LIBRARIES IN A NETWORKED TEXAS

The following summary is based on research conducted by Dr. Philip Doty, Ph.D.* Associate Director, TIPI.

Libraries have been an important part of the educational, social, and political infrastructure of Texas for many decades. Public libraries, in particular, have played a number of important roles in securing the well being of the citizens of Texas. The convergence of computing and telecommunications offers libraries and other nonprofit institutions new opportunities to serve their constituencies; it also offers new challenges.

The Internet and the WorldWideWeb are especially important in this convergence, and the goal of this policy brief is to explore a vision of libraries in a networked Texas. This vision goes beyond libraries as simple information providers, building upon existing roles of libraries in print media and envisioning new roles for them as well. Such a vision also gives rise to important policy issues and implications.

Old Roles

There are approximately 237 public, 108 academic (post-secondary), 60 special, 6 governmental, and an unknown number of school (K-12) libraries in Texas. Libraries of all kinds are not simply centers for getting information. Depending upon their missions and home institutions, they are many things: for example, they are important in adult continuing education ("the people's university"), the site of important educational and research activity, a place for business information, a center for economic development and advice, a site for political empowerment and involvement, a place to get advice about the provision of government services, and a safe place for children to do homework. Libraries are also centers for community meetings, political activism, literacy training, parenting classes, and entertainment and performances.

Old Roles Continued in New Contexts

In addition to the roles noted above, libraries offer at least three kinds of mediation between users and information: transactional, intellectual, and social. Transactional mediation takes place when a librarian works directly with a client face-to-face or electronically. Examples include offering help with a reference question, advice about how to use the file transfer protocol, or support in the use of an electronic interface. Intellectual mediation involves the organization, description, and distribution of information, e.g., by writing abstracts, indexing, developing and using controlled vocabularies (e.g., Library of Congress Subject Headings), designing databases and Web pages, and retrieving information. The third major kind of mediation is social: finding, identifying, and distributing information that is reliable, authenticated, and of high quality, in other words, playing the gate-keeping role. These three kinds of mediation are not mutually exclusive -- rather, they reinforce each other.

While many commentators believe that the use of electronic information will lead to end users' becoming completely self-sufficient, such a belief is not supportable. In fact, the proliferation of digital information services and products requires more mediation, not less. The hybrid information environment is disorganized, chaotic, and uncontrolled -- users need guidance and advice on how to find information and, more importantly, how to evaluate it. Systems are paradoxically more complex
and more transparent. This ambivalence requires persons who can help users, no matter what their technical and topical expertise, when things go wrong. Troubleshooting and individual counseling is perhaps the most important service that libraries and librarians can offer the increasingly independent end user.

New Roles

While general and specific old roles continue in the electronic environment, there are new roles that the library and librarian can and should play. Because of their training and experience, librarians already are playing such roles.

Design of user interfaces Libraries are well-equipped to help system designers understand the psychology and social context of information seeking and use. Libraries are good laboratories to explore the heterogeneous nature of information use and to identify important components in the use of interfaces by real people facing real information problems.

Design of user agents Many assert that individual, intelligent agents are the answer to the complexity and disorganization of the Internet. While that assertion is debatable, what is clear is that most users cannot and will not design agents of their own. Instead, they will rely on existing agents or need help in the design of agents for a particular task or set of tasks. Librarians already do such counseling and design, both for individuals and for groups.

Negotiating licensing agreements As information technologies pose new challenges to the existing copyright and other intellectual property regimes in the U.S. and internationally, libraries are in the forefront of determining how it is that intellectual property can be shared legally. Libraries can also be a center for helping individuals negotiate display, reproduction, and usage rights with rightsholders. By doing so, libraries protect the interests of rightsholders as well as those of users.

Negotiating telecommunication costs A favorable rate for telecommunications is important in the networked world, yet it is often extremely difficult for individuals to secure such a rate. Libraries and their home institutions can aggregate individual demand for telecommunications services and negotiate lower rates for users of such services in or through the library.

Serving local information to the world Libraries increasingly develop electronic information locally and distribute it worldwide. Such information includes library catalogues, genealogical sources, unique local sources, business information, names and contact information for governmental and other services (often called Information and Referral services), cultural and performing arts information, and so on.

Technical consultant Librarians can provide technical expertise on an occasional or continuing basis to nonprofit and for-profit organizations. This kind of cooperation is essential to the success of distributed computing and leverages existing expertise and relationships.

Training users As technologies appear and are surpassed, libraries are essential to the continual education of users, especially the information and financial have-nots. While such support is critical to the success of information technologies, library training of all comers, in fact, has a ripple effect across a community. Technological literacy in one context is often transferable, with modification, to other contexts; thus, library training reaps benefits at work, school, and elsewhere.

Providing access to information, software, and hardware Individuals with financial and other limitations on their acquisition and use of telecommunications equipment often have nowhere to go but to the library. A socially responsible institution with the knowledge of telecommunications and the dedication to the public interest in information is key to achieving the democratic ideal of informed participation in the political process and the economic ideal of highly skilled and motivated workers. The library is that institution. Research shows that "alternative points of access" such as libraries,
museums, and other civic organizations are how growing numbers of users get access to the Internet.

**Center for economic development** While the library is already an important place for economic information, telecommunications offers new roles here as well. The library can broker relationships between information generators, distributors, and users that were impossible to imagine even a few years ago. The library can maintain databases, listservs, and contact information of entrepreneurial ideas, people involved in developing those ideas, and people interested in businesses that specialize in such ideas. Given their experience with library records, libraries have developed internal methods to protect confidential information while still making it available to appropriate parties.

**Conclusion**

The library as we know it is only about 125 years old, yet it has a history of dedication to all members of society and a record of achievement of important intellectual, cultural, social, and political ideals. New roles are continuously invented for this institution, and now new policies and sources of support are needed to maximize libraries' potential in the networked environment.

Among the major policy issues that the networked library faces is how to distribute personnel, equipment, and time to support remote as opposed to local users. While there are many political and sometimes financial advantages to having a wider presence online, there is little new money to support such efforts. Interlibrary Loan has been an important part of library service, but computer networks far exceed support heretofore made available to remote users.

Two closely intertwined policy issues in the networked library are privacy and freedom of expression. How can the library and other institutions protect the privacy of individual users? Especially important are protections of transaction-generated information (TGI), the trail left as users search files, display Web pages, and purchase goods and services online. The library's tradition of protecting clients' records directly conflicts with the keeping of such electronic records and with the commodity value of such information.

Privacy overlaps with concern about freedom of expression and access to information considered "indecent" or otherwise inappropriate. How should the library limit, maximize, or otherwise determine clients' ability to access online information? How does the library play such a role without compromising clients' privacy and freedom of expression and association? How do different kinds of libraries answer these questions?

These and other issues, such as copyright conflicts, cannot be addressed easily or quickly. At the same time, however, it is clear that the library is an important place for exploring and offering answers to information policy questions.

One important component of libraries of all kinds has been their designation as public spaces. They are comfortable, quiet, safe, without pressure to buy. As we see increased competition and conglomeration in computing and telecommunications and as information grows more valuable as an economic commodity, we need the library even more. There the important business of the community, whether real or virtual, local or remote, economic or cultural, can take place. There those with the desire and talent can create knowledge, not just consume it; they can take part in the national conversation, not just listen to it. There our cultural legacy is conserved, and, through the training and support of clients, the library helps recreate that legacy. The library also serves as a counterbalance to the powerful governmental and commercial actors in information. Librarians of all kinds have been a strong voice for the public interest in information. Digital technologies and the important policy conflicts about them underscore the continued importance of this role.

Whether we invoke the political and economic visions of the National Information Infrastructure, the commercial visions of the telecommunications and computing industries, or the social visions of community organizers, the library is key to the realization of such visions. The modern library is a
place where competing ideas have been welcome, where vital skills have been taught, and where significant cultural and educational goals have been articulated and supported.

The Internet and other information technologies offer us new ways to realize our visions of community using the library. What remains to be seen is what we make of the opportunity.

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