

Management of Public Computing in Public Libraries:

Planning, Support, and Policy-Making

The public library is generally agreed to be a place, usually conceived and maintained as an extension of local government services, that makes published materials freely available to the public for information, education and recreation. Part of the mission of making materials available is making certain people can use them, both in terms of the skills required (such as literacy), and in terms of physical access. When "published materials" extend from books and magazines to technology-based media, the library's mission must extend to include those media as well.

Computing and the Internet add a new dimension to the concept of library services. Information, education and recreation can now be found electronically on a server, rather than in a book or on a tape or disc that the library can circulate, or are created by the user herself through the instrument of software. The intangible goods that the library is meant to convey are no longer available only within objects that can be checked out, taken home and returned, but in electronic documents and processes that the user can access from any properly equipped computer—assuming she has access to one. The investments required by computing, both financial and in terms of training and experience, continue to put information technology out of the reach of many people who are the public library's traditional constituency. This conundrum thus puts those people out of the reach of the so-called "New Economy", both as a resource for companies (who need people with computing skills) and for their own benefit.

If the library is to provide access to this new form of information, which has become so critical to educational and financial opportunities today, it has to provide access to computers. Yet the logistical and material challenges in doing so are

formidable. The rate of change for standards in computer hardware and software is so swift that a major investment planned this year, to be implemented next year, will be obsolete before the machines are even installed. Do you want to plan now for future upgrades by seeking a hardware contract that can be renewed for new machines after a period of, say, three years? Or is it better to leave your options open and start the whole process over again with another vendor as your machines age? Do you have staff with skills in computer hardware and networking whom you can assign to managing the new computer system, or do you need to hire systems managers or contract for technical support? If you hire "outsiders" who may not have worked in a library before, how do you plan to orient them to the library, and make your current staff comfortable with tech support procedures? How much training will current staff need in order to work with the new system and assist patrons?

Once you decide to install machines for public computing and Internet access, a host of other decisions must follow, many of them not actually related to the technology itself. Do you know where to seek funding, such as a grant from the Gates Foundation and the PLA Libraries Online! program? Do you need to rally support in the community and/or your governing board for a major investment campaign? Will you try to do all of this by yourself from within the library, or will you seek partnerships with other organizations or companies in the community?

Once you have decided on the number of computers to buy, where are you going to place your machines, and in what arrangement? Do you want a separate computer lab, requiring staff present for security and support, or terminals placed conveniently in the stacks? Do you want to allow patrons privacy during a computing session, or do you want

to be certain their screens are visible so that staff can monitor for unacceptable use? Do you know what your patrons (and staff) consider to constitute "unacceptable use"? Will you need to formulate an Acceptable Use Policy and procedures for enforcing it, and how difficult might that be?

You must also be certain you can provide the infrastructure to support the machines you buy, which may require renovating your current building and updating the wiring, or even building a new facility altogether. You must choose what networking system to use, and what levels of security you need for your network. If you are installing computers across multiple branches that must all be linked in a Wide Area Network (WAN), you must be certain you have the server, wiring and staff support for that system as well. You must buy or lease internet connection lines, and you must know in advance what level of traffic to provide for. You must choose furniture for the computer stations, and you will probably also want to provide access for patrons with disabilities. In sum, you are not only buying computers, but investing in staff to support and maintain them, in physical infrastructure, and in "collateral" purchases like furniture and ergonomic design.

Once you've made the hardware decisions, then comes the software used, usage policies, and training. You must choose the software you want to install (which may be dictated to you by the terms of funding you obtain), and you must safeguard individual computers against tampering and harmful downloads (for instance, you don't want people changing system settings, installing offensive wallpaper, or downloading a virus). You must formulate any rules you may need to impose on patrons for security's sake (can they make any downloads from the Internet? can they use their own floppy disks?), and decide how to regulate computer use (is use by appointment only? will you impose time limits

and if so, how long?). You will probably need to draft a Computer Use Policy for patrons (and staff) to follow. Finally, you have to plan for staff training on the new machines and software, and may need to hire new staff and/or organize volunteers to assist patrons with the computers as well. Patron demand for computer training classes may also be high. Do you have staff who can perform these duties in addition to their other work? Do you need to hire yet another round of people to provide this service, or will you contract out to a professional computer-instruction firm? And all this comes before you have barely begun to talk about the potential perils of the untamed Internet with its apparently unavoidable political controversies.

Most of us are aware of the objections many parents—and vocal political conservatives—have to the potential for children and youth to encounter unsavory materials online. Many libraries have been forced or have chosen to use Internet filtering software on their Internet access terminals, at least on computers meant for use by children. George W. Bush has voiced his belief that all public libraries should be required to use filtering software. The ALA has stated its official opposition to Internet filters (June 2, 1997: www.ala.org/alaorg/oif/fil_res.html), which are not yet sophisticated enough to actually block all objectionable material (for instance, the software can't recognize pictures of naked people), and which have been known to block wholesome or useful sites because they contain a "trigger" word such as "high" (i.e., a student's High School homepage) or "dick" (such as Dick Armey's homepage). Producers of this software generally refuse to reveal their criteria for blocking sites, to protect their proprietary development process, thus making filtering an even trickier proposition. If you are going to use filtering software in your library, it is wise to negotiate a contract

with the vendor which gives you access to blocking conditions, and control over how sites are blocked and unblocked.

In 1996 the Council on Library Resources published a study called <u>Public</u>

<u>Libraries</u>, <u>Communities</u>, and <u>Technology</u>: <u>Twelve Case Studies</u>. [CLR: 1996] Only four short years ago, but decades past in computer technology development time, at that point many libraries were only just beginning to offer public computing. CLR initiated the study in 1995 by sending a letter to over 3,000 public libraries with budgets over \$10,000, asking directors to respond with a brief paragraph describing their programs and plans regarding electronic information technology. They received 293 responses, and selected twelve of those respondents for site visits and write-up in the final study. What they found, among large libraries and small across every region of the United States, was that the most successful library computing initiatives were those with a vision for implementing technology in ways that not only reinforce traditional library services but extend and even transform them; and those which looked to associations with other organizations and non-traditional corporate partners to make the vision a reality for the benefit of the community.

After the Telecommunications Act of 1997 established a requirement for libraries to develop technology plans to qualify for discounts, the PLA responded by publishing Wired for the Future: Developing Your Library Technology Plan. [Mayo: 1999] The volume, modeled after the earlier PLA guide Planning for Results, groups sixteen essential tasks (such as "Review the Library Service Goals, Objectives and Activities" and "Determine What It Will Cost to Implement the Proposed Infrastructure") into five chapters with headings such as "Every Library is Unique", and "Making It Work". A

"Tech Notes" appendix defines technology terms for infrastructure, hardware, operating systems and software; this appendix is supplemented by continually updated information on the PLA website's Tech Notes page (www.pla.org/technoteindex.html). Among its many other helpful tips, Wired for the Future recommends that librarians get ideas from other librarians via forums like the PUBLIB listserv, and suggests Internet resources such as the Library Journal's posting of its webwatch reviews (www.ljdigital.com).

It would be helpful now to briefly look at some examples of how different public libraries have addressed some of the challenges represented by public computing. We will visit a suburban library in Georgia; an urban library in the Mid-West; and two neighboring rural libraries in Oregon.

The Gwinnett County Public Library, headquartered in Lawrenceville, Georgia (thirty miles northeast of Atlanta), was recently selected by the Library Journal/Gale Group to be its Library of the Year 2000. [St Lifer: 2000] The library was especially praised for its wide range of programs on a modest budget, for its cultivation of staff leadership and involvement in decision-making, and for its indefatigable commitment to community service—in spite of a history of controversy regarding collections, primarily instigated by a local chapter of the conservative group Family Friendly Libraries (in the LJ article, library director Jo Ann Pinder points out that Ralph Reed lives in her county, too). The Gwinnett County Public Library also boasts what may well be the best-written Vision Statement I have yet seen: "Gwinnett County Public Library provides resources and services that inform, inspire, enrich and amaze—as we promote community and personal growth."

The GCPL serves a county with a population of approximately 524,000, with a library system consisting of ten branches, most of which were built between 1987 and 1995. The library began offering public computers in 1994, with the most recent upgrades in 1999. Today each branch has at least 12 and as many as 23 OPAC (Online Public Access Catalog) stations, all of which have productivity software and Internet access (see handout for more details); plus each branch has 4 special children's stations ("KiddieLANs") equipped with age-appropriate multimedia CD-ROMs. The library's Technology Plan is posted on their website (www.gwinnettpl.org/TechPlan.html), with special focus on flexibility for future developments and the exploration of new technologies, always emphasizing the fulfillment of community needs (see handout).

The library began offering public Internet access in 1996. Having just survived a major battle over attempts to ban certain books from the library, the administration chose to install filtering software on all Internet stations. Director Pinder considers this policy both a compromise with local values, and a measure of collection management (after all, she argues, you wouldn't allow a vendor to just dump any number of books indiscriminately into your collection; why should the Internet be different?). She tells <u>Library Journal</u> that the library has received no complaints from patrons about being blocked from particular sites they wished to view, and that staff has also not expressed dissatisfaction with the policy.

The St. Louis Public Library is remarkable for its approach to technology training for staff and the public. The system serves an urban population of approximately 397,000 through sixteen neighborhood branches. All but two of the smallest branches include PCs with Internet access, with numbers of stations ranging from two (one adult and one

juvenile) to ten per branch in 1999. Barbara Knotts, Manager of Electronic Collections for the SLPL, published an article in 1999 in the <u>Journal of Library Administration</u> detailing the history of a system-wide computer upgrade and subsequent development of extensive hardware and software training for both staff and the public. [Knotts: 1999] In 1998 the library converted to a new automation system through Data Research Associates, and instituted training for staff and patrons in using the new system. Before the system was installed for public use an intensive program of staff training was completed, following input from staff as to what types of training were desired. A new computer training lab was established, with eight PC workstations and one instructor's stations. Technology training for staff is ongoing, with hands-on sessions in various skills regularly offered.

In the same time period, Neighborhood Computing Centers in fourteen of the system's 16 branches continued to be developed, with grants from Microsoft Corporation and the Gates Library Foundation. One year earlier, in 1997, the library began offering Internet classes to the public—and found that demand far outstripped the resources of the library. Grants from MCI and the U.S. Dept. of Education helped fund better, more extensive training courses. MCI's LibraryLINK community service initiative funds allowed SLPL to contract with public- and private-sector computer instruction providers both to develop materials and administer the classes. After some initial problems with instructors not always showing up when expected, Ms. Knotts revised the contract to ensure better communications with the outside providers and obtain guarantees of performance. She also stipulated that class materials produced by the providers became the property of SLPL, so that staff can now run classes when the outside providers are not

available, as well as after the MCI LibraryLINK program ends. To maintain ongoing technical support for patrons and relieve the burden on regular staff, four trainers were hired to work one-on-one with customers in the various branches during high-traffic periods, answering patron questions and assisting with skills-learning. Volunteers were also organized to provide basic computer support to patrons.

At the end of 1998, the library received an additional grant from the State of Missouri to continue expanding public training. Now, at the close of 2000, computer course offerings continue to be regular and extensive, with basic and intermediate classes on using computers, using the Internet, Windows, and the major programs of the Microsoft Office suite rotating on a monthly basis. In her 1999 article Ms. Knotts documents her care in involving staff, in hiring new staff where needed, in soliciting feedback from both staff and the public to improve the training, and in ensuring that the various technology programs being simultaneously implemented were running smoothly and meeting everyone's needs (both staff and public). She provides several practical pointers in the article that cover every phase of staff and public training, stressing such precepts as "teams work", "training doesn't stop when the new system begins", "make the training personal", "if you enjoy it, they will", and "quality control is a must".

My final examples are the under-dogs. Dallas and Independence are small towns in northwestern Oregon, in the Willamette Valley about sixty miles south of Portland. Individually, they are tiny; the town of Dallas has less than 13,000 people, and Independence has just over 6,000. Through regional networking and the valiant labors of their respective communities and Friends of the Library associations, however, they have been able to draw on resources larger than themselves, and in the case of Independence

even offer some rather ambitious programs. Both libraries are members of a county-wide network called the Polk Library Information Network (PLIN), encompassing three public libraries plus the Western Oregon University Library; and also of the larger Chemeketa Cooperative Regional Library Service (CCRLS), which includes seventeen public libraries plus the Chemeketa Community College Library.

These associations have helped Dallas and Independence develop their library web-pages as well as offer their patrons a broader range of services. A library card from Dallas, for instance, is accepted at any of the CCRLS member libraries; and the catalogs of all eighteen CCRLS libraries are accessible online from each member library's home page. Curiously, the smaller town of Independence has been the most active in developing its library. Dallas boasts twice the population of Independence, but at three public computer stations they have half the computing resources that Independence has to offer. Independence has also pushed to improve its library, with a \$500,000 bond having just been approved in November, 2000 to construct a new library building and acquire four more public-use computers (for a future total of ten stations). In addition, the Independence Library offers computer classes on a periodic basis, held on a series of Saturday mornings. The library website urges patrons to call for notice of the next class offerings.

Whether at home or in the library, the relentless march of technology never seems to slow, much less halt. We quickly become used to it, and forget that only a handful of years ago none of what we now take for granted on a daily basis was even available. The examples given here are only a few of the many inspirational and instructional models that have arisen among libraries in recent years in response to technological change.

Following a long tradition of resourcefulness and of responsiveness to community needs, the public library will continue to be a relevant information center in the information age.

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Knotts, Barbara. 1999. "Technology Training in the St. Louis Public Library". <u>Journal of Library Administration</u> 29(1): 17-35 (January, 1999).

Mayo, Diane; and Sandra Nelson. 1999. Wired for the Future: Developing Your <u>Library Technology Plan</u>. Chicago: American Library Association, for the Public Library Association.

St. Lifer, Evan. "Gwinnett County Public Library: Gale Group/Library Journal Library of the Year 2000". <u>Library Journal</u> 125(11): 34-37 (June 15, 2000).

Used in presentation, but not in paper:

Dewey, Patrick R. 2000. <u>101 Computer Projects for Libraries</u>. Chicago: American Library Association.

Wallace, Patricia. 1998. "Techno-CPR for Public Libraries". <u>Public Libraries</u> 38(1): 40-41 (January/February, 1999).

Web Resources:

Gwinnett County Public Library: www.gwinnettpl.org

St. Louis Public Library: www.slpl.lib.mo.us

Dallas, Oregon Public Library: www.ccrls.org/dallas

Independence, Oregon Public Library: www.ccrls.org/independence

PLA "Tech Notes" site: www.pla.org/technoteindex.htm
Library Journal "webwatch" reviews: www.ljdigital.com
ALA Council Resolution on the Use of Internet Filtering:

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www.ala.org/alaorg/oif/filter_res.html

See also: ALA's Libraries and the Internet Toolkit:

www.ala.org/pio/internettoolkit

Used in presentation but not in paper:

Benton Foundation, <u>Buildings</u>, <u>Books</u>, <u>and Bytes</u> public opinion study re: public libraries and technology: <u>www.benton.org/Library/Kellogg/buildings.html</u>

Customer Service and Technological Change (presentation by Karen Hyman of the South Jersey Regional Library Cooperative, New Jersey, at the PLA 8th National Conference in March, 2000):

www.pla.org/conf00/handouts/customerservice.ppt

Notes for Presentation:

1996, the W. K. Kellogg foundation (which had funded the CLR study) produced the results of a survey on public opinion regarding public libraries in the digital age. Entitled <u>Buildings</u>, <u>Books</u>, and <u>Bytes</u>. The survey found that while people had warm feelings for the library, they had conflicting and confounding expectations for it as well. People wanted libraries to take a leadership role in providing access to computers and digital information—without reducing any traditional services, and without requiring any additional funding. In spite of these expectations of leadership, many people were not confident that the library would transform itself to meet these expectations, thinking of the library as an "old-fashioned" place. Report concluded that the societal changes engendered by technology bring challenges to libraries that are also faced by schools, hospitals, parks, government and social services, and the private sector as well, and that the best solution is to work towards developing creative partnerships among these organizations.

1999: "Techno-CPR for Public Libraries" (Patricia Wallace of Enoch Pratt Free Library, <u>Public Libraries</u> 38(1): 40-41). Submitted late 1998, pub'd Jan./Feb. 1999. Every dept. should have someone who can handle basic computer problems. CPR: Computer Printer Resuscitation.

From 101 Computer Projects for Libraries:

p. 71: the Klinck Memorial Library at Concordia University in River Forest, IL: to reduce "entertainment" use of the Internet, they made a file w/Paintbrush using school colors that contained the full text of the school Internet policy, and saved it as Win95 wallpaper.

pp. 64-66: St. Joseph County Public Library in South Bend, IN carefully designed its webpage, including tips on how to use the Internet and posting their own Internet history. Staff training a major emphasis. All main library public service staff received three sessions of 3-hrs. each on Internet use before unrolling public use; branc staff received 2 2-hr. hands-on sessions on Macs. Public Internet access was not initialized until enough staff had been trained that everybody felt comfortable. They partnered with Notre Dame University for Internet access via Notre Dame's Internet node. http://sjcpl.lib.in.us

Note: our own MCPL's Internet Advocate website is featured on ALA's page for The Librarian's Guide to Cyberspace for Parents and Kids (www.ala.org/pio/cyber/cando.html): www.monroelib.in.us/~lchampel/netadv.html

ALA offers alternatives to filtering at ICONN next Tech Initiative: www.ala.org/ICONN

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