

Hot Spots and Water Towers – Lessening the Digital Divide Disparity in Public Libraries and User Spaces

How can public libraries help to close the digital divide?

Personal Experience aka Backstory.

I lived on the losing side of the digital divide between 2013-2016. I was unfamiliar with the term all of that time and for many years after but there I was, living under the poverty line in Baltimore, MD. I lived in a food desert [1], I depended on public transportation. It was critically difficult to get to and from the libraries, but I found the services offered there to be essential. Especially free WIFI as I did not have WIFI at home or at work. I made it to one of the 3 public libraries accessible to me at the least once a week. Even the bus routes themselves were difficult – it generally took more than one bus and lots of walking to get to the libraries. I have memories of walking city blocks in the snow to get there.

My housemate, Kenisha, primarily used her laptop in the bathroom. She swore that if she placed it on the windowsill with the window open just right that she could get it on some kind of neighboring WIFI. It wasn't impossible but it certainly was not dependable. Additionally, with 3 housemates and one bathroom, it created a hostile situation for Kenisha to camp out in the bathroom for too long of time.

The Problem.

Much like the food desert, where liquor stores greatly outnumber grocery stores, we also have a WIFI desert happening.

Library users have a limited experience of their library's online catalog and other offerings when there is no WIFI available to them at their home.

In fact, only 57% of households with incomes less than US\$30,000 per year have home broadband internet access, compared to 92% of households with incomes greater than US\$75,000 per year. [2]

Library users are having a limited experience of their library's online catalog, services and offerings when they do not have WIFI access available to them at their home. *Lack of internet access can make it difficult for individuals to apply for jobs, complete schoolwork, access government services and stay connected with family and friends. [2]*

Some of the services I discovered currently being offered at Broward County (<https://www.broward.org>) and similar libraries include access to distance learning, access to telehealth appointments, skills-based classes like English as a second language, Using Zoom, Using YouTube. Yoga. Computer Literacy for Windows 10, Mobile Device Help and a number of job search courses. The majority of these courses are offered online (including the Yoga). However, without WIFI access outside of the library, they are not practically accessible to patrons living in the digital divide.

This disparity hits in similar ways with library media collections. I discovered the media-loan mega-services Kanopy and Hoopla through the libraries I studied for my research. Both offer amazing collections of movies, tv shows, eBooks and other media. Kanopy's offering is similar to Netflix – it's based on streaming content. Broward gives all card holders 18 tickets per month to stream media on Kanopy. For someone underserved, with no access to Netflix, etc. this services really is game changing. But again, without WIFI at home it's only accessible to users who can afford to have WIF at home. And now we have the underserved and double-served which is a lot of disparity.

One of the biggest challenges facing underserved communities is a lack of access to technology, which can lead to limited technological capital. According to data from Pew Research Center, nearly a quarter of Americans do not have high-speed internet access, with those in rural areas and low-income households being disproportionately affected. [2]

What Others Are Doing:

Libraries across the country are doing interesting and creative things to address the digital divide disparity both inside the library and remotely. I wanted to see the best of the best in public library remote services. I wanted to see who was really doing things right. Whose taillights do we follow? I looked at libraries in New Jersey, Texas and Baltimore to get an idea of what services are being offered remotely. I was encouraged by discovering the services Baltimore has added in the 7 years since I left. Enoch Pratt Free Library (<https://www.prattlibrary.org>) services Baltimore City with 19 libraries city wide. They have added Mobile Outreach Services that include a Bookmobile, Mobile Community WIFI and a Mobile Job Center. The Mobile Job Center visits all Baltimore neighborhoods and includes:

Mobile Job Center Services support where access to services can be challenging. The vehicle features twelve individual computer workstations, a print collection, and Pratt Library staff to help with:

- WIFI access, printing services and basic computer assistance
- creating resumes and cover letters with one-on-one help from Pratt staff available by appointment as well as job searching services and help completing applications

- The Mobile Job Center is also equipped with a handicap lift as well as a large HDTV screen inside the vehicle for presentations, classes, and demonstrations. An awning and additional exterior HDTV screen allow for expanded group presentations.

Wow!

By offering a range of digital devices and services, libraries can help visitors access tech tools, improve their digital literacy and computer skills, get on the web and learn to navigate the internet safely. [2]

Public libraries are helping to address this digital divide by providing free internet access, as well as WIFI hotspots that members can borrow and use at home.

This is particularly important for individuals who may not have reliable internet access at home, or who need the ability to work or study remotely. [2]

Some libraries broadcast their WIFI signal out of the building to the sidewalk and parking lot so users can sit in their cars and non-library spaces.

In Fort Worth, TX, libraries have been boosting their WIFI signals by broadcasting from water towers. This initiative was possible because of a Grant from Texas State Library & Archives.

Applying and receiving grant money based on proposals and need and partnering with digital equity organizations, community leaders and service providers to provide broadband access and reduce barriers [2] has also been very successful.

We're adapting. According to the ALA, some learning we gained during Covid includes tweaks and changes in how libraries kept their communities connected by:

- Strengthening wireless signals and extending activation hours, so people could access WIFI from outside library buildings
- Partnering with local government, businesses, and community organizations to set up additional outdoor and drive-in WIFI hotspot locations
- Using library vehicles to bring hotspots to neighborhoods in need of connectivity at advertised times
- Targeting hotspots to specific populations — homeless, veterans and low-income families, for example [2]

Lending digital hotspots was a common idea amongst the libraries I studied, duration of loan and number of hotspots available varied but I think this is another gamechanger to close the digital divide. This essentially is giving users the keys to the car (some libraries I found will even give you phone support to hook it up in your location!). Once on the hotspot everything becomes instantly accessible including Libby, Kanopy and Hoopla, government websites and yes, even yoga. Many libraries I found take it a step further and loan laptops, Chromebooks and eReaders

to users. My research study would ask the question “Does providing library users with the ability to check out WIFI hotspots help to close the digital divide?”

Libraries have made progress over the past two decades, but persistent and often systemic gaps remain -- recognizes these disparities with a focus on “covered populations,” which include:

- Low-income households
- People with disabilities
- Aging populations
- People facing language barriers
- Racial and ethnic minorities
- People who have been incarcerated
- Rural residents
- Veterans

These gaps relate not only to accessible broadband and devices but also the skills needed to effectively use technology. [3]

Research Study.

It's important that progress, or lack thereof, be measurable. This is how we well define our success and prioritize our learning when moving to the implementation phase.

Key aspects of digital literacy that can be measured:

- **Basic computer skills:** Navigating file systems, opening applications, managing documents.
- **Internet navigation:** Searching for information, evaluating website credibility, using URLs.
- **Digital communication:** Emailing, texting, using social media platforms
- **Information literacy:** Identifying reliable sources, evaluating data, citing information correctly
- **Digital security:** Understanding online privacy, password management, recognizing phishing scams
- **Content creation:** Creating documents, presentations, videos, and basic digital design

Assessment methods:

- **Self-assessment surveys:** Individuals rate their own digital skills on various aspects of technology use.
- **Performance-based tasks:** Completing practical tasks on a computer or mobile device, such as searching for information, creating a document, or making an online purchase.
- **Knowledge tests:** Answering questions about digital concepts and terminology
- **Portfolio review:** Presenting digital artifacts created by the individual, demonstrating their skills and application
- **Observational assessments:** Watching individuals perform digital tasks in a real-world setting [4]

Conclusion. Or, how research can inform practice.

The goal of Digital Inclusion efforts is to compensate for, correct and ultimately close the digital divide. Public Libraries are playing an important role in this initiative but there is still work to do.

By offering a range of digital resources and services, libraries are helping to decrease the digital divide and promote equity in technology access. However, it is important to recognize that there is still much work to be done to ensure that all individuals have the same opportunities and access to the essential resources they need to thrive. [2]

References:

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- [4] Google AI Overview: “how to measure digital literacy” prompt 11/2/24