
LIBRARY SUPPORT FOR LIFELONG LEARNING: REMAINING CURRENT

Nancy J. Mactague, Aurora University – Aurora, IL USA

Veronica Oleszkiewicz – American Academy of Pediatrics – Elk Grove Village, IL USA

Introduction

Many adult workers find themselves playing catch-up to keep their knowledge base current and compete with newcomers entering the workforce. To retain a job, be promoted into a better job, change careers completely, or enrich their lives, an increasing number of adults are furthering their educations. According to the European Commission, “[Lifelong learning] promotes the development of knowledge and competences that will enable each citizen to adapt to the knowledge-based society and actively participate in all spheres of social and economic life, taking more control of his or her future.” Lifelong learning is necessary to meet the demands of today’s fast-paced, ever-changing workplaces requiring an increasing amount of knowledge and flexibility from employees (Friesen & Andersen, 2004, p. 680; Gaimster & Gray, 2004). Whether called information literacy as in universities and colleges, or lifelong learning when knowledge, skills and abilities are transferable to the workplace, the ability to think critically, identify and articulate information needs, analyze information sources, and synthesize information to solve problems are complex abilities upon which lifelong learning/information literacy is based (George, et al., 2001, pp. 281, 285; Law, Lee, & Chow, 2002, p. 415).

As colleges and universities everywhere see a demographic change in the student population, are their academic libraries ready to support these new students? Can the library remain current with instruction and communication technologies to disseminate tutorials and other research assistance? What innovations are already being tried and what hurdles remain before us?

Background and Purpose of Study

Aurora University (AU) is a private, not-for-profit, comprehensive university in Illinois that has welcomed adult students for over 50 years. An evening program for soldiers returning from WWII was established in 1947, one of the nation’s first at a liberal arts college. Continuing in that tradition, the university strives to meet the needs of a wide variety of returning adult students and offers lifelong learning in many forms. Nursing, recreation administration, social work, business, teacher certification courses and degree programs are offered evenings and weekends at off-campus locations, including students’ workplaces, such as schools, hospitals and places of business. Other less formal courses in areas such as agriscience, writing skills, math remediation, problem solving, and coping with difficult people are also offered. The George Williams Campus in Williams Bay, Wisconsin has a strong focus on outdoor educational programs in an experiential setting.

In many cases, students enrolled in these courses never come to the main campus. Yet those students require library and other support services as much or more than traditional students (Mactague, 2001, p. 31). The challenges and opportunities in providing services to non-traditional students “... not only create opportunities for librarians to collaborate, experiment and learn from, but also to examine all the services we provide—not only for students away from campus, or at a distance, but for all faculty and residential students as well, increasingly more of whom use our libraries from their offices and homes” (Haynes, 2002). The university does not offer any fully online courses; however, a course management system (BlackBoard) is used to supplement face-to-face courses from a variety of programs. This has proven to be a valuable communication tool for off-campus students, but is it enough?

The purpose of this study is to perform a gap analysis to research best practices of library services to non-traditional students at other institutions, and compare those best practices against AU’s current practice. Recommendations on bridging the gap, thereby improving service to AU’s non-traditional

students and positioning the library to better support current off-site, blended learning and technology-assisted courses and future on-line projects will be offered.

Review of the Literature

Goals of Library Support

While each educational institution views and organizes lifelong learning and distance education differently, according to its own academic mission, the goal of the institution's library system should be "to provide *seamless* (author's emphasis) library service to students and faculty, regardless of their location, to meet the specific needs of teaching/learning and research" (Haynes, 2002). More specifically, to ensure the lifelong learning skills of its students, the Queensland University of Technology, recognizes "the need for students to develop independent learning skills in order to work within the electronic learning environment." Therefore, an integrated student learning support program will include academic, information and technology literacy (McCarthy, 2001, p. 236).

Student Needs

"... [S]tudents are often reluctant to use the library services," preferring "...to use their local public libraries, finding them more comfortable places which tend to support lifelong learning" (Haynes, 2002). These are students who need to feel "connected" to the institution, to have a contact person who can help them navigate the institution's maze of information and requirements (Haynes, 2002; Mactague, 2001, p. 32). Librarians can help fill this role.

- Non-traditional students' needs can be summarized as follows:
- The ability to work at their own pace, at their own time, and at their own place students (Mactague, 2001, p. 34; Zhang 2002, p. 356)
- The ability to maintain constant communication with faculty and fellow students (Mactague, 2001, pp. 31-32, 34; Zhang 2002, p. 356)
- The ability to learn according to their own learning style, for example, to take a nonlinear approach to the subject matter (Mactague, 2001, p. 25; McCarthy, 2001, p. 235)
- The ability to acquire a variety of information, communication, and technology literacy skills that will enable them to become independent learners (McCarthy, 2001, p. 223)
- The ability to obtain assistance with searching databases and the Internet, and with improving their study and writing skills (McCarthy, 2001, p. 235)

Best Practices

Standards and guidelines are set down by accreditation and library organizations, including the Association of College and Research Libraries, the North Central Association, the Council of Independent Colleges, the Western Association of Schools and Colleges, to name a few. Program accreditation bodies, such as those for nursing, and teacher certification also provide guidelines. However, none of these are prescriptive, providing a list of must-haves. Instead, terms such as "adequate" and "sufficient" are used, leaving institutions to interpret what is best for their own students.

Best practices as shown by a review of the literature published between 2000 and 2005 include:

- Maintaining strong institutional commitment to provide high quality infrastructure, support and training for faculty, staff and students (Mactague, 2001, p. 129; McCarthy, 2001, p. 223)
- Providing services 24/7 via various media, including toll-free phone, email, chat, and state-of-the-art video, visualization and virtual reality formats (Cervone & Brown, 2001, p. 148; Bailey-Hainer & Horton, 2005, p. 7)
- Providing an increasing number of materials available via various media, including e-books, electronic reserves, electronic document delivery, electronic catalogues, electronic abstracting & indexing, and full-text online journal articles, as well as the more traditional snail-mailing of materials (Cervone & Brown, 2001, p. 148; Haynes, 2002, McCarthy, 2001, pp. 223, 226)

- Providing guidance, such as online tutorials, on using the library, in formats supporting heterogeneous learning styles and competency levels (McCarthy, 2001, p. 225)
- Providing a single interface and linking solutions to integrate catalogues and databases and link them directly into online courses (Cervone & Brown, 2001, pp. 148-9; Bailey-Hainer & Horton, 2005, p. 7; McCarthy, 2001, pp. 223, 237)
- Providing liaison librarians who work with faculty and information technologists to develop an online presence for every unit taught, and offer seminars and one-on-one assistance to faculty in the use of their course management software (Cervone & Brown, 2001, pp. 148; McCarthy, 2001, pp. 229; Rieger, Horn & Revels, 2004, p. 208)
- Providing librarians with professional development opportunities, especially those that would equip them to assist with course development (McCarthy, 2001, pp. 230-2)
- Replacing microforms with digital media when possible (Cervone & Brown, 2001, p. 148)
- Building a database of digital images and archival materials (Cervone & Brown, 2001, p. 148)
- Awarding teaching grants to promote innovation in the development and delivery of library services (McCarthy, 2001, pp. 229)

Methodology

After a review of current and best practices, a survey was developed and targeted at three specific populations that interact with non-traditional students and our current course management system (Gaimster & Gray, 2004). The categories and sample questions are as follows:

Open-ended questions for Information Services personnel and Provost:

- What was the university's philosophy behind the purchase of a course management system?
- Currently, what is the expected role of online "any time/anywhere" content delivered via a course management system?
- What use is foreseen for a course management system in the next five years?
- What would be the top five items on your wish list for library support of non-traditional students? These items could be materials, services, and personnel, anything you like.

Open-ended questions for faculty:

- How do you use the course management system in your course(s), that is, what is your approach to presenting your material?
- Do you expect students to write a research paper for your course(s), and if so, what resources do you expect them to consult?
- What would be the top five items on your wish list for library support for your non-traditional students? These items could be materials, services, and personnel, anything you like.

Question for Library, Learning Centre and Office of Adult and Graduate Studies personnel:

- What would be the top five items on your wish list for library support for your non-traditional students? These items could be materials, services, and personnel, anything you like.

Using the "wish list" approach we hoped to elicit open-ended responses and gather insight about the services participants would like to see if no restraints were placed on their desires. In other words, the respondents need not have all the answers, nor know how to achieve their wishes. That would be the librarians' jobs.

Results

Information Services Personnel and Provost

According to Information Services Department (IS) personnel, a course management system (CMS) began to be used when AU partnered with another university to offer online courses in business. When that relationship was dissolved, AU administrators decided that while the university would not “get into distance education,” a CMS would be used to support classroom teaching, as it is a “good communication mechanism,” especially for the “dissemination of limited resources,” and an “organization tool,” a way to pull resources and functions together and keep students within the course framework.

On the IS wish list is an open source CMS designed around solid learning theory, that allows new functions to be added, integrates with support functions such as email and grade reporting systems, delivers publishers’ content packaging, i.e. content to support their textbooks such as quizzes, study guides, PowerPoint slides, and supports standard course management formats (SCORM). Their preferred CMS would offer a “toolkit approach” to content, allowing faculty to pick and choose from a menu of items to support coursework, and support ancillary pedagogy such as library use instruction, and collaborative group work (B. Sutton & D. Basener, personal communication, 22 Dec. 05).

Faculty, Library, Learning Centre and Office of Adult and Graduate Studies Personnel

One hundred twenty surveys were sent out and thirty responses were received, for a twenty-five percent return rate. The responses were categorized as follows: materials, services, delivery modes, tutorials/training, web-page design, and facilities. The most requested item overall fell in the materials category, and was an increased number of electronic journal databases in the content areas (N=12). In the services category, in-person library use orientations by librarians was requested seven times, and the availability of live librarians to assist students 24/7/365 was requested six times. In the tutorials/training category, an online tutorial on database use was requested six times. Facility improvement by providing study rooms for adults with children was requested four times, and putting the computers back in the former computer lab was requested four times. An Excel spreadsheet detailing the number of all requests is posted on <http://www.aurora.edu/~nmactag>.

A number of requests were for items specifically for non-traditional students. These requests included materials appropriate for non-traditional students, including a librarian to act as liaison to non-traditional students, professional development for faculty to help them better understand the needs of non-traditional students, FAQs, an online newsletter for non-traditional students, study rooms for adults with children and on-site child care. (The university did provide on-campus child care; that service was discontinued in 2000 to free up space for more classrooms.)

Other requests were for tutorials, training, and professional development opportunities. Professional development requests included support for scholarly writing, classroom technology use, and understanding non-traditional students’ needs. Tutorials were requested covering topics such as how to use electronic databases, search the Web, and improve computer skills. The preferred delivery mode for tutorials was online.

As a shell in the course management system BlackBoard is created for every class, and the extent of its use is up to each faculty member, the number of faculty who actively and regularly employ BlackBoard is unknown. Three BlackBoard users responded telling the authors how they used BlackBoard. The most common use was to supply course information, including the syllabus and course calendar (N=3). Two used the online gradebook.

Discussion

While AU subscribes to over 10,000 e-journal titles (compare with other schools?), the most requested item overall was increasing electronic journal and book holdings, also found on the best practices list (Cervone & Brown, 2001, p. 148; Hayes, 2002; McCarthy, 2001, p. 223, 226). Not only are e-materials accessible remotely, but they also free up shelf space. In a zero-growth facility (built 40 years ago for 20 years’ worth of growth) these are important benefits, both to students and to staff. To supplement its e-journal holdings, Aurora University seeks vendors from whom to purchase to

subscribe to subject area collections of e-books. The AU library is looking for subject area collections instead of individual titles, to take advantage of quantity discounts, facilitate cataloguing, and minimize the number of interfaces students must learn to navigate. Currently under investigation are Overdrive, EBL, ebrary, Naxos (music and spoken word), Rittenhouse, and netLibrary.

AU is partnering with fellow library consortium members to write a grant to develop a process model for selecting electronic resources in a variety of formats. Through its consortium of 65 Illinois academic libraries, AU is implementing federated searching and a link resolver to provide a single searching interface and hot linking to all full-text databases simultaneously, often called "one-stop shopping" (Cervone & Brown, 2001, pp. 148-9; Bailey-Hainer & Horton, 2005, p. 7; McCarthy, 2001, pp. 223, 237).

"One Stop Shopping" can be dangerous for students unsophisticated in choosing appropriate databases, and critically analysing results. However, giving students immediate gratification in the form of online journal articles and e-books may keep some away from Google-ing everything, thus providing more quality control than is found on the Internet. "One Stop Shopping" obligates the library to provide online tutorials, which was the most requested item in the tutorials/training category, and another on the list of best practices (McCarthy, 2001, p. 225). The AU library plans to develop multi-media online tutorials using the Camtasia streaming video software, which allows live screen capture with six tracks for voiceover, music, and highlighting of text. See <http://www.carli.illinois.edu/I-Share/training/movies/eu-tutorials.html> for examples of Camtasia tutorials.

The specific requests for information about and support for non-traditional students shows that some faculty and staff are aware of the unique needs of those students. Four requests were made for study rooms for adults with children. When Regis University in Denver remodelled its facility, acoustically quiet study rooms were designed allowing children to play in a room with a glass door and sidelights, floor-to-ceiling windows and child-sized furniture, while the parent studied in an adjoining Internet-equipped, well-lighted study room. Another approach would be to provide more help "at a distance." The services of a virtual librarian may eliminate the need to drive to campus with small children in tow. Purdue University offers a 24/7 chat, email and phone "Ask A Librarian" service. See <http://www.asklib.lib.purdue.edu>.

As evidenced by the receipt of only three comments about BlackBoard, the course management system appears to be an underutilized tool. BlackBoard, or another CMS would be a good means of connecting students to electronic materials, with faculty providing a link to an electronic textbook, and readings in e-books or e-journals (Cervone & Brown, 2001, p. 148; Haynes, 2002; McCarthy, 2001, pp. 223, 226). Computer skills tutorials and professional development opportunities were requested by faculty, and may serve to increase BlackBoard use (McCarthy, 2001, pp. 229; Rieger, Horn & Revels, 2004, p. 208). This would also be an appropriate location to post library FAQs.

The authors learned that some faculty and staff do not know the extent of library services and materials offered. The email format provided a good opportunity for the authors to respond individually to faculty and staff, outline or clarify the library's offerings, and generally connect with faculty (George & Frank, 2004). Perhaps a continuation of this informal, asynchronous discussion would be productive, and serve to keep faculty up-to-date on available technology as well as library services and materials.

From some faculty comments, especially the one about putting the computers back into the (former) computer lab, the authors knew that faculty were paying attention to students' complaints. Fortunately, the administration has agreed to replace the computers that were removed from the lab. Since this room is located in the library building, hands-on tutorials could be conducted here, while still meeting the needs of on-campus students.

One response noted that the College of Education, which has the largest number of off-campus cohort students, is considering developing fully online courses as electives. This information came as a surprise both to IS and to library staff and is an indication of a lack of communication on this topic. Since library support would be integral to any online program, library staff would like to be involved in planning for new online programs.

Finally, one respondent prefaced her remarks by saying, “I’m pretending money is no object...” Although we were hoping to elicit “wish lists” and “out of the box” thinking, this comment highlights the need for a realistic look at what is fiscally possible at our small university.

Conclusions

Today’s librarians are highly educated professionals and information experts. As online and other forms of distance education are becoming mainstream at educational institutions and places of business, the librarian often becomes the technology as well as the literacy guide. Their work with sophisticated databases, online journals, and other media require expertise not mastered by other faculty. Many academic librarians are developing new tools to reach all learners (George & Frank, 2004).

Examples of the new tools are found at the University of Illinois, Urbana-Champaign (UIUC), where librarians provide reference services via instant messaging (IM) and chat, as well as via email and telephone. Benefits and advantages of IM include: students receive immediate response; students know how to use the tool, and librarians are seen as being on the cutting edge. In addition, instant messaging is fast, inexpensive and stable. However, IM does not allow queuing; the user needs an account, and only one simultaneous user can be served. UIUC also developed a “Google-like” library toolbar that offers a search box and quick links to library services and materials. The toolbar appears on all university websites, including BlackBoard. It can be downloaded to personal computers by all actively enrolled students, faculty, and staff. The library subscribes to RefWorks and RefShare. RefWorks is a web-based, personal bibliographic software, mainly used by faculty and grad students, which also interfaces with link resolvers. RefShare allows librarians and other users to share bibliographies (L. J. Hinchcliffe, C. Hamb & P. Hswe, 2006 March 29, personal communication).

Recommendations

Although Aurora University has years of experience educating non-traditional learners, it is just beginning to take advantage of the online environment, and it may be too early in the process to add too many high-tech tools too quickly. However, much can be said for developing a culture of information sharing. A low cost initial effort would be to employ Moore and Kearsley’s (1996) systems approach, pulling a team together from survey respondents, as they have already expressed an interest in this topic. Identifying additional faculty interested in online study tools, and creating a sense of buy-in is essential when developing and implementing new programs. Using the system approach would create a team of experts from across the campus community.

While seven of the respondents (23%) noted that many items on their wish lists are already provided, the reinstatement of the full-time extended services librarian position (eliminated due to budget cuts in 2000) would allow a librarian to travel to off-campus cohorts’ locations to provide face-to-face library use instruction sessions, liaise with and provide professional development for off-campus faculty, and develop interactive online tutorials and user manuals. Awarding teaching grants to librarians or faculty/librarian collaborators would promote innovation in the development of online tutorials that could be delivered via the CMS, Camtasia streaming video, or other Web-based software (McCarthy, 2001, p. 229).

Sustaining the library’s lower-tech solutions including telephone and email services is recommended, even in a tight budget situation. However, providing research assistance via instant messaging would not cost an unreasonable amount of money. Increasing remote access to library support via Instant Messaging and streaming video should be assessed regularly through the use of a Library Blog to encourage open, online discussion.

Future Research

- How can the “tool kit” or modular approach requested by the IS department be used system-wide to incorporate learning objects already developed, and allow the library to incorporate a package of essential research tips into every course shell on the CM?

- How can a course management system and other electronic media, materials and services help position the library to support completely online courses? How can the library position itself to support online learning regardless of the CMS chosen?

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Dr. Nancy J. Mactague
 Aurora University, Charles B. Phillips Library
 347 S. Gladstone Ave.
 Aurora, IL 60506 USA
 Email: nmactag@aurora.edu
 Website: <http://www.aurora.edu/~nmactag>

Veronica Oleszkiewicz
 American Academy of Pediatrics
 141 Northwest Point Blvd.
 Elk Grove Village, IL 60007 USA
roleszkiewicz@aap.org