There are many changes taking place in higher education based on the evolving information and technology environment. Information is generated at a faster pace than ever before and information has become a major component of all part of society and economics. Many industries and enterprises are based on information and information-related technologies. Students enter the universities with high expectations related to information and technology and present the faculty and administration with unique challenges. Competition for students, funding and technology experts is a regular occurrence within the higher education environment. Demands from funding and governing agencies are increasing in terms of measuring learning outcomes of all students and programs. Updating the university curricula so students and governing groups are satisfied present additional challenges for faculty and administrators. Additional demands for higher productivity on the part of faculty in terms of teaching and research and scholarly activities place more stress on the higher education environment. 

Students are demanding flexible learning environments more utilization of the World Wide Web in teaching and learning activities and 24-hour access to information.

Librarians and information professionals have also been addressing the many changes caused by the electronic information environment, and they are dealing successfully with this changing situation. Professional organizations such as the Association of Research Libraries (ARL) are developing assessment criteria for research libraries, scholarly, cooperative ventures for information sharing and provision, global ventures and other new information-related activities. The Association of College and Research Libraries (AC RL) has developed a number of new activities for their constituents including outcome measurements for information literacy in the higher education environment.
Academic librarians throughout the United States are rethinking their activities and repositioning themselves in their campus environment. They are taking advantage of new opportunities to build new partnerships and enterprising endeavors with faculty, researchers and campus related entities. The November 2000 issue of College and Research Libraries News features an article by Carla Stoffle and others, which discusses how academic libraries and librarianship should be reinvented. Listed are seventeen challenges for academic libraries and these challenges can be met. The scholarly communication environment is described as well as the academic librarians' role within it. Ten axioms are provided to help academic librarians be successful in the new century. Above all, the article addresses the effect of the external information environment on libraries and librarians and provides some guidance on how to deal with that.

Another pertinent publication dealing with collaborations between faculty and librarians to teach students information skills is the Collaborative Imperative: Librarians and Faculty Working Together in the Information Universe by Dick Raspa and Dane Ward. The authors define collaborations, present literature reviews and several national models of faculty-librarian cooperative ventures.

Ilene Rockman recently published an interesting article on strategic alliances entitled “The power of Collaborative Partnerships” highlighting partnership models outside the traditional teaching and learning arena. Such collaborations can include athletics, communities, fundraising and others.

Academic libraries, particularly research libraries, do need to become more involved in the teaching, research and enterprise activities of their universities if they want to remain viable and competitive in this new information environment. Outreach activities to faculty, technology, students and others are necessary now as never before if libraries want to remain a major part in the educational enterprise and continue to be well-funded. For librarians as well as faculty outcome assessments are becoming a serious reality so they can respond to the inquiries from funding groups in terms of what their contributions are to the educational enterprise.

The University of Louisville is Kentucky's Metropolitan Research University with ambitious goals for education and research, fully supported by the libraries. The University of Louisville is a good example of a successful scenario where through a variety of partnerships the libraries have become more central to the campus teaching and learning community. Some of the initiatives described are small, some are large, some are less significant, some are more significant, but all of them have helped the libraries become more visible on campus and in the community, more involved in teaching, learning and research and ultimately, more effective in producing positive learning outcomes.

Faculty-Librarian Partnerships
Forming partnerships with faculty has been a goal for academic librarians for a long time. Librarians support teaching, learning and research by building collections, providing electronic information access, offering proactive library services and integrated information skills instruction. At the University of Louisville librarians, who are members of the faculty, have begun to form strong partnerships with a significant number of their teaching colleagues. The Library Liaison Program, in existence for several

---

1 Stoffle, C. et al “Predicting the future. What does academic librarianship hold in store?” CRL News 61, No. 10 (November, 2000), 894-901.
years, connects all librarians with relevant faculty departments for the purpose of collection development, library services and support, as well as information literacy instruction.

- **Information Literacy**
  Information literacy is defined as “the ability to recognize when information is needed and to locate, evaluate and use needed information effectively”.
  At the University of Louisville librarians provide approximately 500 sessions of curriculum-integrated information literacy instruction a year to more than 8,000 undergraduate and graduate students, particularly in the health sciences, music, art, business, chemistry, education, engineering, social work, and English. They have created information literacy competencies for the different levels based on the Association of College and Research Libraries Information Literacy Competencies Standards for Higher Education, adopted in January 2001. [http://www.ala.org/acrl/ilcomstan.html](http://www.ala.org/acrl/ilcomstan.html)

They have incorporated active learning techniques in their information skills instruction. Working in close partnership with the teaching faculty librarians have integrated a required component of information literacy instruction in the honors program and in the undergraduate requirements.

- **Distance Education**
  The University Libraries support twenty distance education programs, particularly in business, education, engineering and social work offered by the University of Louisville in Kentucky and other parts of the country and the world. The courses utilize satellite television, interactive videoconferencing and the web as on-site teaching at off-campus locations. The majority of the programs are at the graduate level including a doctoral program in social work. The Distance Education Librarian works with faculty to prepare distance education courses, trains them in information literacy instruction and provides information and instructional support for the approximately 3000 students enrolled in these programs as far away as Athens, Cairo, Hong Kong, Singapore, Panama and San Salvador. [www.louisville.edu/library/dlls](http://www.louisville.edu/library/dlls)

- **Faculty Development**
  In 2000 the Delphi Center, a faculty development center for the purpose of helping faculty bring technology into their teaching and develop online courses and programs, was relocated into the main library at the University of Louisville and an additional branch will be located at the Health Sciences Library. Librarians are beginning to work with faculty as they restructure their courses and programs to teach in the electronic environment. The libraries have created an Office of Distance Learning Library Services (DLLS) within the Delphi Center to work more closely with faculty development for distance education.

- **Writing Center**
  The Writing Center, part of the College of Arts and Sciences, was moved into the main library at the University in 2000. The library works with the Writing Center personnel to support the students using the Center to improve their writing skills related to term papers, essays, theses, proposals, resumes and others.

- **Metropolitan College**
  The Metropolitan College is the result of a partnership between the University and UPS (United Parcel Service) to provide higher education opportunities for UPS employees. The libraries are participating through the Metro Computer Laboratory, a state-of-the-art computer facility for all students to learn computer skills, prepare their course work, and do research with the guidance from library-trained assistants.
• **Research (scholars’ qualifications)**
Librarians partner with the Research Office to evaluate the University’s scholars qualifications, grant support and research support for the University’s more than seventy endowed chairs as well as all researchers supporting the many University institutes and research endeavors.

• **Assessment**
The Libraries are partnering with all academic units to assess educational outcomes. Working with an external company survey instruments have been developed and include relevant information regarding the libraries and information support. The libraries have also developed their own survey instruments for various campus groups. The first series of surveys has been collected and summarized. The results of these surveys have been most encouraging in terms of student satisfaction with library and information support as well as outcomes related to library and information skills.

**Partnerships in the Health Sciences**
The Health Sciences Library supports the health sciences campus units, Dentistry, Nursing and Medicine and has built strong partnerships over the years with various constituencies.

• **Initiatives with the Hospitals**
The library has worked with the three municipal hospitals to share resources and training. A strong partnership has been formed with the University Hospital to administer that library under contract. A partnership with another hospital has enabled their library to become part of the Libraries’ Endeavor system. The three hospitals have an informal consortium for joint purchasing of health care databases and electronic journals.

• **IAIMS Grant for Informatics**
The library has worked with all constituents on the Health Sciences campus, Dentistry, Nursing, and Medicine to obtain a two-year Integrated Advanced Information Management System (IAIMS) grant from the National Library of Medicine. The purpose of the grant is to plan for the integrated use of healthcare information for support of education, research, clinical care, community health and consumer health. All health care related organizations in the greater Louisville area are included in this joint effort.

**Partnerships on Campus**
Opportunities arise regularly to form more and new partnerships on campus and at the University of Louisville librarians have begun to take advantage of such opportunities.

• **Students**
The libraries work closely with student government groups, undergraduate and graduate students, to address their information needs and to ensure that they have appropriate physical and electronic access to libraries and library information. Adding a first class coffee bar in the main library, lending laptops to students, extending library hours, doing a joint student library survey, and general student satisfaction and regular increases in library use are but a few of the outcomes from the students-librarians partnership.
• **Information Technology**
Keeping the library on the cutting edge of technology in terms of computers, software, networks, training and security is based on a strong partnership between personnel in Information Technology and the University Libraries Technology Office. The libraries’ client server system, Endeavor, is jointly administered by the two units, not only for the University of Louisville but the western half of Kentucky, another partnership. The powerful campus network, administered by Information Technology, helps the libraries remain on the cutting edge of technology. A partnership with Xerox insures state-of-the-art copying and printing technology for all campus users.

• **Metroversity**
Metroversity is a consortium of all academic institutions, public and private, in the Louisville and Indiana areas to support higher education and workforce development. The universities and community colleges work together to ensure that the population receives opportunities for higher education without too much duplication.

The relevant academic libraries including some public libraries have formed a Library Council to address the information needs of students and the public in terms of education and work force development. Through resource sharing of information using interlibrary loan, special loan privileges and web sites the libraries are contributing to the area educational goals.

**Partnership with Other Libraries**
Cooperative ventures among libraries have long been a strong component of library work in Kentucky. In recent years such ventures have included partnerships with public and school libraries. The University Libraries have worked with the Jefferson County Schools Media Centers and the Louisville Free Public Library (LFPL) on a variety of projects.

• **Professional education**
The shortage of librarians in the Louisville area is acute and the University Libraries have worked with the school media centers and the public libraries to bring two thirds of the library and information science program from the University of Kentucky to the University of Louisville. Librarians from the University and the public libraries teach most of these classes in the University Libraries. Some classes are taught through video conferencing. Thanks to this partnership the University Libraries were able to establish a minority librarian internship in reference where the individual works full time in the library while completing a master degree in library and information science.

• **Managerial training**
The Louisville Free Public Library has contracted with the University Libraries to provide a year-long management training program for beginning public library managers in cooperation with the University’s School of Business.

• **Information literacy training**
The University Libraries are working with the librarians in the school and public libraries to help them develop their instructional expertise to teach information skills.

**Statewide Library Partnership**

The Kentucky Virtual Library was started in 1999 as a consortium of all libraries in Kentucky, private, public, state, academic, school, public and special. The purpose is support for distance education, support
for the Kentucky Virtual University, information sharing, access to electronic databases, reference and web-based tutorials for learning information skills electronically. www.kyvl.org

Conclusion

Based on the University of Louisville’ experience with partnerships involving academic libraries this seems to be a good direction in which to move at the beginning of the 21st century. Academic librarians need to be aggressive, able to take risks and work with their academic environment to be successful in this competitive information age. They need to be open to new ideas and cease new opportunities as they arise. Research libraries in the 21st century will continue to be major players in education and should become the center on their universities for teaching, learning and research activities. They can successfully do that if they utilize their unique and specialized expertise, think out of the box, reach out to form new partnerships and achieve measurable educational outcomes.

A Few Examples of Other University- Libraries Partnerships

**Academic library outreach through faculty partnerships and Web-based research aids.**

**Academic/librarianship partnerships in the electronic library.**

**Courting athletics, creating partnerships.** *Author*: Gilbert, G.I R. *Source*: Library Administration & Management v. 14 no1 (Winter 2000) p. 35-8

**Managing technology; innovation: who’s in charge here?.**

**A new academic library model: partnerships for learning and teaching.**

**Technology partnerships: the PALNI success story.**

**University/industry partnerships: premonitions for academic libraries.**
*Author*: McDonald, E. *Source*: The Journal of Academic Librarianship v. 11 (May ’85) p. 82-7