The Internet, Public Computing, and Public Libraries

Jared Dunn LIS 502 Policy Tracking Paper 3/8/2011

1. Policy Summary

Over the past two decades, the importance of and public demand for internet and computing access and associated literacy training in public libraries has steadily increased. This development has combined with the policy inconsistency and fiscal parsimony of the neoliberal state to create a set of urgent problems and new leadership and service opportunities for public libraries and librarianship.

Policy Overview (1990's-Present)

The rise of the internet to prominence in the 1990's was accompanied by a variety of federal initiatives to promote public access, adoption, and literacy. These initiatives were largely uncoordinated, and were scattered throughout many different federal agencies, setting a precedent that has largely endured to the present day. Among these programs were the Technology Opportunities Program in the Department of Commerce, the E-Rate program at the FCC, the Library Services and Technology Act, and a variety of initiatives around community technology centers and student and teacher literacy at the Department of Education.

During the Bush administration, many of these early programs lost funding or were reorganized, and a generally market-directed policy focus for these issues was the order of the day¹. However, E-Rate and LSTA did endure and become relatively entrenched as crucial sources of funding for internet and technology access in libraries, and were joined by the private philanthropic efforts of the Bill and Melinda Gates Foundation as the primary means by which the current public access computing infrastructure in American public libraries was built.

Though sufficient funding was available for a period of time to build that system, provision for sustainably supporting it afterwards was lacking, and the lack of overall policy coordination or direction on the part of the government in the Bush years led to inexorably growing problems with sustainability for technology services in public libraries². The lack of certainty about E-Rate and LSTA funding year-over-year created further uncertainty and made technology provision planning difficult for libraries³.

The Obama administration brought new energy and focus to these issues, with the introduction of a National Broadband Plan and the funding of the Broadband Technology Opportunities Program under the American Recovery and Reinvestment Act.

However, many of the previous problems with federal policy endured, as the dispersal and guidelines for the BTOP funding were not timed or coordinated with the release or the stated priorities of the Broadband Plan, and the funding focus remained on infrastructure over sustainability, education, and staffing, and on vendors and consumers over public uses⁴. Through 2010, BTOP had funded \$3.48Bn in infrastructure, and only \$452m in public computing and sustainable adoption projects. This disparity was not simply a function of demand, as the infrastructure funding represented 12% of total applicant demand in dollars, while sustainable adoption and public computing proposals were only funded at 6% of demand⁵.

Change of Library Focus towards Public Internet Access

Despite this uncertain and often unsupportive policy and funding environment, public libraries have largely succeeded in transforming their mission, culture, and physical space over the past two decades to meet public demand and social needs around access to information technology and the internet, and beyond that, have led the way in providing innovative programming, services, and training around information technology for their communities.

This is a remarkable achievement, and it both meets crucial public needs that aren't being met elsewhere (McClure and Bertot's Public Libraries and the Internet surveys consistently report that over 70% of public libraries are the sole source of true public access computing for their local community⁶) and provides libraries with a new identity with which to make the uncertain transition into the digital era. As one librarian in the Bertot et al surveys put it, the public library had become "the most significant tool for our community to have access to the world of information.⁷"

Public access technology in libraries has become a vital support for communities, other social institutions, and government, playing key roles in support of the rise of e-government and provision of e-government services to those without other access to computers and the internet, the provision of disaster relief, the fostering of technological and information literacy, and the support of the unemployed and underserved in the current economic downturn⁸.

Challenges as a Result of These Changes

Rapid changes such as these in the uncertain policy and funding environments described are bound to create problems and conflicts, and this has certainly been the case with the transition of public libraries into the role of public technology access providers of last resort and technological literacy trainers of first resort for much of American society.

The first and most pressing issue is that of sustainability, or, as it is framed by McClure et al, the looming infrastructure plateau⁹. The crux of this problem is that while funding was initially made available to build this public access infrastructure in the public library system, it has not continued at the levels necessary to sustain the systems that were built, let alone expand them to deal with the continually growing demands of both people and technology. Libraries all around

the country are stretching limited bandwidth beyond the point of usefulness, waiting far too long on average between hardware and software upgrades, straining already overworked staff, and running out of physical space for new workstations.

The policy issues identified in these reports that continue to confront policymakers and the public library community include but are not limited to sufficiency of connectivity, levels of public access, the need for training, continuing gaps in access, sources of funding for technology, and questions of public policy. Today, public libraries still struggle with these same issues, as well as more recent issues, continually working to obtain adequate resources and political support for the provision of information services through the Internet¹⁰.

The authors posit that unless real policy changes occur to support the new technological functions and responsibilities of libraries, something will have to give, and hard choices will have to be made about limiting access and services, changing focus, or surrendering ever more of the broader and older missions of the public library to sustain the new technological demands upon it.

This precarious resource situation also makes libraries more vulnerable politically. Few libraries are in a position to turn down E-Rate or LSTA funding to support their technological functions, but that money has become tied to hot-button political issues such as internet filtering and enforcement of the Patriot Act, a state of affairs which leaves librarians with very little leverage to fight for their autonomy and values as a profession or their patrons' rights and interests in terms of privacy and unfettered access to information. Reliance on private foundation money can also create conflicts between what's best for the patrons and the community and the values and choices that such funding can often impose 12.

Additionally, Bertot et al describe a problem of free-riding by other government entities around the provision of e-government programs and services. In this process, governments move many of their services online, reap the efficiencies and savings associated with those, and then rely on libraries to handle the fallout in terms of increased patron demand and need for training and education to help citizens use the new online gateways to government agencies. If other government entities do not begin helping to offset some of these extra costs, the whole system could become unsustainable and unworkable over time¹³.

Finally, some thinkers exemplified by John Buschman argue that fateful choices have already been made with little debate, and that the libraries have already given up far too much of their traditional values and broader public mission to meet insatiable public needs for technology access. In this school of thought, the reactive and triage-like response to consumer, technological, and institutional demands has led to a largely unexamined abandonment of old duties and priorities, and must be rethought¹⁴. Bertot et al also touch on these sorts of concerns.

Given the significant costs for purchasing and deploying a technology infrastructure to support Internet based services and the stagnant or limited growth in many public library budgets, a significant shift may be occurring in which public libraries are moving to better meet the needs of one group in the local community—those demanding more and better Internet-based services—at the expense of other community information needs¹⁵.

This endlessly reactive approach to always-pressing problems indicates a larger failure to formulate and advocate for a positive policy around the provision of technology in public libraries, and a failure to fully integrate new functions and missions with the longstanding public and institutional commitments of public libraries and librarianship. The real policy lesson around public access technology in libraries is that a comprehensive policy is still desperately needed.

Ways Forward

A variety of possible responses to these issues were proposed in the readings surveyed. Mary Alice Ball recommends forming inter-library and inter-community partnerships for training, programming, and resource sharing, as well as consortiums to aggregate demand for bandwidth and other technological services in order to negotiate for better rates¹⁶. Bertot et al recommend similar collaboration and resource-sharing strategies, though focused towards state and local governments and the free-riding issues they discussed in relation to e-government¹⁷. They also propose that librarians get our own house in order as a profession by developing a national library-side broadband and technology policy, so that we have a positive program to advocate for at the federal policy level and so we can work to credibly obtain the resources really needed to fulfill these needs sustainably.

Finally, Siobhan Stevenson draws upon ideas from the Free and Open Source Software movement and Community Informatics to offer up a more visionary and throughgoing way forward, which suggests re-orienting the entire library approach to technology around community and user empowerment.

All of the ingredients exist to transform public library PAC services from financial and technological problems to be managed into a self–sustaining, community–based initiatives. The former perpetuates dependency, while the later offers autonomy through solidarity, collaboration, and free and open access to the new means of production¹⁸.

2. Recent developments

Developments of recent interest in this area are the ongoing state and federal budget/revenue crises, which have made an already precarious policy and funding situation around these issues even more uncertain and urgent. Only two weeks ago, librarians, coordinated by the ALA and other professional organizations, managed to fight off a proposal to eliminate all LSTA and IMLS funding for the rest of FY 2011¹⁹. These sorts of battles are likely to continue for the foreseeable future.

3. Keeping Up to Date

The best way to keep current on these issues is to read the yearly Bertot / McClure et al reports (http://www.ii.fsu.edu/Solutions/Public-Libraries-The-Internet/Reports), and the ALA reports based upon their work (http://www.ala.org/ala/research/initiatives/plftas/index.cfm). The ALA Techsource Blog (http://www.alatechsource.org/blog) is also a good way to keep up with developments around technology in libraries in general, and there are a wide variety of other library blogs covering this ground from different angles as well.

4. Reflections and Surprises

I was very surprised to see how little there has been in the way internal policy making and coordinated response to or integration of these cultural changes and new demands that libraries face, and at how bad librarianship as a profession is at getting a seat at the table in these conversations at the national policy level. If we're supposed to be at the forefront of an information revolution and leading our society and our communities into this brave new information world, then we need decide for ourselves as a profession what our stances and policy preferences are on these issues, and then insert ourselves into these conversations and at the center of these policy battles.

5. Bibliography

Ball, Mary Alice. "Aggregating Broadband Demand: Surveying the Benefits and Challenges for Public Libraries." *Government Information Quarterly* 26.4 (2009): 551-558. Web.

Bertot, John Carlo. "Universal Service in the Networked Environment: The Education Rate (Erate) Debate." *Journal of Academic Librarianship* 26.1 (2000): 45. Print.

Bertot, John Carlo, Clark, Larra, Davis, Denise. "Capacity Planning for Broadband in Public Libraries: Issues and Strategies." *Library Technology Reports* 45.1 (2009): 38-42. Print.

Bertot, John Carlo, McClure, Charles R., and Jaeger, Paul T. "Public Libraries and the Internet 2007: Issues, Implications, and Expectations." *Library & Information Science Research* 30.3 (2008): 175-184. Web.

Bertot, John Carlo, Jaeger, Paul T., McClure, Charles R., et al. "Public libraries and the Internet 2008-2009: Issues, implications, and challenges." *First Monday; Volume 14, Number 11 - 2 November 2009* (2009): n. pag. Web.

Bertot, John Carlo, Jaeger, Paul T., Langa, Lesley A., et al. "Public Access Computing and Internet Access in Public Libraries: The Role of Public Libraries in E-Government and Emergency Situations." *First Monday; Volume 11, Number 9 — 4 September 2006* (2006): n. pag. Web.

Bertot, John Carlo, McClure, Charles R., Jaeger, Paul T. "Public Libraries Struggle to Meet Internet Demand." *American Libraries* 36.7 (2005): 78-79. Print.

Bertot, John Carlo, McClure, Charles R., Jaeger, Paul T. "The Impacts of Free Public Internet Access on Public Library Patrons and Communities." *The Library Quarterly* 78.3 (2008): 285-301. Print.

Bertot, John Carlo, McClure, Charles R., Ryan, Joe. "Study Shows New Funding Sources Crucial to Technology Services." *American Libraries* 33.3 (2002): 57. Print.

Blum, Steve "Handicapping the BTOP Derby and the BIP Stakes." Tellus Venture Associates. Web. 7 Mar. 2011. http://steveblum.santacruzgeeks.com/2009/07/12/handicapping-the-btop-derby-and-the-bip-stakes>

Buschman, John. "Libraries and the Decline of Public Purposes." *Public Library Quarterly* 24.1 (2005): 1-12.

Doctor, Ronald D. "Seeking Equity in the National Information Infrastructure." *Internet Research* 4.2/3 (1994): 9. Print.

Esbrandt, Philip. "Funding for Technology: Six Steps for Success." *Media & Methods* 32.3 (1996): S-7. Print.

Goldberg, Beverly. "IMLS, LSTA Saved—for Now." *American Libraries Magazine*. Web. 9 Mar. 2011. < http://americanlibrariesmagazine.org/news/02172011/imls-lsta-saved-now">http://americanlibrariesmagazine.org/news/02172011/imls-lsta-saved-now>

Hudson, Heather E. "Universal Access: What Have we Learned from the E-rate?." *Telecommunications Policy*. Apr. 2004: n. pag. Print.

Jaeger, Paul T., John Carlo Bertot, and Charles McClure. "Public Libraries and the Internet 2006." *Public Libraries* 46.5 (2007): 71-78. Print.

Jaeger, Paul T. et al. "The Policy Implications of Internet Connectivity in Public Libraries." *Government Information Quarterly* 23.1 (2006): 123-141. Web.

Jaeger, Paul T., McClure, Charles R., Bertot, John Carlo. "The E-rate Program and Libraries and Library Consortia, 2000-2004: Trends and Issues." *Information Technology & Libraries* 24.2 (2005): 57-67. Print.

Latham, Joyce M. "Positioning the Public Library in the Modern State: The Opportunity of the Children's Internet Protection Act, CIPA." *First Monday; Volume 6, Number 7 - 2 July 2001* (2001): n. pag. Web.

Mandel, Lauren H., et al. "Broadband for Public Libraries: Importance, Issues, and Research Needs." *Government Information Quarterly* 27.3 (2010): 280-291. Web.

McClure, Charles R., et al. "Reports / Public Libraries & The Internet / Solutions / Information Institute / FSU - Information Institute." Web. 8 Mar. 2011. http://www.ii.fsu.edu/Solutions/Public-Libraries-The-Internet/Reports >

McClure, Charles R., Jaeger, Paul T., and Bertot, John Carlo. "The Looming Infrastructure Plateau? Space, Funding, Connection Speed, and the Ability of Public Libraries to meet the Demand for Free Internet Access." *First Monday; Volume 12 Number 12 - 3 December 2007* (2007): n. pag. Web.

Odlyzko, Andrew. "The Many Paradoxes of Broadband." First Monday; Volume 8, Number 9 - 1 September 2003 (2003): n. pag. Web.

Opsahl, Andy. "Most of Broadband Stimulus Funds Went to Vendors in First Grant Round." Digital Communities. Web. 7 Mar. 2011. < http://www.digitalcommunities.com/articles/Most-of-Broadband-Stimulus-Funds-Went.html >

Pratt, Peter J. "What Congress Needs To Do Now to Fix the Broadband Stimulus Program." StimulatingBroadband.com. Web. 7 Mar. 2011.

http://www.stimulatingbroadband.com/2010/01/what-congress-needs-to-do-now-to-fix.html

Samuelson, Don., Lowenstein, Andrew. "Reflections on 'Sustainable Adoption' for Round 2 of Broadband Stimulus." BroadbandBreakfast.com. Web. 7 Mar. 2011. http://broadbandbreakfast.com/2010/01/reflections-on-sustainable-adoption-for-round-2-of-broadband-stimulus/ >

Stevenson, Siobhan. "Public Libraries, Public Access Computing, FOSS and CI: There are Alternatives to Private Philanthropy." *First Monday; Volume 12, Number 5 — 7 May 2007* (2007): n. pag. Web.

Trotter, Andrew et al. "Technology Programs In and Out of Ed. Dept. Take Big Hit in Budget." *Education Week* 21.22 (2002): 33. Print.

Vedantham, Anu, and Breeden, Laura. "Networking for K-12 Education: The Federal Perspective." *Internet Research* 5.1 (1995): 29-39. Web.

"Public Library Funding & Technology Access Study 2006-2007." American Library Association. Web. 7 Mar. 2011. http://www.ala.org/ala/research/initiatives/plftas/previousstudies/0607/index.cfm

"Public Library Funding & Technology Access Study 2007-2008." American Library Association. Web. 7 Mar. 2011. http://www.ala.org/ala/research/initiatives/plftas/previousstudies/0708/index.cfm

"Public Library Funding & Technology Access Study 2008-2009." American Library Association. Web. 7 Mar. 2011. <

http://www.ala.org/ala/research/initiatives/plftas/previousstudies/0809/index.cfm >

"Public Library Funding & Technology Access Study 2009-2010." American Library Association. Web. 7 Mar. 2011. http://www.ala.org/ala/research/initiatives/plftas/2009_2010/index.cfm >

"An Educator's Guide to Funding Issues." University of Illinois CTER White Papers on Technology Issues for Educators. Web. 7 Mar. 2011. http://www.ed.uiuc.edu/wp/access/funding.html >

"BroadbandUSA." National Telecommunications Information Administration. Web. 8 Mar. 2011. http://www2.ntia.doc.gov>

"National Broadband Plan" Federal Communications Commission. Web. 8 Mar. 2011. http://www.broadband.gov/download-plan >

"NPTalk: Community Technology Centers Policy Overview." OMB Watch. Web. 7 Mar. 2011. < http://www.ombwatch.org/node/148 >

"The Broadband Technology Opportunities Program: Expanding Broadband Access and Adoption in Communities Across America - Overview of Grant Awards." National Telecommunications Information Administration. Web. 8 Mar. 2011. http://www.ntia.doc.gov/reports/2010/NTIA Report on BTOP 12142010.pdf>

"Telecommunications and Information Technology: Federal Programs That Can Be Used to Fund Technology for Schools and Libraries: T-HEHS-98-246." *GAO Reports* (1998): 1. Print.

"The Technology Opportunities Program." National Telecommunications Information Administration. Web. 8 Mar. 2011. < http://www.ntia.doc.gov/top >

⁴ Bertot et al. "Public libraries and the Internet 2008-2009: Issues, implications, and challenges."

¹¹ Ibid.

¹ Trotter, Andrew et al. "Technology Programs In and Out of Ed. Dept. Take Big Hit in Budget."

² Jaeger et al. "The Policy Implications of Internet Connectivity in Public Libraries."

³ Ibid.

⁵ "The Broadband Technology Opportunities Program: Expanding Broadband Access and Adoption in Communities Across America - Overview of Grant Awards." National Telecommunications Information Administration.

⁶ Bertot et al. "Public libraries and the Internet 2008-2009: Issues, implications, and challenges."

⁷ Bertot et al. "Public Access Computing and Internet Access in Public Libraries: The Role of Public Libraries in E-Government and Emergency Situations."

⁹ McClure et al. "The Looming Infrastructure Plateau? Space, Funding, Connection Speed, and the Ability of Public Libraries to meet the Demand for Free Internet Access."

¹⁰ Jaeger et al. "The Policy Implications of Internet Connectivity in Public Libraries."

¹² Stevenson, Siobhan. "Public Libraries, Public Access Computing, FOSS and CI: There are Alternatives to Private Philanthropy."

¹³ Bertot et al. "Public Access Computing and Internet Access in Public Libraries: The Role of Public Libraries in E-Government and Emergency Situations."

¹⁴ Buschman, John. "Libraries and the Decline of Public Purposes."

¹⁵ Bertot et al. "The Impacts of Free Public Internet Access on Public Library Patrons and Communities."

¹⁶ Ball, Mary Alice. "Aggregating Broadband Demand: Surveying the Benefits and Challenges for Public Libraries."

¹⁷ Bertot et al. "Public Access Computing and Internet Access in Public Libraries: The Role of Public Libraries in E-Government and Emergency Situations."

¹⁸ Stevenson, Siobhan. "Public Libraries, Public Access Computing, FOSS and CI: There are Alternatives to Private Philanthropy."

¹⁹ Goldberg, Beverly. "IMLS, LSTA Saved—for Now"