinator (a member of academic staff), by a distance learning librarian or the appropriate liaison librarian, and used to help students directly with subject-specific enquiries. This strategy has the obvious advantage that it provides a point-of-need service to students by getting librarians into the virtual classroom. The online forums have been so successful that Charles Sturt University’s Division of Library Services is in the process of developing a library forum, which students will access through the Library Web page. This may well become an important medium for in-
formation literacy instruction. How much use it receives remains to be seen, however—there are already non-subject-specific forums, such as a Student Services one that covers the related area of learning skills.

One solution to e-mail’s lack of synchronicity is to turn to a synchronous form of communication such as online Chat and NetMeeting. Chat is seen by Marc Meola and Sam Stormont (2000, p. 34) as “an intermediate step between electronic mail reference and real time audio and video conferencing.” Other alternatives they mention are paging and instant messaging programs. Charles Sturt University established a trial Chat in 2000, which was seen as a means of building social cohesion between cohorts of students at Bathurst and Dubbo campuses. The case studies (mentioned earlier) note that Chat achieved this purpose, but add that Chat is no longer used “as we have a teacher based in Dubbo who can deal with the students face-to-face every week.” Of course, as already pointed out, not all Charles Sturt University students have this face-to-face contact. The Library took part in the Dubbo trial, but found that Chat was cumbersome for in-depth information literacy instruction. There is simply too much text to input, and while the librarian is doing so other conversations are continuing. It was noted, however, that Chat had potential for sorting out quick information enquiries, such as “How many books can I borrow?”—even in the online environment people prefer “informal,” human, information sources to “formal” sources such as Web pages.

NetMeeting, a free Microsoft product, was also seen as a potential means of communicating with students such as those at Dubbo. It goes beyond Chat, since it allows for video images, sound, whiteboard, and the sharing of programs. This means, for instance, that the librarian can watch a student’s database search on-screen and suggest different approaches. One of the main barriers to use of NetMeeting is the bandwidth problem—it does use large amounts for short periods. It has yet to be used with students, but is undoubtedly a helpful medium when demonstrating new resources across a multi-campus university like Charles Sturt University. Within the Division of Library Services, for instance, it has been put to good use by the Metalib Cross-Campus Project team.

Camtasia Studio is another software development that the Library has used for library instruction. It is an animated screen capture tool, which can record activity from other software or from Web sites (even dynamic applications, such as streaming video) and allows users to edit, import, and publish videos in multiple formats. It has been used at Charles Sturt University by academic staff and educational designers to produce a CD-ROM resource that provides distance students with a
guided-tutorial-style study guide with similar material to that provided by the internal teaching program. The Library has used the software to create a basic Information Literacy Instruction CD-ROM for academic staff to use during a Study School at Hong Kong University—one of its partner institutions—with new students. As the librarian moves between screens and explains what she is doing, students see the screens and the cursor opening them up. Use of the Camtasia software is relatively new to the Library and it will be monitored and evaluated by the Information Services team. Initial reactions from LIM teaching staff, however, are encouraging.

WEB TUTORIALS

The need for online instructional material has been underlined by some studies. Statistics from Owens Library, Northwest Missouri State University Library, Maryville, for instance, showed a 46.3% increase in instructional requests from 1992-93 to 1997-98; while in the same period the number of questions asked at the Reference Desk declined by 33.9%.8 As the need for a reference desk service point has decreased, Owens Library has employed students “to provide peer-to-peer information services” to field general questions, with information professionals scheduled to answer the more complex enquiries, thus enabling the professionals “to produce and update online instructional materials and content-rich Web resources” (246-247).

There is nothing new, of course, about the use of computer-assisted instruction (CAI). Librarians have been developing CAI programs for almost as long as the personal computer has been about. The development of such programs in a Web environment, however, is clearly of special interest to those institutions, such as Charles Sturt University, that provide services to distance students. Previously, distance-learning librarians have relied on the technologies outlined above and on the distribution of print materials to take user education to those students who never set foot on campus. With access to Web tutorials, these students now have an element of interactivity that was previously difficult, and certainly time-consuming, to reproduce. Moreover, they put students in control of their own learning. As Margaret Appleton and Debbie Orr point out, such programs “are ideal for learners who enjoy working through a course at their own pace and provide the opportunity for learners to be in control of the sequence of the learning program.”9
Charles Sturt University’s Division of Library Services collaborated with Australia’s Unilinc network, of which it is a member, to develop a Web-based tutorial, called Web-ezy and, in March 2000, was the first library to implement it. Web-ezy has been running for a few years now, refined along the way and sold to other institutions. It is broken into modules that cover areas such as topic analysis and use of the catalogue, databases, and search engines. Features include a glossary, with links from specific terms, a split screen that allows students to read instructions and see examples, the use of Notepad to keep a record, and the provision of feedback on student exercises. The authors have noted positive reactions towards Web-ezy from students, especially among students of library and information management, who have a special interest in information literacy. One of the most common comments from the latter group is that computer-assisted programs like this are much more flexible than the “classroom” mode of teaching and learning and provide the opportunity for self-paced learning. One of the aspects that students find especially helpful is the module on topic analysis. Information literacy is not reducible to information seeking skills. It is perhaps worth noting, as some of our LIM students have done, that the Web-ezy tutorial implements many of the principles enunciated in Nancy Dewald’s excellent article on the application of good pedagogical principles to online instruction: for instance, the degree of interactivity, use of feedback, and the focus on learner focused education.

Positive comments also refer to the use of repeated reinforcement, the links to the glossary (although there are words students find confusing that are not linked), the provision of examples to work through (which reinforces learning) the use of a split screen, the use of Notepad and the provision of feedback. Even those students who already have some experience of searching the Internet, library catalogues, and databases find that they learn search methods of which they had previously been unaware. What one student finds helpful, however, others may not. The split screen, for instance, is regarded by some students as confusing and difficult to read. Of course students’ reactions depend on so many factors, such as their own background and experience, affective factors, and personal ICT skills. What to some is a jargon-free package is not necessarily that to others.

Negative comments include slow response times, the lack of a record of progress, which is unhelpful if students do only half a module, and the lack of links between nodes in a module, which compels them to take the time-consuming path of working through modules in a linear
fashion using Previous or Next options (or exit the module altogether and returning, for instance, to the Menu). The last point highlights the need either to structure modules with links between nodes or to provide shorter modules in some cases. Currently, the Catalog module consists of twenty-two pages and the longest of the three Database modules (the one for Ovid) consists of twenty-eight pages, a point noted by some students. It is interesting to note that the name of the package comes in from some criticism from students, because not all believe it is obvious that *Web-ezy* is a tutorial. When Deakin University Library purchased the package, it decided to rename it Smart Searcher, which is slightly more meaningful. Charles Sturt University’s Division of Library Services is presently in the course of renaming its *Web-ezy* tutorial, *SmartSkills* (with its Metalib resource being launched as *SmartSearch*).

It is worth noting that, although tutorials such as *Web-ezy* have been developed with off-campus students very much in mind, on-campus students also benefit from their availability. As Marc Meola and Sam Stormont point out, the “remote user” can include students in dorm rooms (2000, p. 31). One of the benefits of the development of online tutorials, quite apart from the fact that they provide a means of reaching students who never set foot in a university library, is that they are available for the students when they need to use them—part of what Anne Lipow described as “point of need access.” As Appleton and Orr put it (2000, p. 18), “a student using a computer-assisted learning program at a point where information is needed has an advantage over a student who attends a library class weeks before the first assignment is due.” With point-of-need access to such programs there is also a motivational factor. As Nancy Fjällbrant points out, “Students, who have a real need for information, for example in connection with projects, have much higher motivation than those who simply attend a course.”

There are those who argue, however, that online tutorials are less effective in terms of learning than face-to-face instruction. Martin Churkovich and Christine Oughtred, for example, conducted a comparison at Deakin University, and found that those students who received face-to-face instruction performed better in a post-test than those who had completed the tutorial. They also established that the former group felt more confident about their library skills than the latter. In the classroom situation, of course, instruction can be geared towards students’ assignments—something that is more difficult to achieve in a generic online package. Nonetheless, Web-based packages do offer benefits that are absent from face-to-face instruction: for example, consistency. Face-to-face instruction is never the same from one instructor
to another, and any suggestion that better training will significantly improve the standard of face-to-face instruction is spurious. Moreover, although Churkovich and Oughtred support the view that students’ learning experience is best when a mixture of face-to-face and online instruction is provided (p. 33), this does not address the needs of all the off-campus students, and even for on-campus students it assumes that university libraries—already stretched in terms of human resources—can continue providing instruction in both modes.

The answer seems to be to make the online material better, and perhaps suites like Camtasia are the beginning. It is sobering, however, to read the following claim in the newsletter of the Australian Library and Information Association, as recently as April 2002: “The traditional ‘library orientation’ which gives the teachers half an hour free time and allows them then to proceed with their teaching in the fond expectation that their students now know all there is to know about locating information, is still the norm in many situations.”15 Whether the comment accurately reflects the reality in the Australian Technical and Further Education sector (as distinct from the university sector) or even the level of information literacy instruction in the state from which the claim originated, its very appearance in the literature does give food for thought.

**INTEGRATION WITHIN THE CURRICULUM**

A possible weakness of instructional programs such as Web-ezy is that, because of the need to provide feedback to students, examples are generic and are not, therefore, practical examples that students can link to their work. In the literature, online information literacy instruction tutorials come in for significant criticism:

- For being tedious and text-heavy (Vander Meer, 2000)
- Presented as stand-alone lessons, disconnected from course or assignments (Dewald, 1999; Donaldson, 2000)
- Lacking sufficient interactivity to create adequate active learning experiences (Dewald et al., 2000)
- Communicating an academic research process that is not relevant to students’ expectations (Veldof & Beavers, 2001).16

As some of these comments suggest, there is a perceived need for libraries’ information literacy programs to be more closely aligned
with students’ coursework. Philippa Levy (2000, p. 47-8), drawing on a constructivist notion that “knowledge is constructed through, and builds upon, experience,” suggests, “Skills are most effectively learned when related to learning needs arising directly from academic work.” There has been a growing belief that information literacy instruction tutorials should be integrated into academic programs. As Cathy-Mae Karelse points out, “Where information literacy remains an add-on, or extra-curricular, learners generally tend to forget these skills very soon.” There is also the more fundamental point, put so well in an excellent survey of European approaches to information literacy:

Information literacy is not a ‘library thing’—and it is not concerned only with database searching and Boolean logic; information searching is a part of the learning process and should be taught as such embedded in the curriculum.

Some librarians may not like the idea, but they are not the only players in the development of information literacy programs.

Such views underline the move in many universities to take information literacy instruction outside the library walls and look for partnerships with academic staff. As Christine Bruce and Philip Candy note in their review of information literacy programs: “In the higher education sector there is an ongoing concern for ‘curriculum integration’ of information literacy, and a search for strategies that might assist in achieving this.” Philippa Levy reports several “key skills” units that have been developed for British undergraduate programs, including one at University of Sheffield, which uses a combination of “face-to-face lectures, self-paced Web guides, e-mail, and computer-conferencing.” A number of Australian universities have also introduced information literacy instruction programs in the past few years: for instance, University of Southern Queensland (Levy 2000, 46), University of Central Queensland, University of Wollongong, and University of Ballarat. The last of these appointed a Lecturer, Teaching and Learning (Information Literacy) within the University’s Scholarship and Educational Development Services Branch, which is seen as “significant in continuing to foster information literacy education,” because in the past “the Information Literacy and Research Services team has historically been situated on the edge of curriculum development processes, discipline-based discourses and course teaching, and learning practices.” It is worth recording, however, Levy’s cautionary note. She points out that in “traditional distance education” there is “a strong tradition of
packaged information resource provision” that can “serve to limit learners’ engagement with the wider information environment” (2000, p. 51). This need not be a problem, but it is worth pointing out that those distance learning institutions that have been developing international programs may be under some pressure to maintain the “packaged” approach to learning, because even with international partners it is not always possible to guarantee the same levels of library and information resources as it is with domestic markets. (Of course, as the media of library resources become increasingly digital, this issue may not loom so large.) Despite the tendency to package distance learning resources, however, there are strong pressures in the tertiary sector to treat “engagement with the wider information environment” with greater diligence, with phrases such as “life-long learning” and “user empowerment” becoming buzzwords. Sarah Currier, commenting on INSPIRAL—a JISC-funded research project at Strathclyde University in Scotland (INveStigating Portals for Information Resources and Learning)—makes the point that in the course of the project people repeatedly voiced concerns, on the one hand, over “spoon-feeding” students with information and, on the other, “letting them loose in the un-controlled world of the Web.”

Charles Sturt University, as Australia’s largest distance learning institution, has followed two development paths. Some academic staff have developed their own information literacy modules and even complete credit-point subjects, designed to familiarize their students—typically undergraduate students—with the “wider information environment.” The full (eight) credit-point subject, “Electronic Information Literacy for the Humanities and Social Sciences,” is an example of such a development. As the name suggests, however, much of the impetus comes, not from the perceived need to improve on existing library user education programs, but from the notion that, despite supposed improvements in the information literacy skills of secondary school leavers, many undergraduate students are not yet ready to be “let loose” on the technology. Moreover, one of the features of a university with a high proportion of distance students is that there are typically a high percentage of “mature” students, who are often even less computer literate than the typical school leaver.

Second, Karin Smith has been in on the act for the past few years, with an information literacy instruction tutorial, developed by the University Library on the Bathurst campus. It runs as a module within full credit-point subjects, with the approval of the academic coordinating the subject. The online tutorial contains some basic informa-
tion on searching databases, and provides students with a simple set of exercises to complete. Typically, it is set as the first assignment in the subject and is presented as a means of gathering resources for the next, content-based, assignment. It is marked by library staff members, who find their educational role in the University changing significantly, and is almost always an assessable item (around 5% of the student’s assessment). The advantages of basing the tutorial on the students’ next assignment are obvious in terms of motivational factors, and it also helps to contextualize student learning. Generally, the tutorial has been provided to non-LIS students, such as Management students, but it has been used in the Teacher Librarianship and the Library and Information Management programs: for instance, as the first assessable exercise in an ‘Information Technology in Libraries’ unit. Feedback from students has generally been positive–they see that it helps them familiarize themselves with the Library databases and find resources to assist their learning. Comments include the following:

• Clearly written.
• Excellent resource for students with no information retrieval skills.
• Great opportunity to experiment with Charles Sturt University databases.
• The tutorial was great. I liked the format as it “stepped” me through information retrieval practices on the Internet.
• As a “novice” it helped me immensely.
• The tutorial provided a practical and logical way to approach a search for information . . .
• This tutorial was very timely because I was living in a remote location during the semester and relied on online journals more than usual.
• I used the tutorial in all my subjects.

It is worth noting, however, that the current program is very much a first step. As Helen Hobbs and Tania Aspland note, information literacy needs to be embedded throughout a course, and not simply presented as a suite of teaching activities early in a course. It is well worth addressing their question: “How embedded is the embedding?” Some institutions have taken further steps, and developed information literacy modules for more advanced students. Indeed, Bill Johnston of Strathclyde University, Scotland, suggests that first-year undergraduate students commonly need only basic information literacy instruction, because they tend to rely on recommended and prescribed reading, whereas more ad-
Advanced students are expected to read more widely and, therefore, have greater and more sophisticated information literacy needs. With this principle in mind, Strathclyde developed an information literacy subject that is not taken by students until their Third Year.\(^9\) Charles Sturt University has still to embark on this road, although academic programs have on occasion included units within subjects, such as an “Information Seeking” module that was embedded within a “Readings” (literature review) subject in the part-coursework, part-research Master of Applied Science (Information Studies). This module was developed primarily because the IT students generally had far lower information literacy awareness than their LIM counterparts in the same program—not that the latter always came up to the required standard.

**NEW PARTNERSHIPS, NEW PARADIGMS**

The title of this paper is prompted by a comment that Anne Lipow made in her 1999 paper in Sydney: namely, “... rather than thinking of our users as remote, we should recognize that it is we who are remote from our users.” University librarians need to change their mind-set. Developments such as the first-year tutorial discussed are small steps but, combined with the other strategies discussed in this paper, they represent important stages in the establishment of a new educational paradigm, in which university librarians, like their academic colleagues, attempt to guide and support the student’s learning experience—preferably in collaboration with academic staff and others whose expertise lies in the area of educational design. Closer cooperation and a team approach have much to commend them. Teaching, learning, and information resources cannot be compartmentalized, a point underlined, perhaps, by the recent decision of Charles Darwin University (previously Northern Territory University) to bring Library Services and Student Support Services together under the Learning Resources Division.

One of Sarah Currier’s INSPIRAL case studies sums up beautifully the key issues in the integration of information resource provision and online learning, and they are worth repeating here:

- Commitment and direction at the institutional level.
- Strong central learning support services (including the Library and the teaching and learning support unit).
- Close collaboration between learning support units, and with academics.
• Commitment to teaching and learning, not just to technical developments.
• Strategic positioning of information services within e-learning developments.
• Authentication and other seamlessness issues.
• Staff skills and staff role development.30

Failure to find partners in the learning resources mix may result in librarians finding themselves increasingly on the “edge of curriculum development processes.” The debate, online tutorial versus face-to-face teaching, may have some pedagogical, or (as some would prefer it) andragogical, interest (Some writers have started using andragogical as a means of flagging the shift from pedagogy, which was originally applied to the teaching of children, to an emphasis on adult learning.), but it1 should not significantly form university library policy. Online programs are here to stay and their further development must be among university libraries’ top priorities. It is an imperative to realize that they are no longer driven simply by the development of distance learning programs, but by broader developments in the electronic delivery of educational courses. Librarians must embrace the new educational paradigms and work with others in the tertiary sector to support the needs of the independent learner. There may be considerable job satisfaction in being the “sage on the stage” but there is always the danger that we end up playing to an empty auditorium.

NOTES


6. Charles Sturt University 8.


9. Margaret Appleton and Debbie Orr, “Meeting the Needs of Distance Education Students,” Information Literacy Around the World: Advances in Programs and Research, ed. Christine Bruce & Philip Candy (Wagga Wagga, New South Wales: Centre for Information Studies, Charles Sturt University, 2000) 17-18.


13. Nancy Fjällbrant, “The Development of Web-Based Programs to Support Information Literacy Courses,” Bruce & Candy 27.


22. Levy 45.
26. Radomski 77.

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