The Digital Divide:
Social Responsibilities of the Librarian in 2008
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The “Digital Divide” is a term that has been used frequently in the past decade to describe the gap of access to modern computer technology between different socio-economic groups in the world, and the effect that has on people’s financial success in today’s economy. There has been debate about the severity of the issues outlined in this concept, even to the degree of whether or not a digital divide actually exists. This paper will discuss what would currently be an accurate definition of the problem. Then it will provide some examples of programs that have attempted to solve this problem, to varying success. This should put into perspective the different positions people have on this subject, and the validity of the ethics behind those positions. Some ideas and actions that are needed for our society to live up to its social contract of fostering a civil society will then be examined.

It is important to have and maintain a working definition of the “Digital Divide”, to make sure the issue remains relevant. The Bush administration used their definition of digital divide to state that the divide has been gapped, and we no longer need the community based programs that were designed to address the problem (Schwartz, 2002). This administration actually increased spending on information technology, but it was allocated to computer and data security after the 9/11 terrorist attacks (Konrad, 2002). This concept of technology inequality has come under criticism from many scholars and politicians alike. While some of these criticisms are self-serving, they also can be used to make solutions more successful. There have been examples of well intentioned efforts that had unforeseen consequences. In 2000, the state of Maine spent $65 million dollars to purchase a laptop computer for every seventh grader within the state, but provided no funds for training or maintenance for the computers (Servon, 2002). There has been backlash to this and other programs that have had less than total success. This may have occurred due to an incomplete definition of the problem being addressed. The digital divide is an intricate concept factoring in community needs, everyday life information searching, hardware and access issues, and diverse socio-economic considerations.
Examples of Local Success

The Hillsboro Public Library has a program at its Shute Park branch called “Digital Bridge”. This program provides services to the Latino population that lives in the neighborhood surrounding the building. The program tries to live up to its name by offering classes in computers skills such as library catalog use, database searching, web page design and internet searching techniques. When classes are not being held, internet access is offered on 10 computers and Spanish speaking assistants are available for help (Hillsboro Public Library, 2007). This program is extremely popular, as the computers are almost always occupied.

A similar but more ambitious program in the neighboring town of Cornelius has made the headlines in local papers. Centro Cultural, a non-profit organization that has received state funds for many community programs teamed together with Pacific University, Portland Community College, the Washington County Public Libraries, Oregon State University two local school districts, and local businesses such as Intel (Arch, E.C., 2002). Their “Access Technology” program was initiated by a Department of Education Community Technology Center (CTC) grant in 2001 (Arch, E.C., 2002). This program benefits the Hispanic community of the area that mostly works in the agricultural sector, with most families making less than $20,000 a year (Arch, E.C., 2002). The average salary for families in Washington County is over $50,000, largely due to being the home of the “Silicon Forest” where high salary, high tech jobs at companies such as Intel and Yahoo are prevalent (Centro Cultural, 2006). This grant allowed Hispanic residents to learn English, basic education, computer and job skills. After completion of a 6 month program, participants can give a power point presentation, create web pages, and navigate the complexities of MS Excel, even if they didn’t get far in the schools of the United States or their native countries (Arch, E.C., 2002). This program allowed individuals who have more obstacles to success in this country than others, to have hope of the future and pride in their achievements.
Ethical Debate

There are those who do not acknowledge that there is a digital divide, as defined as a problem that needs to be addressed by government or other actors in society. Columbia University professor, Dr. Walter Block is one who disagrees with the whole premise there is a problem that needs to be fixed. His arguments seem to be based in civil libertarian philosophy, that things are as they are, and there is a natural order to the world that will be disturbed with social engineering. He disagrees with statistics showing disparities between race and gender as people trying to make us all alike. He states that “…sub groups of humanity have different tastes and predilections, that without any chicanery or foul play, different samples of the population have widely disparate goals and ambitions and accomplishments” (Block, 2004). This statement would seem reasonable if one ignored historical crimes that have been committed against certain populations of the human race such as forced slavery, and other superstitious, near-sighted, and cruel institutions of society. He makes out of context statements like “There is more weiner-schinzel in Germany and Austria than the rest of the World”, and are we supposed to even out that divide too? (Block, 2004). He also mentions a concept of the “Yacht Divide”, and even hints at the side of the divide with less access to information technology not having as high IQ’s as those that do (Block, 2004). He totally ignores arguments that would say that a civil society is fostered by having an economically stable working class and has no fear that he might be affected if society collapses due to ideas such as his. I point out this example to show that some of the philosophies behind the argument of not bridging the digital divide are heartless and mean-spirited, and therefore should be easily dismissed in terms of helpful contributions to the debate. It is merely important to know that such ideas exist, so as not to be confused when confronted by its proponents.

Other criticisms of the issue are more constructive. In “The Digital Divide: Who really Benefits from the Proposed Solutions?” authors Houston and Erdelez propose there is money behind some of the solutions that are proposed to bridge the digital divide. They identify the stakeholders behind some proposals as the digital access industry,
government and educators. This is a more logical approach to analyze the situation, and deserves consideration, as they have made good points such as ‘Is high-speed internet really necessary?’, and that wide-sweeping subsidies of hi-speed internet services would be a waste of money, because not everybody wants it and would not know what to do with it if they had it (Houston & Erdelez, 2004). These types of criticism can make implementation plans more successful by pointing out the intricacies of the on-the-ground realities of the problem. They point out that subsidizing new computers at $1000 each would be more costly than distributing refurbished computers at $250 each (Houston & Erdelez, 2004). There are unforeseen obstacles that arise when sorting through all the options for the ones that fit best in certain communities. For instance, Microsoft offers a $3 software suite to governments that subsidize computers for students to use at home. But New Zealand does not qualify for this program, as they distribute refurbished computers to low-income citizens (eSchool News, 2007). But I believe that instead of abandoning all progress in attempts to create a civil society by addressing digital divide issues, we should be open to reasonable criticisms to help redefine the idea of the digital divide, so we can be more successful in doing so.

Hi-Speed access has been shown to be necessary as web sources have begun to use the available technology to develop more broadband intensive applications (Chaudhari & Flamm, 2006). Subsidies could be fine-tuned to address the real disparities that exist in society. When I took the GRE-CAT test, I realized that the only hand-written versions of the tests were for students in other countries. To do well on the test, it was recommended that length was one key factor in doing well on the essay questions. One could then only do well if one could type fast, a skill that would learned by having access to computers. 80% of undergraduate students have a computer at home. The percentage of those who are white is 84.2% and who are Hispanic is 71.4% (Metcalf, 2007). The percentage of families with incomes under $20,000 that have a computer at home is 28.6%. With families that make over $75,000, the percentage is 82.5% (Metcalf, 2007). To do well in college, one needs basic computer skills. Someone with a computer in his dorm room has it easier than someone who has to walk through the rain, and then wait in line at the library to do a research paper.
Libraries are seen as a way to bridge the digital divide, but there are disparities between libraries as well, perhaps due to funding coming from property tax. Professor Denise Agosto of Drexel University suggests that wealthy neighborhoods have better non-profit support from organizations such as the Friends of the Library (Agosto, 2005). A “Friends” branch in a wealthy neighborhood might have more expensive donated items to sell to wealthier customers. She also points out that businesses like Verizon might want to donate in neighborhoods where the population can afford their products (Agosto, 2005).

Social Contract theory points out the benefits to living in a civil society where people interact with each other through rules based on shared morality (Quinn, 2006). These rules can be implemented by government, rules such as providing resources for working people to better their condition in life. Funding CTC programs such as Centro Cultural provides working people with hope for a better future. People who grumble about the taxes necessary to provide such services should reminded that they benefit from the social contract by living in a society where they can afford vegetables, and is stable enough to allow them to live safely in peace. It is much more costly to help people to help themselves, than to jail them for stealing because they were hungry. In turn, the benefits of bridging the digital divide with tax-payer support are much greater than not doing so. Incorporating private interests into the solutions can also address the complex nature of this issue.

**Ideas for Future**

There are many ideas that can help society progress through addressing the issues of the digital divide. Geographical problems require geographical solutions. Rural connectivity has be addressed by expansion of satellite broadband internet services (ThomasNet.com, 2006). A new idea is to use Broadband over Power Lines, or BPL. Broadband internet access can be transmitted over power lines, costing customers only $25 a month. This
solution has been successfully implemented in rural areas of Pennsylvania, and could be an answer for other rural area throughout the country (BPL.coop, 2008).

Another solution that would partially, but considerably help is through recycling and refurbishing computers, which would otherwise be dumped in land fills. This would reduced the need for manufacturing new computers and cut back on carbon emissions produced by that process. Corporations and individuals dispose of 100,000 computers a day (Next Step Recycling, 2007). Next Step Recycling in Portland, Oregon has recycled and provides technical support for 10,000 computers (Next Step Recycling, 2007). This is a business that could grow, employing many people as they do. Perhaps those trained in CTC’s could work there in the future.

There are many human based ideas that would help. Students studying computer science could work for CTC’s in internships, gaining real life experience, real bullet points on their résumé’s, all while helping disadvantaged communities. Before these students jump into the for profit world of say, designing social networking sites, they could develop such sites for “small communities, housing complexes, community centers, retirement homes and neighborhood associations” (Lamb, 2008). Perhaps some of these students would forgo the lure of large salaries in the corporate world to work for the government and non-profit sectors, as they then would have seen the benefits of socially conscious work.

The past decade has shown a lot of improvement in bridging the digital divide, but according to a report from the Gates foundation, “Towards Equality of Access: the Role of Public Libraries in Addressing the Digital Divide”, there is still a long way to go (Oder, 2004). More money “…is needed to sustain open hours, technical support, hardware and software upgrades, Internet connections, and technology training” (Oder, 2004). The report says despite the progress, there is a “Fragility Index” that concludes that 22 percent of public libraries have difficulty sustaining funds for internet access under their current budgets (Oder, 2004). This is the part of the definition of the Digital Divide that the current administration ignored when it decided that the problem had been
solved, and cut the funding to important community technology programs. A solution from the Gates Foundation is the creation of Webjuction.org. This is a website that provides professional development and other technical information for libraries. Suggestions for libraries to get E-rate discounts and other tech tips, saves money on technology consultants (Oder, 2004).

Many libraries are struggling to keep up with new technological developments and struggle to maintain the services they already provide. One idea for those libraries that are in good financial shape, is to take a step into the future and set up an Internet2 connection for themselves and their patrons. Internet2 is a non-profit advanced network that has been set up by government and higher education entities (Werle, Fox, 2007). Public libraries for the most part have not adapted this new technology opportunity, but there is much potential in this option. Internet2 is capable of moving information thousands of times faster than the original internet, and is good at handing popular bandwidth-heavy applications like hi-definition video conferencing (Werle, Fox, 2007). Staff could communicate more effectively with colleagues and experts around the world, and communities could have conferences with people outside the local area. Public libraries could access the immense Library of Congress archives, downloading interesting materials in seconds, instead of minutes or even hours (Werle, Fox, 2007). Public libraries could serve as local history repositories, as Internet2 advanced network has a much greater capacity for storing information. Libraries could serve as distance learning centers with Internet2, as it could facilitate real life collaboration and all types of new media formats (Werle, Fox, 2007).

One “if you had unlimited funds” idea would be to create a multi-faceted CTC based on this new technology. The Hillsboro Public Library has a large second floor that it has been trying to rent out for additional income. Perhaps this space could be used for a CTC that involved local high schools, colleges, marginalized communities, and neighboring businesses such as Intel, Laika and Yahoo. Projects could be created by the ideas of the students with the help of the community. Music recording projects, film development, game programming, web design, scholarly research, and business incubators are some of
the ideas that could result from such a consortium of interests. The community would gain educated students and more highly trained citizens, and the businesses would have a better reputation for being community friendly. They might also get some good employees out of the process.

Libraries and librarians have helped bridge the digital divide in many ways. Many CTC’s are based in libraries, and many libraries act as CTC’s. Librarians are in an excellent position to help teach people computer literacy, as many are trained in many aspects of information science. Librarians have long been the “teachers of teachers” in school library settings (Johnson, 2004). Librarians are in the position to teach not only information technology, but its ethical use as well (Johnson, 2004). Many are excited to adapt to this new role.

**Conclusion**

There are many areas of the digital divide that are beyond the scope of this paper to address, such as international variations of the digital divide and solutions that might be applicable to local problems. The Internet connects the world, and those who are not connected are, in some ways, being left behind. It is our ethical responsibility as librarians, citizens of the United States, or members of the human race, to help each other progress towards the theoretical ideal of the civil society by working to reduce the inequalities between us that are described in the definition of the digital divide. The quote inscribed at the feet of the Statue of Liberty well describes the social contract we share as Americans. “Give me your tired, your poor, your huddled masses yearning to breathe free, the wretched refuse of your teeming shore. Send these, the homeless, tempest-tost to me. I lift my lamp beside the golden door!” The library can play a major role in processing that request.
References


**Additional Websites**

Internet2

http://www.internet2.edu/

Webjunction

http://www.webjunction.org/do/Home;jsessionid=EFA2C250A8B2255890937CCC59ED A388