

Digital Readiness

and other digital divide strategies

Jessamyn West
librarian.net/talks/wla17



Hi thanks for having me. You can see cites to my talk as well as the slides themselves at this URL. I touch on a number of topics and sometimes one will stick with a person. We can talk more about any of them at the session after this in the Aurora room but also if you just like reading stuff, there are links there, lots of links. I am a librarian and I can't not do this.



So hey welcome. I am excited to be here and I hope you are also. I am a librarian who loves to tech. I also love Canada. And visiting big cities where tech can seem more like a (potentially) cool and actually USEFUL thing and less (to some) like a hostile invader set on disrupting our way of life. I am sad the telephone museum is closed because I love ALL technologies. I'm here to talk to you about digital divide stuff, just some things to keep in mind as we spend the next day and a half together being nerds and geeks and techie librarians together.



This is a footer, so use it when you need it.

I'm here to do three things

1. Talk about some of the characteristics of the digitally divided and introduce the idea of digital readiness (orange county in 2012) county in 2012
2. Introduce you to to the work and tactics of Phil Agre and build on some of it.
3. Open a conversation (to be continued if people want) about ways we as librarians can make this better. Maybe some things to think about as you head home tomorrow.

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Computer people are fine human beings, but they do a lot of harm in the ways they "help" other people with their computer problems.

Phil Agre's How to help someone use a computer

If I was doing this talk in 45 seconds instead of 45 minutes, I'd say "The digital divide is important because 1. tech is important for personal and professional reasons especially as the world changes and digitally divided people get left behind 2. the people who are building a lot of the technology we use are (sometimes, often) making bad choices *because of* the digital divide and as a result they make things worse for everyone. Not on purpose, necessarily."

Librarians are usually somewhere between the first group of people (the divided) and the second (the techies and programmers).

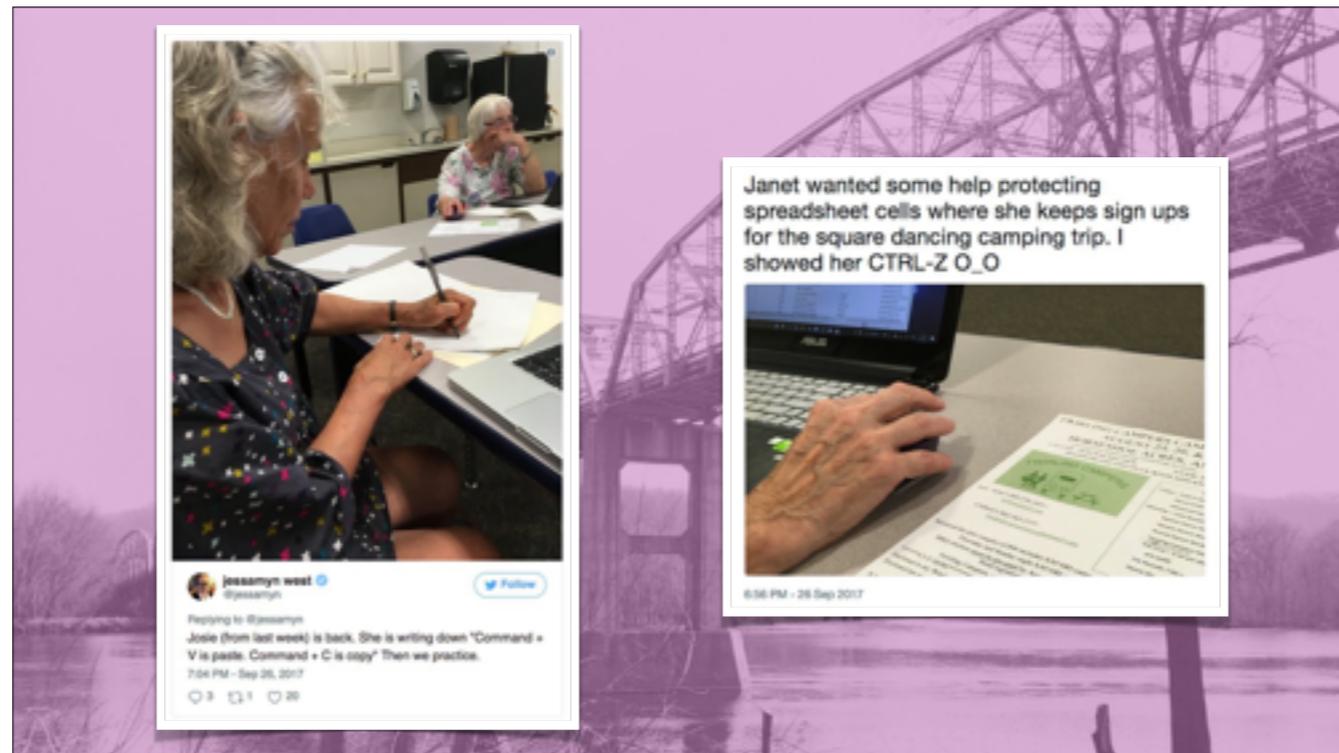
I'd also say "Read this list of things to know about how to teach people how to use computers by Phil Agre." It was written in 1996. It's still true today. I use some quotes from it throughout the talk. It's good advice because it's not just "Hold the mouse like this" but rather "Think about the world like THIS" useful for people like us.



It's sort of hard to "show" the digital divide and this is part of the larger problem. Lots of pictures of bridges. Librarians tend to understand the issue—we see digitally divided people in our populations every day, but they can be a little INvisible to the people who create the technology the digitally divided folks have to use. Part of the divide is the lack of overlap between tech-rich parts of society and tech-poor parts. This can be proximity, how far you are from Silicon Valley, but also demographically—age, class, race, gender.

20-something white men in US cities are building a lot of the technology that everyone else is using.

(click) I've taken to just telling stories about the people I work with. This is Josie.... and this is Janet. They're everyday stories but they play big on Twitter where tech people are. I like to think this is helping. I met Josie and Janet through my regular drop-in time, a program I do through a local technical high school (you guys have tech ed?). I hang out in a room once a week and people in the community (pop 4500 or so) come in to ask questions. I've been doing it for ten years.



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13%

13% of American adults do not use the internet at all.
Additionally, 9% of adults use the internet but not at home.

Pew Research Center

We'll start here. This is a true fact. And what's weird is I've been doing variants on this talk for over a decade and this number which was a little over 20% used to move and it doesn't anymore. Those 13% are staying put.

In Canada this number is nearly the same, estimates are in the 13-15% range, despite more people here being CAPABLE of getting broadband than in the US for various handwavey reasons such as population density and government programs. But what does it mean to be offline? What are the outlines of the digital divide?

Three (or more) digital divides



Financial

People couldn't afford computers or broadband. Some still can't but libraries have filled that gap for most people.

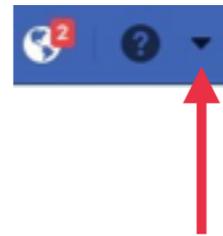
The idea of the digital divide sounds simple, but it is complex. It's not one thing anymore. It was and now it's not. It used to just be "Hey computers are expensive and people can't afford them..." or "Getting the internet is expensive and people can't afford THAT" But realistically now in the US 97% of our populations have access to public library service. Alberta considers broadband access an essential library service (we're getting there in the US...) and this reduces this barrier to entry. It's not fixed but it's mostly ameliorated and has had remedies that work.

Three (or more) digital divides



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Usability

Websites are hard to use and people have cognitive and physical challenges that make this harder than it needs to be.

Secondly, there's the usability stuff or, as I like to call it in my facebook classes "let's learn where the tiny triangles are which hide all the stuff you want." Because seriously, this little triangle is dark blue on slightly lighter blue and it's 30-ish pixels on a 2000-ish pixel screen. That's a tough target. (click) You may have also heard about the US healthcare debacle of a few years ago (as opposed to the one of this year). Not only did people have to apply online, they were confronted with a terrible poorly-functioning website to do it. People got driven online, in droves, were forced to interact with this website and walked away thinking "Computers are hard" That is a failure on so many levels, and extra sad because it was untrue and avoidable. People who think they are bad at computers are often just having trouble with interfaces.

We can help with this with our advocacy and our own good practices. Build good, tested, usable websites. Demand them from your vendors.

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**"Most user interfaces are terrible. When people make mistakes it's usually the fault of the interface. You've forgotten how many ways you've learned to adapt to bad interfaces."
Phil Agre**

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Empowerment

People don't "see themselves" in online spaces and don't see it as a place where they belong.

And then there's empowerment. Offline people look at ads like these grinning white people all wrapped up in their own devices ignoring each other and say "That's not what I want. Why would someone think I want that?"

A lot of people who are not fully online have ... concerns. I used to moderate a giant online community, helped keep people from fighting with each other. The line I use about heavily online users is that they're online for a reason. Maybe they have a disabled family member they're caretaking for, maybe *they* are the disabled family member, maybe they're timeshifted, maybe they have agoraphobia, maybe they're an expat, maybe that have a small weird hobby. Understanding their lives can help you understand how to work with them when they struggle.

The same is true for offline people. The 13%. They may have physical challenges but they may also have mental ones. Lack of energy for learning an all-new thing. Concerns over doing something wrong and wasting money or time. They're looking for more of a welcome mat and less of a "Hey have you tried Ubuntu?"

Seriously "Try Ubuntu..."



So remember Janet, the one who is organizing the square dancing camping spreadsheet? I got this feedback after I tweeted about her. And this guy is... not wrong. But we might also say "not EVEN wrong" because he's got the right solution but for the wrong problem. Which is not unusual in the tech world. But we, librarians, can be compassionate towards him while still not installing Ubuntu on Janet's laptop. Unless her problem to solve is "too much free time and a desire to learn a new operating system in her 80s" in which case go Janet!

Three digital divides



Financial

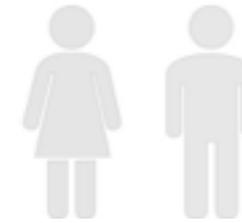
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What is your gender?

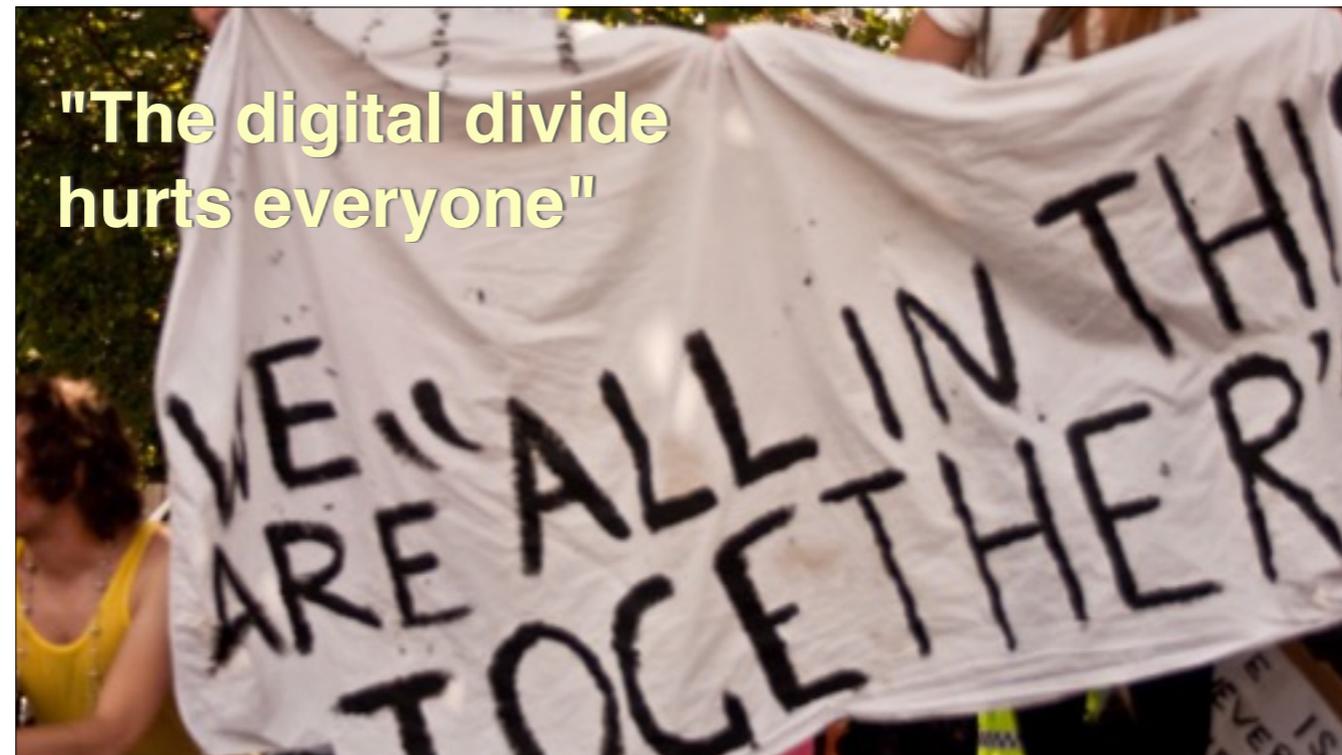


Inclusion

People are made to feel unwelcome in online spaces or with UX considerations and then figure "Why bother"?

Empowerment can also be inclusion. These are different aspects of a similar issue. Often people, "computer people" to use Phil Agre's parlance, are looking for scalable solutions and they oversimplify the complexities of humanity into something that will fit into a checkbox or a database.

Letting people fill in their own gender, using their own words, is vastly preferable from a human standpoint, but difficult from a database standpoint (or a market research standpoint where your client is telling you "we need this split up by gender" and you're not deputized to explain genderfluidity to them). But how do you explain that to the digitally divided transgender kid who is faced with this choice? And that kid feels 1% or heck maybe 25% less likely to want to engage online because of it.



I talk a lot about social justice and inequality issues. I try to be tactical as well as truthful. One of the messages I find helpful, tactically, is the idea that many institutionalized issues (poverty, racism, ableism, homophobia and transphobia) hurt everyone, not just the people who are the "targets" or "victims" of prejudice and intolerance.

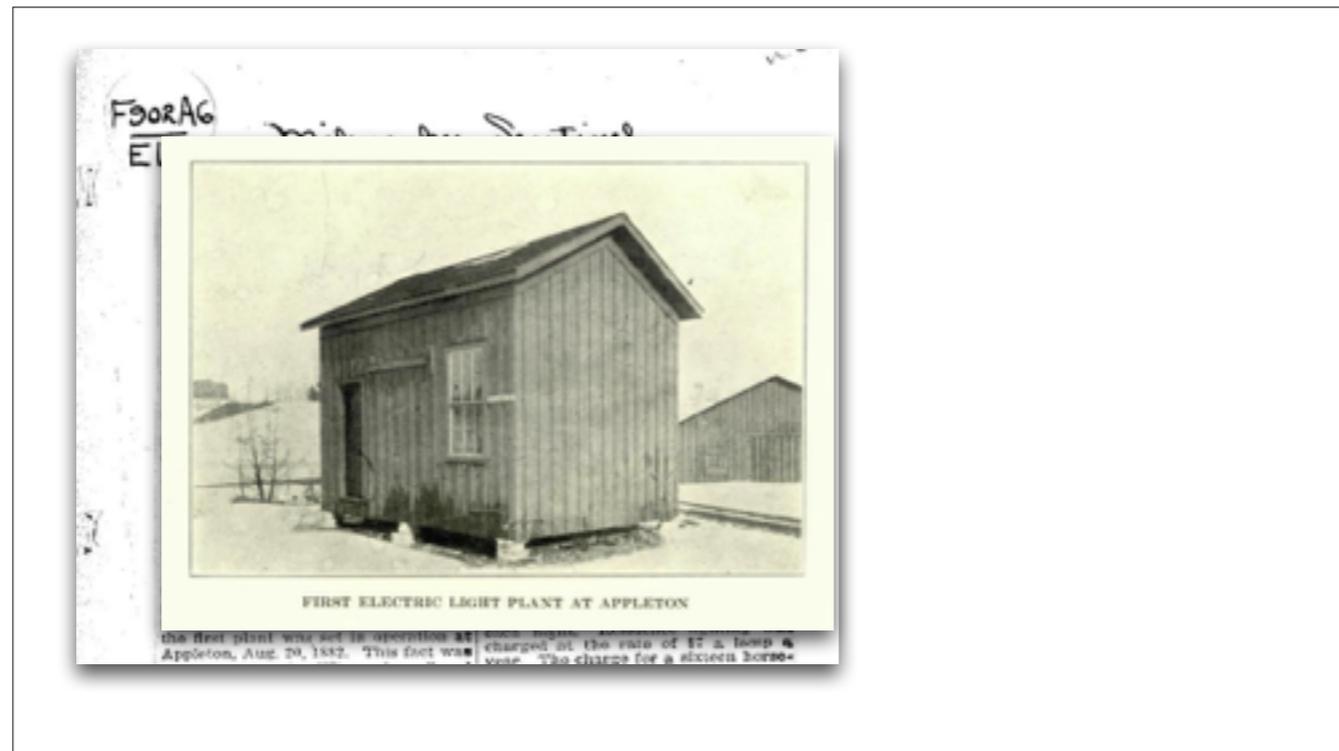
Feminism, as a more straightforward example, can make a more pragmatic kind of sense to a wider audience when it's not just a thing for women but a thing for everyone because the idea of the patriarchy—normative gender stereotypes, toxic masculinity, people pressured to fit some societal notion of gender roles—is bad for people of all genders.

So this is my message about the digital divide: It hurts everyone, working on it helps everyone.



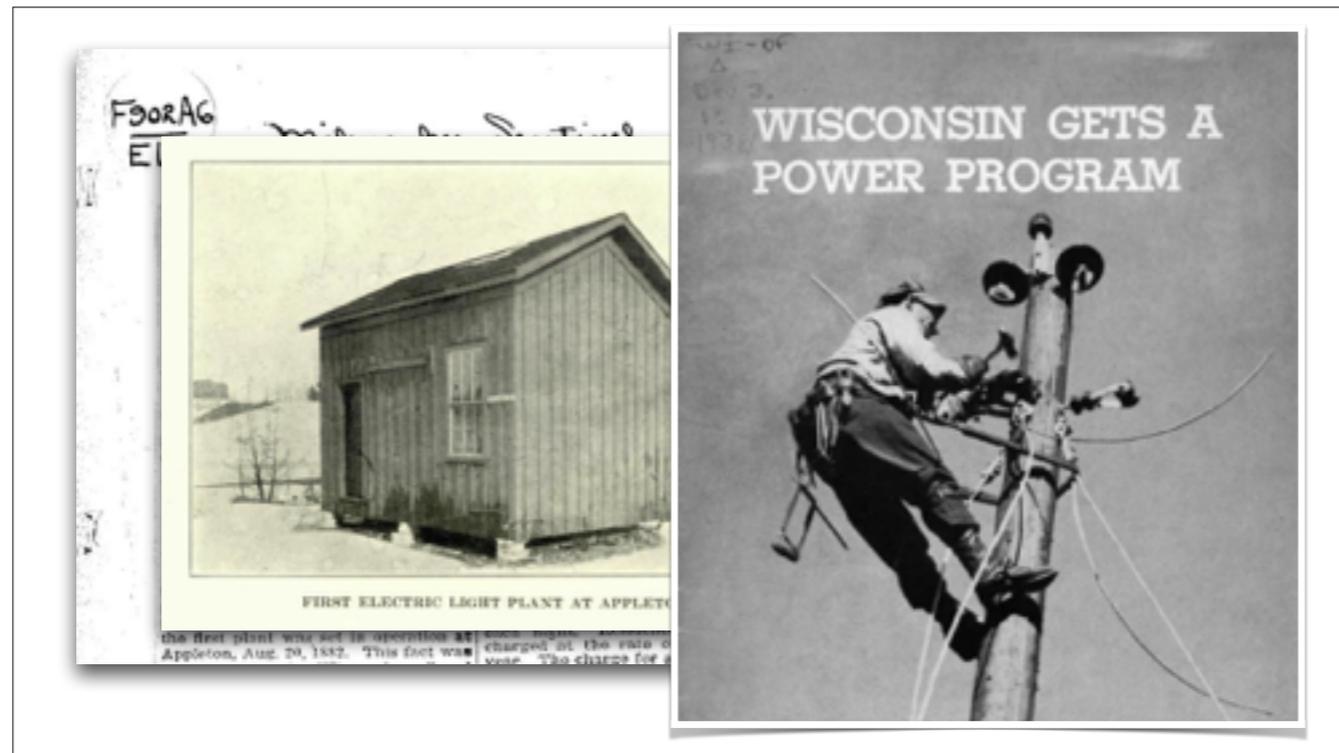
Sometimes people get lessons for the digital divide from the path we took to get citizens hooked up to the electrical grid and rural electrification incentive programs. The nation's first commercial electric plant began operation in Appleton in 1882. Neat huh? Don't get too excited, it looked like this. But as late as 1930, only one in six farms had electrical service. In 1937, Wisconsin's first cooperative, Richland Electric Cooperative started. Within fifteen years, 90% of American farms had electricity. So part of the answer to "Why are people still offline in some areas?" is "They got a late start" But also think about how Appleton was wired for 40-50 years before the farms got electricity. That's a lot of catching up to do.

We forget, or may not know, that part of this process of rural electrification was selling people on the idea of electricity, an electric bill, electric stuff. Here's a few pages of a book put out by the Milwaukee Electrical Company talking about how awesome electricity is (and how low the bills are). This stuff was... hyped.



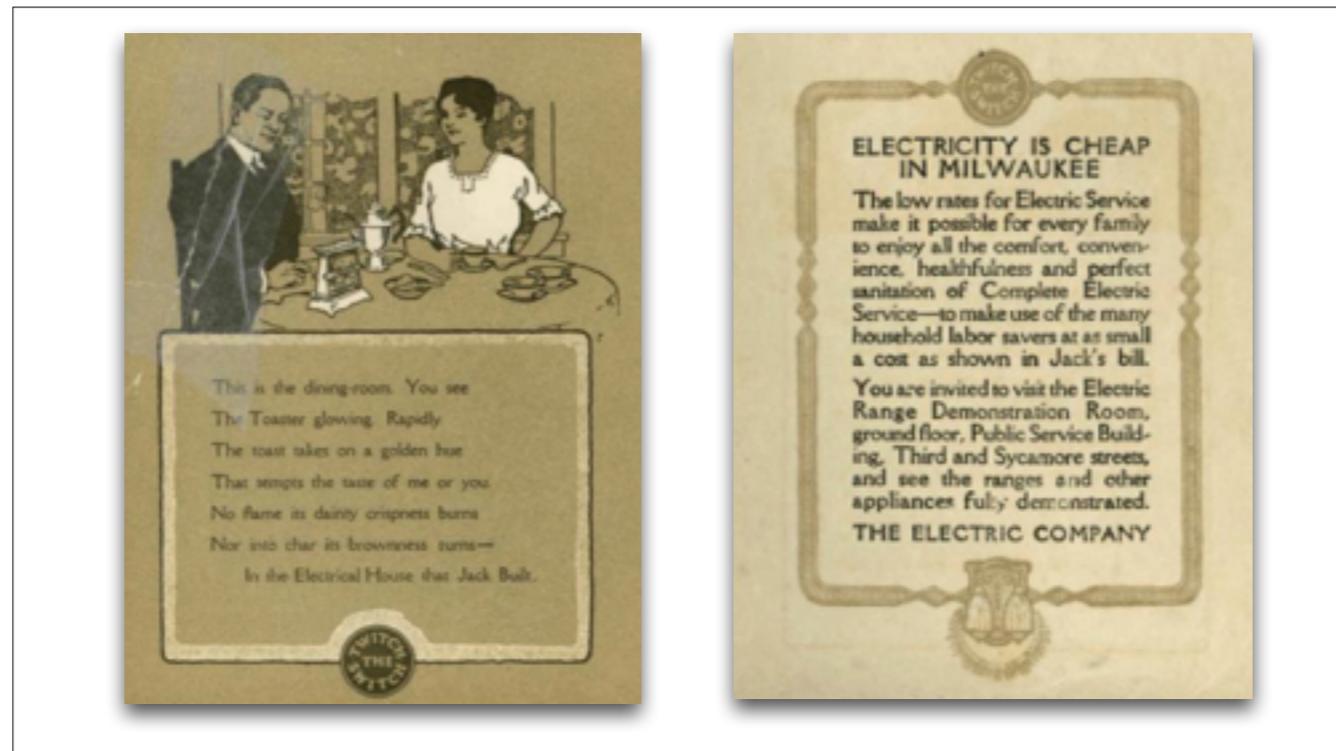
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Rural Electrification involved some hype...

We forget, or may not know, that part of this process of rural electrification was selling people on the idea of electricity, an electric bill, electric stuff. Electric companies would do little displays "check all this stuff out!" It wasn't passively saying "This is available" it was actively saying "This will help you. Get it. Try it. It's for everyone." If true, this is an inclusion/empowerment power move. If not true, it makes offline people even less likely to trust what you say next.



And a lightning eyebrowed banker mascot?

Electricity was *advertised*, promoted, pushed. This is why in discussions of Rural Electrification you see sentences like "87% of rural Alberta had access to electricity by 1961." Having access to it wasn't the same as using it. (the last person to get an actual wire attached to their actual house in Vermont was in 1962, in a town called Victory, living memory for many of my colleagues)

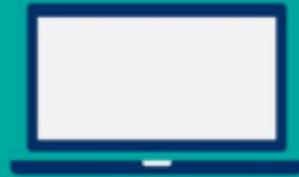
That's still true with broadband and the digital divide. Only there's no government mandate (in the US, slightly different here) and a different sort of advertising. But when the government, not just business, starts requiring you to be connected, that's a different thing.



It's like learning to drive. It's a thing you can do. It's a thing most people do. Some people can't (money, health, access) and there are workarounds for them. Some people won't and those same workarounds will work for them. But nearly everyone who makes a choice not to drive understands the social costs of not-driving. (Chris story...)

2 Ways to Apply for Disaster Aid

ONLINE



disasterassistance.gov

FEMA APP



fema.gov/mobile-app

This is not the same for people not using computers. The costs of remaining offline are often hidden, or at least they are right up until your town floods and the only way to interact with the government's Federal Emergency Management Agency is through a web page. Awkward. We know this in the library because we frequently see these people.

In the US you can maybe get a social worker to help you apply for food stamps but not so much for completing an online dating profile.

It becomes a social issue, people's lack of connectivity, whether it's choice or not a choice.

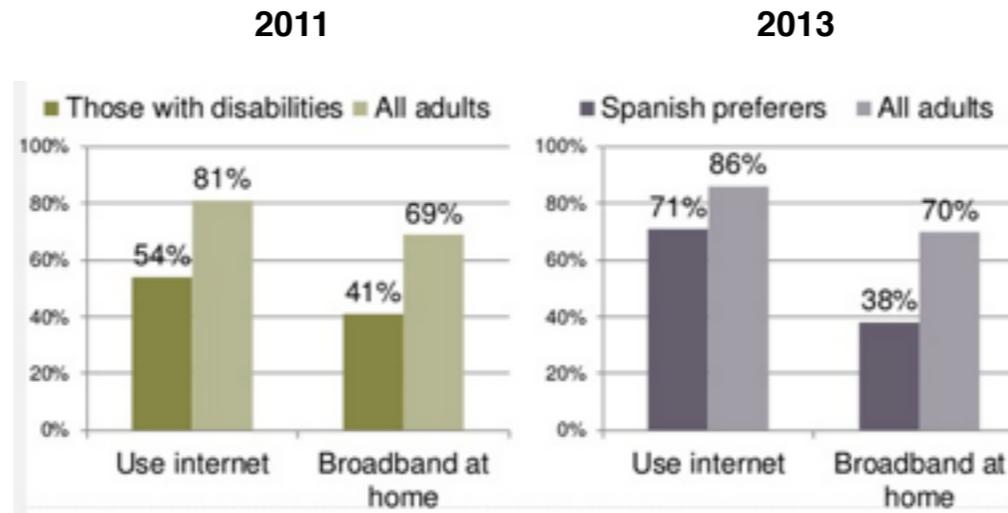
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**A computer is a means to an end.
The person you're helping probably
cares mostly about the end.
This is reasonable.**

Phil Agre

Realistically, you and I view computers as tools. Digitally-divided users view computers as obstacles. Let's look at what else we know about this 13%, the non-adopters.

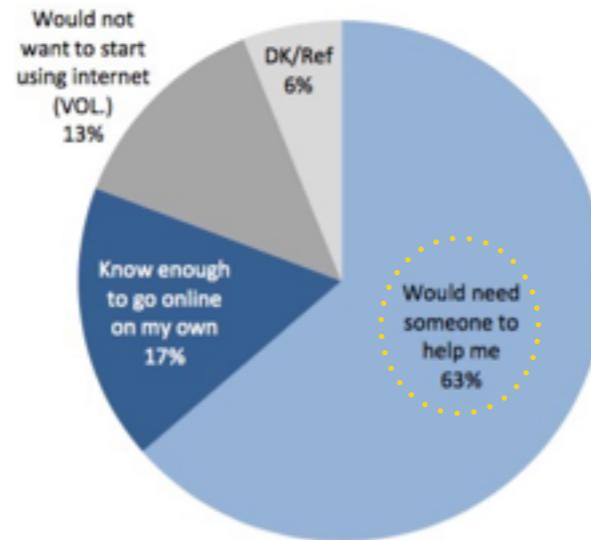
Who is left offline?



These are slightly old numbers. The ratios remain roughly the same even as the bars get taller. In 2011 people with disabilities were 27% less likely to use the internet and 28% less likely to have broadband at home. in 2013 people who prefer to speak Spanish at home has similar gaps. AND THE INTERNET IS ALSO IN SPANISH. When we look at the numbers—the numbers barely anyone is counting because they don't like the story they tell—we realize that the people who are getting left behind are the people with all the other challenges - economic, education, mental, physical. And if we know this, isn't it our responsibility to make sure they can live the good life too?

The hardest to serve have always been the hardest to serve, and they are society's responsibility.

What do they need?



And, in a different survey, Pew looked at offline populations and asked them what they would need to get online? Some didn't care to, some didn't want to, some didn't know (I am having a hard time thinking how that conversation went) but most would need help. They can't get online alone. As the digital divide has been shrinking this piece of the pie gets bigger. They need help, they need our help.



Email is Internet 101. We need to get people to 202, fast.

When I was in library school, my favorite thing was helping people learn technology. I helped people get email accounts using rocketmail and mailexcite in the late nineties. I figured I'd do that for a few years and ... everyone would have email and then we could deal with more sophisticated topics like online privacy or what to do when Equifax gets hacked and loses the data of most of the adults in your country. I laugh at how naive I was. I'm still signing people up for their first email accounts in 2017. But people move at their own pace and you can only try to make their online experiences good so they might want to have more.

“

Your primary goal is not to solve their problem. Your primary goal is to help them become one notch more capable of solving their problem on their own

Phil Agre

Because that is what we can work on. I can't make email work any better (though I can show you how to block those annoying ads) I can empower. I can include. Help people see themselves. Help them find their people. Because in rural areas especially, or for people who are otherwise isolated from their real life communities, online spaces and interactions can help people solve problems. Here are a few quick examples.

Problems like...

shopping



So I don't think any of these will be totally novel to you, but I just want to run some of these down. I help someone learn to use a computer every week. People who are offline pay more to buy things (fewer discounts, more difficult comparison shopping), are more at risk when buying things (getting in a car in the winter) and have fewer choices when buying things.

Problems like...

shopping



working



Job applications even for "offline" jobs are often online or require at the least a resume uploaded. A large amount of what the people in "voc rehab" do for people retraining from being loggers or carpenters and trying to get a job at Home Depot is just teach people to fill out applications. I'm sure you see these folks in your libraries.

Problems like...

shopping



working



meeting people



Dating has moved online. Now if you are primarily an offline person you *might* be looking for an offline person and yet many social and networking opportunities either happen entirely online or are facilitated by the online world—facebook, social media. It's important when we talk about these online engagement opportunities to use our language to explain that not only is this happening, much of it is **NORMATIVE** now. Not your thing? Fine. But it's a normal thing.

Problems like...

shopping



working



meeting people



civics



And as things become normative, expectations of how people are expected to interact with their governments are also normative. When I talk to librarians in Maine, for example, they talk about how one thing that gets digitally divided people motivated to get online is Moose Licenses (incidentally I saw my first ever moose in Edmonton in 1993, it was cool). Having something appealing and motivating is a lot better than having your first online experience be when your house is underwater.

Problems like...

shopping



working



meeting people



civics



learning



and then we get things that aren't problems necessarily but more like opportunities. There's just a ton of ways people can self-directedly learn online from Khan academy or Lynda.com or Universal Class to my favorite local pastime, watching tractor engines running and learning to tune them up.

Problems like...

shopping



working



meeting people



civics



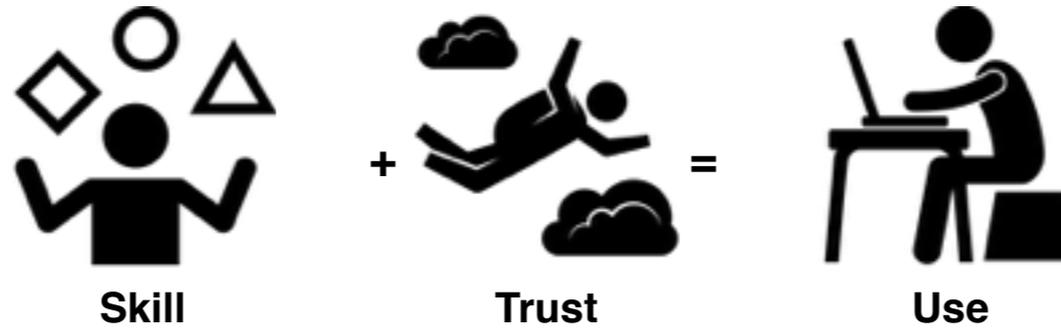
learning



This last one, though, this is where things are going.

How many people here have learned a thing by watching YouTube videos? I learned ukulele, I learned how to fix my car's back seat which wasn't folding down, I learned how to put my hair in a bun. Seriously.

Digital readiness



*digital readiness: whether people have the **skills** to use information technology, as well as the **digital literacy tools** to help people determine whether the online information they access is trustworthy.*

This is important for the last part, what I sometimes call the last divide: the concept of digital readiness. With lots, many, most, learning opportunities shifting to online spaces, people need digital readiness to take advantage of other opportunities. We should understand this issue. People need skills (mouse, vision, reading) as well as trust (trust in their own abilities to discern, trust in themselves not to make mistakes) in order to be comfortable and happy empowered people. And this is tricky in an era of serious bullshit and its no wonder people have trouble with this part.

My job as a librarian in 2017 is to help you be digitally ready, or help other people to be.

The Fate of Online Trust in the Next Decade

Many experts say lack of trust will not be a barrier to increased public reliance on the internet. Those who are hopeful that trust will grow expect technical and regulatory change will combat users' concerns about security and privacy. Those who have doubts about progress say people are inured to risk, addicted to convenience and will not be offered alternatives to online interaction. Some expect the very nature of trust will change.

BY LEE RAINIE AND JANNA ANDERSON



Trust will be strengthened,
but it will be blind trust
enforced by the ceaseless
demands of The System, hell-
bent to drive everyone online.

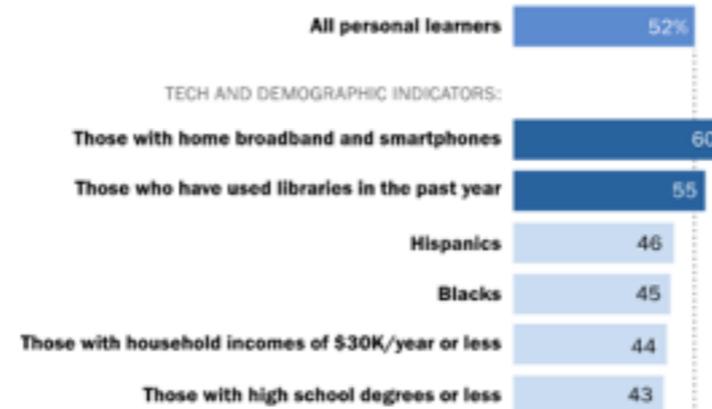
EBENEZER BALDWIN BOWLES

Helping people trust, teaching them to trust, in their own skills, in their abilities to discern the real from the fake, the credible from the fraudulent, with us and eventually... without us, is where the next stages of digital divide mitigation is going. The bad news is, people's trust is shaky, especially lately (and especially in the US) the good news is....

library usage as indicator

Library users and the highly wired are more likely to use the internet in personal learning

% of personal learners who use the internet for learning among ...

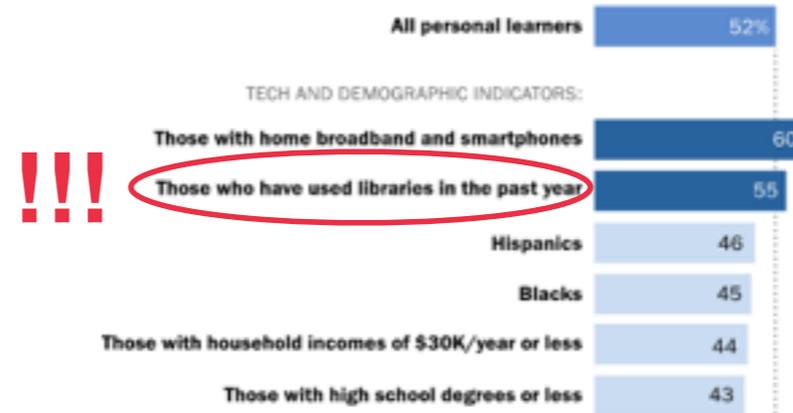


People who are using libraries are people who are already primed to use the internet for learning. We can use this platform to help them use the libraries to learn to trust (or what not to trust)

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Everyone is part of it.



WHOLE COMMUNITY UNDERSTANDING OF DIGITAL TECHNOLOGY ADOPTION IN REMOTE AND RURAL INDIGENOUS COMMUNITIES



Figure 3. Networked Model of Meaningful Broadband Adoption

And one of the things the research points us to about digital readiness and uptake (and this is true for climbing out of a number of social problems generally, people just out of prison, domestic violence victims, trauma survivors generally) is that the more supportive their ENTIRE NETWORK, the better off their ability to get out of their bad situations. Now lack of broadband/connectivity is not necessarily a bad situation like these others, but it does impose structural limitations on connectivity, inclusion and access that we should be, and are, working against.

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Take a long-term view. Who do users in this community get help from? If you focus on building that person's skills, the skills will diffuse to everyone else.

Phil Agre

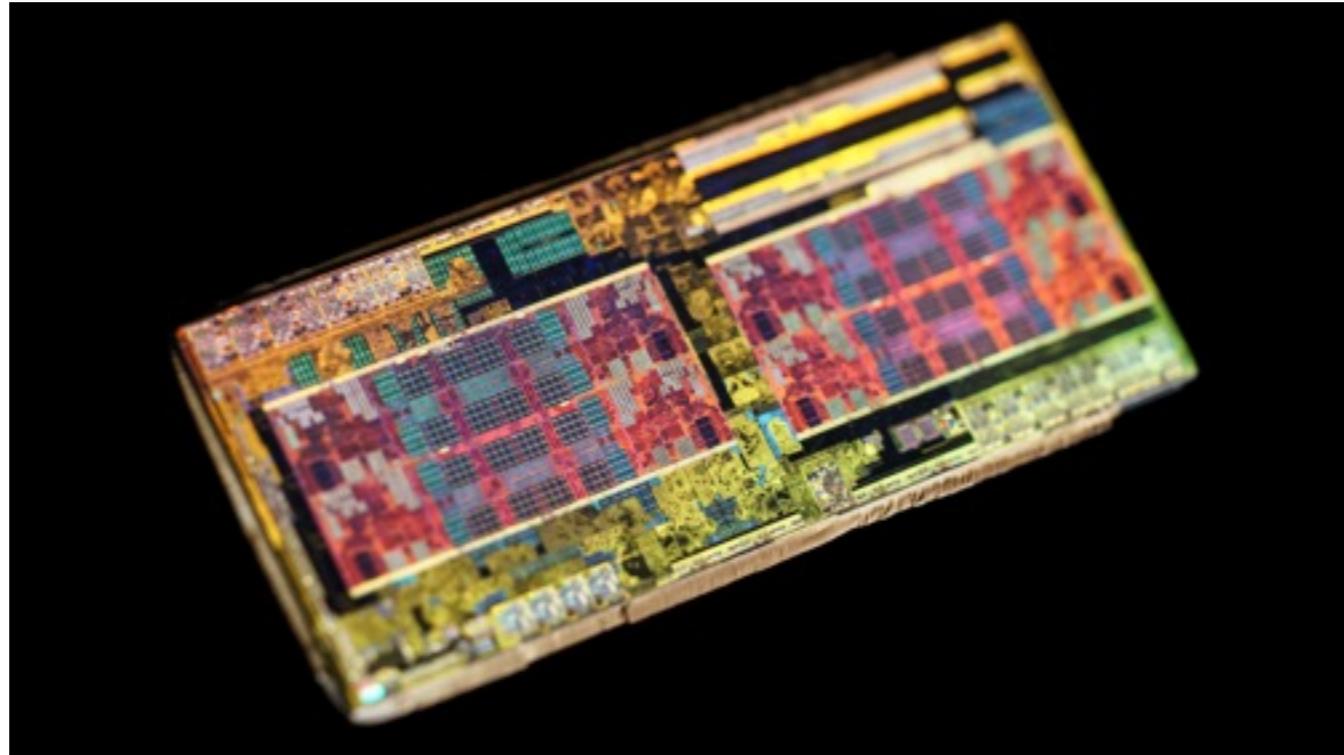
Since we stopped being a room full of books (though we are that) we've moved more towards being conduits for different things. Electronic information, skill building, community stewardship. Now we're getting into a more nebulous role of, among other things, incentivizing participation, calming fears, and becoming the trusted source/ally among a ton of people who are just trying to sell you something.



This is not give a person a fish, though that is part of it (the tech, the broadband).

This is not teach a person to fish, though that is part of it (the skills, the practice).

This is helping someone not be afraid of the water, showing them a good spot where the fish are biting, and guiding them through their first few fishing trips. Maybe asking them how it went afterwards. In a computer way. Digital readiness.



There is beauty in technology, not just in a "hot chips" way but in the way it can bring us together, help us learn, help us become who we wish to be.

“

***Knowledge lives in
communities, not
individuals.***

—
- Phil Agre



As I said earlier, it's not just "Hold the mouse like this" anymore. Those messages have been in the ether since we've had mice (1984). They're important but they're not enough.

We not only give people access to the information they want (and need) but we also improve and strengthen their access to their communities. And that is what helps improve digital readiness and help people become more like ... themselves. The digital divide hurts everyone. Libraries ease the digital divide. Libraries help everyone. Now let's go learn more ways to do more tech things to help more people. Welcome.

Thank you!
Stay in touch!

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