

Net Inclusion - NDIA 2019

Conference Report from [Partners Bridging the Digital Divide](#)

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We attended the 2019 Net Inclusion conference in Charlotte on April 1-3. The following notes are from the sessions/activities that PBDD attended, reflecting only a subset of the conference. Many of the slides from presentations are available at <https://netinclusion2019.sched.com/> along with information about the speakers. [Livestream of some sessions](#) (the ones in the main room) are available.

Thank you to [The Knight Foundation](#) for providing a lot of support for this conference and to all the [sponsors](#). The food was wonderful, and the opportunities to socialize and network were most appreciated. The NDIA staff, volunteers, and participants once again did a tremendous job of pulling together those engaged in digital inclusion into a community, and we thank them.

Our main takeaways from the conference:

1. While political philosophy differences may prevent agreement on broadband as a right, whether equipment given away is valued, and the role of government in making broadband affordable, there seems to be agreement that addressing the [Homework Gap](#) is something we as society should do to ensure that the next generation is getting the education they need to succeed
2. Partnership is critical. Many organizations are able to perform “above their weight” because they partner. Example [Winterset community schools partner with local businesses to get students broadband](#).
3. When presenting information, try to avoid being text heavy. An example of cookies and how they are used can be as non-word focused as having someone wear a t-shirt with a photo of a computer on it walking around taking pieces of cookies and storing them in a cookie jar. Then matching the cookie with the person when they revisit the site. For a full example, see [NYC Digital Safety training](#).
4. Learning is an ongoing activity, with goal setting being important. People can explore and follow their interest and learn more and teach more.
5. Providing broadband to the economically challenged can be a good business decision. For example, with prepaid plans, there’s no need for a credit check, and users can pay for access when they can afford it, and when they most need it.
6. As a community and a movement, we have raised public awareness of the issue of digital inclusion, and potential for progress is evident in the [Digital Equity Act](#) being introduced in the US Congress.

Conference Opening- 4/2/19



Next year Net Inclusion is at Portland, Oregon - April 7-9, 2020 at Portland State University where we can expect bad weather since snow seems to follow this conference. (It snowed in Charlotte on April 2nd.)

The Startup Digital Inclusion manual (which Barry contributed to) has been released, and is available at startup.digitalinclusion.org

The introduction of various organizations, called lightning rounds, was broken into categories and spread throughout the conference, making it easier to keep straight who said what and avoid introduction fatigue.

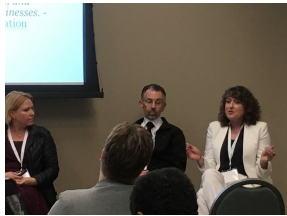
[Lightning Round #1](#)

For lighting round on Tech Access, we're not saying that we have any pull on the order, but the first two presentations were PBDD partners: TechBoomers and AZStRUT.

1. Kay Fleury from TechBoomers <https://techboomers.com/> have over 100 free courses and 1500 articles that are free to use under creative commons license with the only requirement is a link back to where you got the resource.
2. Tom Mehlert from AZStRUT. <https://azstrut.org/> described how they refurbish, addressing environmental concerns with green tech all done in the state of Arizona. In 21 years, have provided over 80,000 computers, including 5705 last year. In 2018, they sponsored 46 [Techie camps](#), 488 students left with a device at no cost to them. In partnership with Arizona State libraries, donated computers to rural and tribal libraries.
3. Wendy Pearson - Kansas City Public Library System. <https://www.kclibrary.org/> Sponsored a program, based on demand for DIY: Build your online presence using P2PU's Learning Circles. The groups meet two hours a week for four weeks. They offer the program on a rotating basis, with full sessions in different locations.
4. James Jack from Human-I-T. <https://www.human-i-t.org/> Highlighted models for sustainability and scalability. eWaste is growing. Business service to recycle computers and other equipment. Wipe and refurbish computers but funding comes from reselling outlier technology. Every single entity in the US is getting rid of technology. Don't have to search to find it. He recommended leveraging 5G contracts for public benefit funds, incorporating public benefit into the RFP negotiation process.

5. Nicole Umayam is the Digital Inclusion librarian for Arizona State Library, <https://azlibrary.gov/> Their goal is to empower Arizona libraries to be champions for digital equity by supporting libraries applying for eRate funding and training and continuing education. They offer sub-grants for community-based training and hotspot lending programs. They collect data including on under-connected libraries, and have sponsored annual summits for tribal libraries.
6. Melissa Sassi runs a nonprofit mentornations.org. We have a definition of literacy, but digital literacy doesn't mean the same thing to everyone. How can we measure progress if we don't agree on what things are? Literature review 2 years ago, identified hundreds of sources and frameworks. Picked out three favorites, but they were different. Check out the [DQ institute](http://dqinstitute.org). Coalition for Digital Intelligence to come up with a standards. If interested in joining, let her know. <https://www.coalitionfordigitalintelligence.org/>

Breakout session: [Digital Inclusion for People with Disabilities](#)



Jessica Looney, Moderator, Community Tech Network, communitytechnetwork.org

Melissa Helquist - Director, SLCC Community Writing Center, <http://www.slcc.edu/cwc/>

Gary Knight - Executive Director, San Diego Futures Foundation, <https://sdfutures.org/>

1) What does digital inclusion mean to you?

Gary Knight - how do we bring this to everyone who wants it

2) What challenges when considering accessibility?

Jessica Looney - A blind woman who does usability studies for organizations. Found quite a few states whose voter registration pages were not accessible. As state departments, they made changes and are now accessible.

Gary Knight - like the snow currently falling in Charlotte in April, no two people are exactly alike. When SDFFF started, they didn't take the consideration of the users into account. Things like transportation. Can't just take the equipment out to the client, because then they need a space to set up. Had to work on helping clients get to their location. Also discovered that their clients may not be used to having a schedule. But since SDFFF is setting up people for work, have to develop clients' soft skills. Need different accommodations for people who lost vision late in life versus early. People adapt differently to the equipment.

Melissa Helquist - Often people don't think about disability until there is someone with a disability in class which means they are then playing catch-up. Challenge is to think about disability from the beginning. If creating content - Who can't see it? Who can't hear it? A lot of people approach disability from a legal standpoint, but not all needs are covered with laws that exist.

3) Where have you seen progress? What does success look like?

Jessica Looney - Ten years ago, accessibility wasn't recognized as an issue. Now it is.

Gary Knight - Talked about employers including one who hired a blind person from his organization, where is the restroom--down the hall--how do I get there? Oh. When stating there's an issue, the question came, "Are you suing us?" No, just make accommodations. Microsoft has made strides with screen readers

because the president has a child with issues. Gary's organization tested out Windows 10 while it was being developed. Work is being driven by people who have an interest.

Melissa Helquist - People are aware, but there's reluctance to address it. There are tools to try out. There is amazing assistance hardware, but it's expensive. Content is a bigger issue than the hardware.

Audience discussion about not helping kids in school with disabilities, including the story of a child who the district said, "We won't help him because he has a fatal disease." Someone in the audience had a list of pro bono lawyers. That's how she got the school district to listen.

[Breakout session: America's Digital Divide 2019: what does the national data tell us](#)

John Horrigan, <https://techpolicyinstitute.org/> has been working for 20 plus years with digital inclusion data. DEPLOYMENT - where is broadband and how fast is it?

Data from Form 477 which FCC requires service providers to file. This data is flawed. Quotes from two FCC Chairmen (Pai 2019 and Gen 2012) "19 million people are not connected." Microsoft estimates real number to be 162.8 million.

ADOPTION - who connects? Community population survey (CPS) and American Community Survey have similar results through department of Commerce. 83.5 or 85.9 % have internet at home. Pew results = 73% have internet at home. Why the big difference? Could be related to survey types - phone versus mail.

Related issues: Income is positively related to broadband adoption. Increase in income means increase chance of broadband subscription.

Smart phone only users/sharers - 31% of low income population compared to 9% upper middle class.

Need tech support researched and addressed.

Karen Mossberger ASU School of Public Affairs, <https://spa.asu.edu/>

What about community level data?

FCC reports subscription data on quintiles (0 - 20%, 20 - 40%, 40 - 60% etc) not very helpful to measure change.

[American Community Survey \(ACS\)](#) doesn't have many years (3) of digital survey data (under [subject headings](#) S2801: Types of Computers and Internet Subscriptions and S2802: Types of Internet Subscriptions by Selected Characteristics). Good potential due to high response rate (90 - 97%).

Because of smart city initiative, able to look at neighborhood changes in adoption in Chicago. Karen was surprised at the major changes.

Need more data that can be examined at metro neighborhood, regional, rural and tribal areas.

Susan Corbett from Maine

She is now head of National Digital Equity Center, <https://www.digitalequitycenter.org/>

Maine has population of 50% over 48 years old

She spoke about the need to talk about outcomes and returns on investment. Creating benchmarks and "measuring the data is VERY important." Example, when a call center closed down in Maine, 277 employees

lost their jobs. 6 AmeriCorps trainers stepped in and promised that 80% of trainees would gain tech skills for employment in classes/training they offered to the newly unemployed. "Measure things like take rate before and after to prove your case."

Other points from the session:

In community coalitions, agree on the data to give unified message to stakeholders, funders, public. Get community members on the coalition to champion the cause.

MLAB is free speed test. <https://speed.measurementlab.net/#/> Adds data to national collection bank of internet speeds.

John mentioned that the trend in digital literacy is increased concern about privacy and security. Also told story about Boston app that was used to have residents identify locations of potholes. More affluent areas reported more often and those potholes were filled very quickly. Gap is widening between haves who can use and those who don't have and/or can't use.

Susan said they are using the DITTO data collection program state wide so that they can track and express outcomes on a wider scale. Also use North Star Digital Assessment which has a data component.

Asked question about those who are in and out, off and on broadband adoption. How are they measured and understood? Panel said Pew may have a survey related to that. Also read Amy Gonzalez research

Hack-a-thon Code for America <https://www.codeforamerica.org/>

Breakout Session: **Creating and Managing Digital Inclusion Partnerships**

- Moderator: James Neal- Program Officer, Institute of Museum and Library Service, <https://www.ims.gov/>
- Krysti Nellermoe - Education Program Supervisor, International Rescue Committee (IRC), <https://www.rescue.org/united-states/salt-lake-city-ut>
- Tom Esselman - CEO, Connecting for Good, <http://connectingforgood.org/>
- Cassie Bair - Chief Business Development Executive, Mobile Citizen, <https://mobilecitizen.org/>
- Adam Echelman - Executive Director, Libraries Without Borders, <https://www.librarieswithoutborders.org/>

The [IRC](https://www.rescue.org/), in addition to providing disaster relief, manages refugee settlement programs in 23 states. Krysti is with Salt Lake City IRC, and their two years of case management involves digital inclusion as well. They partner with for-profit corporations, primarily tech companies and B-corporations. These partnerships require a fair investment up-front (forty hours of effort to prepare a one hour presentation), but it pays off. One of the challenges they've found with corporations is getting a long term commitment, since five years is often beyond the perspective of many companies. But they have seen a mutual benefit in the long-term relationships. Initially, there is often a fair amount of training, educating the key corporate leaders and volunteers about the needs of the community. It is important to keep the communication open, touching base periodically even if

there is no need for the company to take action. It is important to identify the demographics & interests of the company and volunteers- some tech companies with young employees were not responding when asked to help support single mothers, but when they engaged with teens, there was a strong connection almost immediately.

[Connecting for Good](#) works to provide access to computers and skills, working from three core values:

- Connectivity = Opportunity
- Education is the only path out of poverty
- Broadband is a critical utility (like water or electricity)

They target outcomes as “the four E’s”:

- Education (across age ranges, including digital and financial literacy)
- Employment (providing credentials, helping with job fairs)
- Economic Impact (selling computers for \$35, building wifi networks & computer labs)
- Environment (broad definition- recycling to neighborhood crime prevention)

Digital inclusion is only relevant in the context of community. Tom talked about the interplay between adverse childhood experiences and adverse community environments. Connecting for Good partners with schools, neighborhood associations, police, banks, government agencies, and other non-profits to help improve the community environment.

[Mobile Citizen](#) is a non-profit service provider working to advance social equity through access. They work with partners to address poverty, overcome language barriers, work with the unbanked, and provide digital literacy.

Cassie presented the following recommendations in working with partners:

- Building trust is key
- Keep the programs simple
- Promote the offers off-line, working with existing programs
- Focus on a specific target audience for the program

[Libraries Without Borders](#) works to bring knowledge and information to where it is most needed. Alan talked specifically about the [Wash and Learn Initiative](#)- turning laundromats into libraries. The goal is to promote access to information, and reimagine libraries to meet families where they are. Everyone needs to do laundry, and within low income communities, they need to spend that time in laundromats. They partner with libraries for their professional expertise and open access and laundromat owners to provide the space and contribution to community.

Q&A

What to do when partnerships go wrong:

- Candid Conversation
- Manage the public relations impact
- Establish explicit Memorandum of Understanding up front to clarify responsibilities
- Focus on quality over quantity- grow gradually from an existing relationship
- Maintain personal contact with a key person within the partner organization
- Keep people in the loop, especially with regard to problems

Finding partners

- Talk to people within the community. They know what organizations exist and their reputations

- United Way (if available) can be a great hook into organizations and corporations

[Lunch Keynote: Community and Broadband - Karen Mossberger](#)

Broadband adoption is strongly linked to economic outcomes for community residents as well as businesses. This research is part of a new book project with co-authors Caroline Tolbert and Kellen Gracey, analyzing two decades of data on broadband adoption for communities that was generated from a National Science Foundation funded project (the University of Iowa and Arizona State University broadband data portal <https://policyinformatics.asu.edu/broadband-data-portal/home>). They are studying whether broadband adoption creates spillover effects over time- increasing community scores for prosperity and growth. Initial findings are that prosperity (individual/family) is strongly impacted, while growth (community economy) is not impacted as directly, though in conjunction with IT employment and Millennial involvement, there is an impact on growth. Broadband adoption does lead to an increase in household income (prosperity) as well as health and civic engagement (e.g. voter turnout).

[Breakout Session: New Tools and Materials for Digital Literacy Training and Assessment](#)



Roundtable discussion of the variety of approaches to digital literacy training and management: including the use of volunteers, class structures, certifications, use of online tools, curriculum, etc. The room had 70 chairs and it was full beyond capacity.

A full write-up of the session is available [here](#). Presentation material is [here](#).

1. **Topic: Managing Privacy- How to balance vulnerability vs. paranoia** - Kay Fleury, Content Manager & SEO Specialist, Techboomers.com
 - a. Teaching specific safety and privacy tip as part of contextual lessons rather than as a separate topic
 - b. How do we articulate the skills & dispositions needed to function effectively in the digital space?
 - c. Readout: show a scam being run, use Northstar to assess skill level, show a video from GCF and talk through what they saw. Cookies -- use a physical example such as cookies with frosting, wear a facebook shirt going around eating pieces of the cookies to demonstrate how it works. Stay away from text heavy explanations. Use incognito mode until you have time to teach the concepts.
2. **Topic: Building Community while improving digital literacy** - Barry Glicklich, President, [PBDD \(Partners Bridging the Digital Divide\)](#)
 - a. Leveraging existing material to meet our clients' specific needs

- b. Readout: talked about resources that people find useful. Work with each individual on their point of need. You may have to go back to basics. Wish list is if there was an iFixit for training. Goals to work for that.
- 3. **Topic: Digital Literacy for Older Adults- Challenges and Solutions** - Kimberly Brennstener, [OATS](#)
 - a. How to develop clear outcomes for digital literacy students
 - i. how to show them with real examples what they have to gain from this training/how to get them engaged
 - ii. Readout: How to address best practices is a challenge. Having smaller class size, repetition, couple skills with things that are relevant, small bits of information at a time.
- 4. **Topic: Coming trends- What we should be preparing to teach** - Matt Robinson, [GCE Global](#)
 - a. How do you build independent learner?
 - b. Readout: think about soft skills, how to extend learning beyond the classroom, role in thinking and framing, a learning playlist that people can explore and follow their interest, dialogue-based learning (chatbox), make what we do obsolete so we can learn more and teach more. The more we push the boundaries so we don't have to do these things, the more we can be human.
- 5. **Topic: Measuring individual performance through NorthStar assessment** - Rebecca Ryan, [NorthStar](#)
 - a. How do you measure success?
 - b. Readout: lots of people who don't know what they don't know.

Building community:

1. Some of the top resources, <https://pbdd.org/training/>, <https://techboomers.com/>, <https://www.p2pu.org/en/>, <https://www.youtube.com/>

2&3. The person in front of you has their point of need, so may have to toss out prepared plan and work on 'how to use a mouse.' Doing job stuff, start with, 'do you have an email?' Had to go back to basics more than expected.

Experience with Geek squad, clients don't know what they need to know.

4. Use P2Pu's learning circle concept to have a group that helps each other learn. <https://www.p2pu.org/en/> Breaking down the hardware can get people over their fear of the computer. Use talented coaches to help with this. Can be assessing people while watching them break down the hardware. Then when they have a computer, they feel empowered to use their skills.

Sometimes have to draw people out when they have an issue with a computer, like with Geek squad. Lots of encouraging.

5. Would like an iFixit version of training. <https://www.ifixit.com> It does take time to sift through the material that's there and do the work.



[Breakout session: How to Get Low Cost and Free Computers to Your Community](#)

Michael Abensour from [Kramden Institute](#) introduced the panelists and moderated the session. Presentations from this session are available from [E2D](#), [PCs for People](#), and [Tech Exchange](#). All panelists were AFTRR members and all are encouraged to look at [aftrr.org](#)

E2D is a Charlotte based non-profit that had been part of the Monday site tours. They started small, scaled up and now employ 50 high school students at \$10 - \$15/hour. Pat Millen, Executive Director, said that their focus is “not just cranking out computers,” but creating social capital through personal relationships and skill-building of their student employees.

Casey Sorensen has been with PCs for People for 11 years. Three main locations - St. Paul, Cleveland, and Denver, with the ability to ship out equipment all over the United States. 300 non-profit partners. Their goal is to process 150 computers a day.

“We offer a service to businesses.” We take care of their ‘old’ devices.

Sustainable funding is built on corporate sponsorship and earned income (90%) and (10%) grant funding. Their scalable design also provides:

- online purchases (refurbished computers average \$50 each),
- Mobile Events,
- 1:1 support and training for customers at stores, by phone, walk-in troubleshooting [training](#)
- a one year warranty and \$25 repairs,
- LTE mobile unlimited internet in Sprint service areas for as low as \$11.25 per month
- Work opportunities for people with disabilities
- E-waste properly handled

Tech Exchange has been in the Bay Area since 1994 and is lead by Seth Hubbert. Although near Silicon Valley, the need is great. 47% of low-income youth don’t have a computer at home. Environmental Stewardship: Like PCs for People, they offer services to corporate, public and government workplaces who need management for the end of life of their e-waste.

Workforce Development: Also has 20 interns who learn valuable workplace skills.

Digital Devices and Inclusion: Does low cost internet sign up and gives refurbished computers to community members in various ways: Tech Fairs (large number of give-aways, low ‘touch’), Tech Nights (families at schools and some training), Tech Training(deeper training modules at community locations like public housing center) and Tech Hub (community center where you can bring your device and connect and get assistance). Seth shared some slides about the environmental impact of producing and discarding computer equipment.

All on the panel made strong statement about working together all over the U.S. to provide refurbished equipment. Anyone considering a refurbishing program should talk with/look at website of AFTRR. Anyone who needs equipment can check the AFTRR site for nearby refurbishers or online stores like PCs for People.

[Breakout Session: Infrastructure Projects that Include Affordability, Digital Literacy, and Public Access](#)

- Moderator -- Chris Mitchell, Director, Community Networks, ILSR, champions local self-reliance, also with Next Century Cities and runs MuniNetworks.org, the comprehensive online clearinghouse of information about local government policies to improve Internet access. <https://muninetworks.org/>
- Garrett Brinker, Chief of Staff, Neighborly, open access fiber and service <https://neighborly.com/>
- Deb Socia, Executive Director, Next Century Cities, supports mayors and community leaders <https://nextcenturycities.org/>
- Geoff Millener, Digital Equity Officer, Enterprise Center Chattanooga, works with a team leveraging the city's unique gigabit infrastructure, <https://www.theenterprisectr.org/>
- Will Aycock, Greenlight General Manager, City of Wilson, Offering video, high speed internet, and phone with local service, local support, local people. <https://www.greenlightnc.com/>

In response to a question from the moderator about connecting low-income households, Will Aycock said that trying to connect low-income households is a business opportunity. There's no reason the entire community can't benefit. The bulk contract that Greenlight used in the city of Wilson wasn't unique although people thought it was. The housing people handled the billing since they were already interacting with the residents. Work with property managers -- give them a commission, then they will keep the occupied units connected. Another option is prepaid plans. Again, it's not a special program, it's available to anyone. Credit checks are one of the issues in getting service, so prepay solves that. You can turn it on for any amount of time, like the weekend before college essays are due. The infrastructure is there. It's all automated. Makes the 'worst' customer base the best, no need to try to collect. Resident pays the housing authority that pays Greenlight.

There can be barriers to make fiber available to everyone such as state rules that offers cannot go below the cost. In Chattanooga, there is a low-income qualified plan of \$27 a month, 300 megabytes. They host drives with public schools as partners so everyone with a student knows the plans are available. To build out fiber to communities, 90% of the cost is digging up the road. If other construction is going on, drop fiber at that time.

Amongst the creative approaches the panelists have seen include NC school department putting solar panels on their roofs of the buses and hotspots. They parked the buses in the low income neighborhoods at night. Gave an option for a few hours of access in the evenings. Monkeybrains in SF, <https://www.monkeybrains.net/>, gives high speed access to public housing. Public-private partnerships providing resources to low income neighborhoods. There are limitations to these plans, but they are steps forward. For transient people, Deb Socia worked with Mobile Beacon for hot spots. Not perfect, but couldn't get service providers to provide homeless shelters with access, so they went with hotspots.

Garrett Brinker pointed out that we have to have equity be the voice from the get-go. Find a best practice and do it. That's how Tech Goes Home came into being, <https://www.techgoeshome.org/> Want everyone to dream, having everyone saying that the advanced stuff is for me too. So we aren't creating two classes of internet users.

[Breakout session: Advocating for and Supporting an Accurate Census 2020 Count](#)

Presentations are available from [National Neighborhoods Indicators Partnership](#), [NC Counts Coalition](#), and [New York Civic Engagement Table](#)

Need an accurate count. BIG potential impact on \$800 BILLION funding decisions for Education, Health, Housing, Human Services, Transportation according to Census results.

According to panel the Census will be MAINLY online in 2020 (budget is for 80% online responses). Households will be mailed a postcard in late March with info to go online and respond to questions. If no online response is received, then households will get phone call reminders and finally paper census copies (budget is for 20%). Some may also get in person census visit.

CHALLENGES:

HTCC - Hard to Count Communities

Inadequate and late funding and lack of end to end testing

Controversial citizenship question is not resolved. Decision by Supreme Court in late April.

Director of US Census stepped down recently. Maybe related to fact that the complete online version has not been tested end to end yet.

Rumors and misinformation are creating fear so that people may not participate.

Digital version makes some people intimidated and fear that information will not be secure.

RECOMMENDATIONS:

Sign up on census.org as a partner to get updates and info

Find the hub in your area like a complete count committee and support their efforts

Similar to Get out the Vote, think about who you know and have built trust with and strategically spread message of Get out the COUNT!

Libraries will be called on to address digital connection and education for the census.

[Breakout Session: Digital Literacy Training Strategies and Models](#)

Moderator: Rebecca Ranallo - Cuyahoga Library <https://cuyahogalibrary.org/>

Lynda Goff - Winstonnet <http://www.winstonnet.org/>

Qumisha Goss - Detroit Public Library <https://detroitpubliclibrary.org/>

Nico Koenig - Peer to Peer University <http://p2pu.org>

Brandy McNeil - New York Public Library <https://www.nypl.org/>

[Presentation summary slides](#)

Winstonnet offers "Neighborhoods Empowered Through Technology", a five week, thirty-hour course in technology and job skills (including soft skills) for the under-/unemployed. A laptop at the end is strong incentive to complete the course.

Detroit Public Library offers classes, including Cyber Seniors, Learning Circles, and Wash & Learn pop-up libraries at laundromats (partner- Libraries Without Borders).

P2PU (which gave a shout-out to PBDD for sponsoring them) offers a framework and training for Learning Circles- a free study group format, typically 6-8 weeks long. Retention rates for this method are 50-75%, compared with 5% for traditional Massive Open On-line Courses (MOOCs).

NYPL offers many courses, up to advanced technology skill development classes. The coding classes have been very popular, as has the 3D “Make it, Print it, Sell it” course. All material is on-line at nypl.org/computers, including [assessments](#). With the remodel of the midtown library, they are building a studio for podcasting, videography, photography and music production

Q&A:

Series versus single class:

- For immediate need (e.g. building a resume), a single class is often best
- For building a skill (e.g. learning a programming language), a series is needed
- Since retention within a series is a challenge, oversubscribe even if the first week or two are crowded
- Series is helpful for building community around a topic
- Making a big deal out of completion (red carpet ceremony) can be very meaningful, since for some clients, it may be their first “graduation”

Rule of Three: If individual wants one-on-one help on a topic, if they come back a third time, suggest a class.

Greatest challenge:

- Keeping up with new/changing technology
- Providing staff for facilitating learning circles (It’s good to recruit previous community participants to serve that role)

Most organizations provide a certificate of completion, though NYPL has partnered with SUNY organization for formal certification.

Attendance rules vary by organization. Learning Circles typically define expectations up-front as a group, and rely on peer pressure for adherence. NYPL is very strict due to high demand. Some libraries perform assessment before issuing completion certificate.

Biggest successes:

- Seeing it click in students mind that if they change parameters in code, it changes system behavior
- A student from job preparedness class that donated their first paycheck to the library
- Seeing the long term impact on people, and their ability to articulate and achieve goals

[Lightning Round #2](#)

1. Nico Koenig, Peer to Peer University <http://p2pu.org>. The challenge has been to meet learners where they’re at to enable life-long learning. Learning circles is the approach they use. Free. No one fails. Usually 6-8 weeks long with 5-15 participants. Lots of material available. In the first deployment, 65% of learners had never taken an on-line course before.

2. Kami Griffiths, Community Tech Network <https://www.communitytechnetwork.org/> focuses on playing well with partners. Key points are to have the right people on the team, be heading toward the same goal, keep clear communication (MOU, tracking action items, etc.), trust is a must. Bear in mind that often partners aren't doing digital inclusion as their focus, so work with each other's strengths.
3. Dave Sevick, Computer Reach <https://www.computerreach.org/>, also part of AFTRR, working to shares best practices, have a map of refurbishers. Active in 29 states. Started working with ConnectHome in Pittsburgh after seeing the programs in other cities at Net Inclusion 2017. Received funding from three foundations and provided 245 computers with 223 Northstar assessments.
4. Kristen Perry, Voqal, Mobile Citizen <http://mobilecitizen.org>. EBS - Education Broadband Services spectrum - used by non-profit ISPs like Mobile Citizen and Mobile Beacon. FCC stopped licensing 20 years ago. Now, EBS is under threat to be commercialized and auctioned off. Go to www.saveebs.org and email your representatives.
5. Kimberly Brennsteiner, Older Adults Technology Services (<https://oats.org/>). Developed a partnership with Comcast to expand [Internet Essentials](#) to seniors who didn't have a child at home, but offer low-cost internet devices and training. OATS is a social impact organization that provides training for seniors. Their new curriculum is available on the Internet Essentials website.
6. Samantha Schartman-Cycyk, Connected Insights <https://www.connectedinsights.org/>, helping organizations to strategically use data to better manage and measure their programs and impact. Developed cloud based, mobile-optimized software platform for managing class scheduling details- [Digital Inclusion Technology Training Outcomes \(DITTO\)](#). Available for \$300 a year.
7. Krysti Neller-moe, International Rescue Committee, <https://www.rescue.org/united-states/salt-lake-city-ut>, offers refugee resettlement programs to establish self-sufficiency, including digital tools. IRC often partners with organizations to help with this. See Breakout Session: Creating and Managing Digital Inclusion Partnerships above for more details

Tuesday evening reception at Google Fiber

Macaroni and cheese bar with a variety of toppings.

Conversation, spilling out into the neighboring park (in contrast to morning snow showers)

Breakfast Session- April 3:

Net Inclusion this year- 34 states, three provinces & Belgium

Charles from Knight Foundation (premier sponsor).

Supporting digital inclusion, Knight School, Charlotte Digital Inclusion Alliance, Civic Tech Hub's Project Lift.

Angela- NDIA Overview.

Four years old, created in context of adding broadband to Lifeline program. Started with zero funds, now small staff, with heavy reliance on volunteers. Focus is on benefiting affiliates- financially & to achieve mission. Three guidebooks: [Coalition Guidebook](#), [Discount internet](#), [start-up manual](#) (released April 1). "We have changed the conversation". Including access & adoption along with infrastructure. Community of DI practitioners, policymakers, academics.

April 11 webinar for Federal legislation- launch point.

Digital Inclusion Trailblazer - cities with DI programs- checklist of indicators on local governments. Work with them to improve.

Brookings Institute- project on DI & well-being.

It is free to come an affiliate- [click here to join](#). Currently 350; Subscribers pay on sliding scale, and have the opportunity to participate in monthly calls and working groups. NDIA receives funding from grants, donations, and by providing consultation for a fee. Budget is \$200K.

[Lightning Round #3](#)

1. Tom Esselman- Connecting for Good, <http://connectingforgood.org/> Kansas City. Provide affordable internet, computers, digital skills training to low income community members. Part of KC DI coalition. Each year they have a theme. Values: Connectivity = Opportunity; Education is the only path out of poverty; Broadband is a critical utility (like water or electricity). Four goals: Education, Employment, Economic Impact, Environment
2. Beth Thompson- Principal- Whitewater Middle School in Charlotte. <http://schools.cms.k12.nc.us/whitewaterMS/Pages/Home.aspx> Increasing outcomes for children. Recipient of Verizon innovative learning grant. Innovation lab
3. Robbie McBeath, Benton Foundation. <https://www.benton.org/> Millions without Broadband. Started 1981. Goal- Open Affordable High capacity broadband for Everyone in the US. Humanize communication policy. Daily/weekly news digests. Long view on policy for broadband. Subscribe from website.
4. Lazone Grays- [IBSA](#) Topeka. Streets University- for young students- learning tech skills (Wordpress, embedded maps) & earning money. Includes soft skills for success in business- salesmanship, social skills- setting up business profiles on web. Looking to replicate program in other cities.
5. Saletha Mitchell- Ashbury Senior Community Center (Cleveland) <http://www.asc3.org/> - now intergenerational. Training focused on technology. 7200+ trained. Call Center program. Super-Tech Gadget Days. 52+Collaborations & partnerships
6. Laura Fogle- METRC - <https://ced.ncsu.edu/> teacher realizing students not able to fulfill their potential due to tech limitations & homework gap. Works with Kramden to get computers to students. Digital LLiteracy training for parents of students.

7. A'Sarah Green - East Cleveland Public Library & NTEN DI fellow, <http://www.eastclevelandpubliclibrary.org/> Teaching classes & working with PCs for People to get free computers to students.. 102 year old student "What are you teaching me today? I don't have much time left"
8. Delgesh Shahab- Psycharmor Institute <https://psycharmor.org/> Provides education to military service veterans & families. Provide training courses, includes apps

Breakout Session: Strategies for Teaching Online Safety and Privacy

Davis Erin Anderson METRO library Council, <https://metro.org/>

Sara Rasmussen- Free Geek <https://www.freegeek.org/>

Sonya Reynolds - NY Civic Engagement Table <https://www.nycet.org/>

Amy VanDeVelde- Oasis Institute <https://www.oasisnet.org/>

Resources:

- [Surveillance Self-Defence curriculum](#) by the Electronic Frontier Foundation (available in multiple languages)
- Free Geek posts [privacy and safety classes and most curriculum](#)
- Our Data Bodies digital defense playbook in [English](#) and [Spanish](#) (you can also request a [printed](#) version)
- NYC Stronger Communities Digital Security [Guide](#)
- NYC Digital Safety: Privacy & Security [Website](#)
- Mozilla's Web Literacy Core Curriculum [Website](#)

NYC Digital Safety

<https://foundation.mozilla.org/en/initiatives/stronger-nyc-communities/whats-in-the-guides-and-workshops/>

Stronger NYC communities-

Need to collect data to do work, but how do you get informed consent & address privacy.

Privacy & security- power versus paranoia and getting people in the room.

FreeGeek- developed volunteer cadre with professional experience, and interest in raising awareness, bring them into conversation with the community of digital literacy students. They each learn perspective of other. Same message can frighten one person & empower another. Getting them together can help.

Not using privacy in title- make it more specific & personal to an experience.

Many instructors feel imposter syndrome, Need to keep everything up to date. Changing every day.

Know the resources.

Privacy versus convenience is the headline of every conversation

Start with "[Have I been pwned?](#)"

NYT has tool showing a lot of data breaches & time-frames- [How many Times Has Your Personal Information Been Exposed to Hackers?](#)

Techniques for teaching:

Cover who, what, when, where, why & how

Physical representation of how data goes, what roles are- using cards & string (Browser, DNS, etc.) Resources (courtesy of [METRO](#)) are available: [Map the Web exercise \(intro\)](#) & [The full three hour class](#) & the [Map the Internet cards](#)

Privacy needs to be a tidbit in every other class.

“Slipping the privacy spinach into the brownie”

Phishing attacks have timing - 7:30 - 9am; 3:30pm & later.

Can introduce non-digital processes for protection- verbal confirmation before issuing check over \$1000

Privacy is contextual- need to understand context.

Important to understand what your individual vulnerabilities are.

Library Freedom Project

Small libraries have extra challenge- lacking expertise, but trying to educate public.

Privacy audit- determine which data doesn't need to be kept.

State legislation - GDPR fines can get higher-ups to pay attention to these issues within the organization.

Libraries can leverage city & county & state privacy officer to get.

Missouri state has anti-phishing program - competition between departments.

Digital literacy for children- some schools. Common sense media has a lot of good materials.

Best practice recommendation- Less words, more visual- show people what real scams look like, and how to detect them- a lot of activities. No more than five minutes of talking at a time. Prioritize what to focus on based on who is in the room- Spearfishing is biggest issue

Oasis has Youtube channel

It's not always a stranger- attacks may come from compromised accounts of friends.

[Breakout session: Digital Inclusion Funding Thru Workforce Development](#) (Including Certifications)

[Presentation Slides](#)

The session was moderated by Farrah Parkes from the City of Philadelphia. Each panelist described their programs:

Karisa Tashjian from Providence Public Library <https://www.provlib.org/>

Many classes in many locations , some leading to jobs.

Uses Northstar Digital Assessment for certificates, badges and data. Very pleased with this resource.

Recommends I BEST model (LINK?) for ESL, GED and citizenship classes. Incorporate technology from the beginning.

Often waitlists for class so created Learning Lounges and have introduced them to libraries in LA and Chicago.

Patrons can get guidance on anything related to learning and/or employment.

Library also trains Adult Ed Staff on technology and gets some state funding for that.

Library creates workplace trainings for corporations and gets paid from state funds.

Elizabeth Lindsey from Byte Back <https://byteback.org/> based in D.C.

Traditional pathway model from training, certification to employment could take nine months and includes:

1. Digital and Career Identification by client
2. Choice of track : MOS certification or IT Fundamentals/A+ Certification. Coursework and training related to choice.
3. Employment

She talked about funding challenges and getting creative (outside of government/WIO) by pitching ideas to Banks and other funders with effective use of data. (FOLLOW UP - can she train others to do pitches?)

Heather Gate from Connected Nation <https://connectednation.org/>

She described their Digital Works program which trains clients in remote working skills. They have partnerships with over 70 employers which is key element to programs success. Path starts with client application, background check, basic computer class. Next client is matched with potential employer and does specific job skills training. Clients must pass [NRF certification](#) and [ACT Work Keys NCRC](#). Once requirements are completed, client starts work. During this time, clients are mentored and invited to Co-working Center for support and programs that introduce more education and can lead to advancement. Connected Nation has six Co-working Centers.

Discussion and Q/A about other certifications that lead to work and possibility of a Creative Arts federal certification being announced soon.

Code the Dream (<https://www.codethedream.org/>) is training minimum wage earners in coding skills which can lead to 80K salary

When asked about one support/incentive that has helped retain adult learners, answers were:

Hire former students to teach what they have mastered.

Offer tutoring immediately when any learner shows lower results in classes.

Facilitate mentoring and family environment. Invite clients to Board meetings. Recognize their achievements.

Listen to their problems.

Challenge: How to visually show learners the pathways from learning to employment. So many options and variables. Haven't been able to come up with a clear diagram.

Charles Benton Digital Equity Champion Awards

PCs for People - Casey Sorensen, <https://www.pcsforpeople.org/>

Gives out computers to nine-year-old boys (like he was), girls, anyone who needs it. Asked who in the audience had sent the earliest email--1981. It is remarkable that some people haven't yet sent their first one yet. Started PCs for People eleven years ago. Now have 65 employees in four locations. Provide many services to refurbishers and non-profits looking to provide low-cost broadband to their clients.

San Antonio Connect home Coordinator - Mooney Ray Chester,

<https://www.saha.org/index.php/about-saha/technology-digital-inlcusion>

From Brazil. Her parents taught her that being alive means being part of a community. We all have our role to play.

Lightning Round #4

1. Katherine Lato, Partners Bridging the Digital Divide, <https://pbdd.org/>
Sharing information about digital access, training and procedures. Also, what inspires you about your own organization? What are the stories you tell when people ask why you do what you do?
2. Marian Christmon, Digital Inclusion Initiatives, Nashville Public Library, <https://library.nashville.org/>
Cyber-Seniors: Program for seniors.
3. Toby Schneider & Tony Frank, PCs for People, <https://www.pcsforpeople.org/>
“We type harder to stay warm.” so computers wear out faster. Having a repeatable process in place is important. Become a partner in your community.
4. Cindy Fisher, Texas State Library and Archives Commission, <https://www.tsl.texas.gov/>
You can do I.T., technology training for rural Texas library staff. In 2010, budget cuts required cutting ten regions. <https://www.tsl.texas.gov/ld/workshops/youcandoit>
5. Lauren Yergeau, Mobile Beacon, <https://www.mobilebeacon.org/>
EBS powers Mobile Beacon’s internet. Customers use this public resource in their digital efforts. Go to saveebs.com and show support.
6. Kyra Gomez, Charlotte Bilingual Preschool, <https://www.bilingualpreschool.org/>
When 15 instead of a party, she asked for a laptop.

Closing Plenary: Senator Patty Murray & Digital Equity Act

Hart Clements & Ben Merkel (staffers in D.C. Office)

Authorizing \$120 million/year, going to states & organizations. Grants will be administered by NTIA (Broadband USA) Bill includes funding for NTIA to administer.

State (five year grants): Advancing the cause of digital equity inclusion within the state. 70% must go directly to programs for targeted populations. No matching grant requirements. State must create digital equity plan, with metrics & reporting, work with stakeholders.

Organizations (four year grants): (Competitive Grant Programs) 10% match requirement (which can be waived). 5% set-aside for tribal communities. Can include localities or these can be within context of the state grants.

Tried to steer clear of controversial issues- not specific discussion of affordability, though low income is a targeted audience.

Senator Co-sponsors: Mazie Hirono (D-HI), Angus King (I-ME), Sheldon Whitehouse (D-RI), Amy Klobuchar (D-MN), Richard Blumenthal (D-CT), Tina Smith (D-MN), Chris Van Hollen (D-MD), Gary Peters (D-MI), and Jack Reed (D-RI)

House: Energy & Commerce Committee three members as lead sponsors (from NM, NY, one other). House bill will be introduced later.

Sponsoring organizations include (non-comprehensive list): NDIA (bill called NDIA bill in some circles), Alliance of Community Media, Broadband Connects America, National Coalition for Literacy, Consumer Law Center, League of Cities, NTEN, SHLB Coalition, many others that went by too fast.

Timetable: Will be introduced next week. Webinar 4/11 was recorded and is available to NDIA affiliates. Bill needs to work through committee & mark-up process. Working on path forward with forward momentum. Might be tied to Infrastructure bill in May? Reach out directly to members. Murray's office will be in touch throughout the year to identify when & where to push.

John Windhausen- How to lobby (as a non-profit) without getting in trouble with the IRS

Can provide information, but not recommend a position on a bill to public and to congressional staff. Can discuss.

Private foundations cannot lobby. Public charities with funding from private foundation, cannot engage in lobbying.

501(c)3 restrictions- Cannot use federal grant funds. Can lobby if it's not a substantial part of activities (less than 10% of operations is okay).

Back to Staffers

Once passed, State goes through Planning Grant phase, develop plan (Governor decision). Then Formula Grant (Capacity Grant) formula. With plan, will get a grant. Dispersal can be subcontracted to agencies that do digital inclusion. Formula is based on state population, impacted populations.

About a year of rule-making for NTIA (based on what was done for BTOP). Will include public comment period. Then a year for states to do planning grant (which requires consultation with stakeholders). So two years after bill, money could start to flow.

Much of structure and distribution will be managed by the individual state.

Bill includes data & evaluation to allow NTIA to define which metrics to collect (annual, not quarterly)

Differs from BTOP, in that focus is not on infrastructure & large multi-state endeavors.

Bill allows for private companies to apply, if in conjunction with anchors (non-profit, library, school, etc.) Must be in public interest & no unjust enrichment.

Site Visit Tours - Monday, April 1st

Each of us went on one of the tours.

Bus Tour 1- Housing & Digital Charlotte (Barry)

Brightwalk Neighborhood

[Charlotte-Mecklenburg Housing Partnership](#) is a thirty-year old non-profit housing development and financial corporation that sponsors economic mobility through digital inclusion. They have helped build a mix of market-priced and low income housing developments in a corridor of distressed neighborhoods. Low income housing is for families of less than 80% annual median income, and the Alexander facility we visited has families in the 24-60% AMI range. They have had success building the low-income housing first, with ample demand for the market priced housing, refuting the myth that people will not buy homes next to low-income housing. The digital inclusion programs include a set of four two-hour classes twice a week, with students completing the course receiving a free laptop computer and a job-readiness curriculum. “Teaching is not telling.”

Dillahey Courts

This is a low-income community in which [Open Broadband](#) has built an open (free) wifi network available to everyone within the housing community. Alan Fitzpatrick, CEO of Open Broadband and a member of the [Charlotte Digital Inclusion Alliance](#) (CDIA) discussed the key facts, and provided [this presentation](#) with additional technical details. The network uses Wifi antennas on the buildings, and is kept open (without password) to facilitate use and reduce administrative costs. The system cost \$7000 to deploy, and run for the first year. It is used extensively for job searches, homework, boys & girls clubs. In the previous month, 4 Terabytes of data was used. The network is maintained by the IT department of the housing complex.

Residents of Dillahey Courts are able to take advantage of a training program offered through [Digital Charlotte](#), where after a six-week (two hours per week) Microsoft skills training course, students are eligible for a laptop.

Digital Charlotte

[Digital Charlotte](#), launched in 2011, is part of the Knight School of Communication. Their mission is to raise awareness of digital inclusion issues, provide training, and empower community organizations to deliver digital inclusion resources.

In 2017, they played a key role in developing CDIA’s [Digital Inclusion Playbook](#).

Their programs include:

- [POWER \(Parents Operating With Educational Resources\)](#), a program to engage and educate parents on the technology used in schools. In addition to providing individual parents with knowledge and a laptop, it has served as the catalyst for parents to join together to form a PTA in a school that didn’t have one.
- [Program Accelerator](#), a program to bring together students, community members, and organizations to enable community organizations to deliver digital and media literacy training to their communities.
- Digital Literacy as a service- providing “out of the box” digital literacy training for organizations with funding but lacking expertise, and helping them acquire the skills to run the training themselves.
- Portable labs, allowing organizations to safely transport the equipment and use a set of laptops or iPads for programs they have developed. The labs have been utilized by many STEM programs, Girls

who Code, and Read Charlotte. They utilize the library's system as the basis for inventory management.

Dr Zachary White, a professor at Knight School talked about his program which explores partnerships between the university and community organizations to promote digital inclusion. He describes their program involving a 200-level course (Freshman & Sophomores) working with the YMCA to develop digital literacy courses for older adults, starting with focus groups to identify specific needs, through development and deployment of the six week course. He describes it as a win all around, for the students (leadership opportunity), the faculty (exposure to community service), the organization (serving it's clients), and the clients themselves (digital literacy). One key aspect he noted was that the course wasn't technology focused.

Walking Tour (Katherine)

The first thing I learned on the walking tour of Charlotte was that Charlotte doesn't have a downtown. They call it uptown because it's at the highest topographic point in the area. It was a Native American trading site. So, when moving from 9th street to 4th street, you are going uptown. We visited two libraries and Google Fiber, all within a mile of our starting point.

Charlotte Mecklenburg Library was built in 1903 thanks to a grant from Andrew Carnegie of \$25,000. The city was to furnish a site and taxes to support operations. The 1903 charter also provided for the Brevard Street Library for Negroes, which opened as an independent institution at the corner of Brevard and East 2nd Street in 1905, becoming a branch of the Charlotte Public Library in 1929, and continuing to operate until 1961.

The library has technology that can be accessed by residents, such as \$20 a week to rent a hotspot through Sprint. When they applied for an [Edge grant](#), they were asked about multimedia. So they developed podcast kits which are very popular. There are 39 holds on 15 kits. The library has participated in challenges such as ways to build a better book with 3D printing, something beyond plastic since that isn't tactile enough for people with vision issues. There was a challenge to 3D print hands for middle schoolers since they break or are outgrown, so it's better if middle schoolers who need an arm can have one that is cheaper.

When we arrived at the Charlotte Mecklenburg Library ImageOn, we learned that the front desk was where Jon Stewart did his broadcast during the Charlotte DNC. One of the neat aspects of the library is that there are spaces where you have to be below a certain age to go, or between certain ages to go, such as the teen space. There are theaters as part of ImaginOn with children's shows as well as adult.

Our last stop was at Google Fiber on 7th street, which is a shared space for nonprofits as well as a Google Fiber store. They partner with Digi-Bridge to host [Daddy-Daughter Code-Ins](#) for dads and daughters aged K-8th to connect and explore technology. At Google Fiber, the goal is for schoolkids to be able to do their homework at the kitchen table.



Bus Tour #2 (Maryanna)

1. SouthSide Housing 'Internet Cafe'- 400 units and 400 children in two story brick units. One of five Charlotte Housing Authority pilot sites where resident leaders attend train the trainer programs and are then hired to offer classes in community center space. Once residents attend 5 of 6 classes they are given a refurbished device and sign up for internet connection, if needed. They use GCF Learn Free online curriculum. Kids also come in for homework help twice a week.
2. West Charlotte High School:
 - E2D Eliminate the Digital Divide is a refurbishing program in a "learning cottage" (trailer) on the WC High School campus and have 3 other similar labs at 3 other Charlotte Mecklenburg High Schools. Each lab employes high school students for 6 - 9 hours/week at \$10 - \$15/hour. Computers are donated from Lowes and other companies/govt/orgs. Students learn how to do repairs and refurbishing. Families/students pay \$60 for a Dell, HP or Lenovo loaded with Windows OS and Microsoft Office and get a 6 month warranty.
 - Project L.I.F.T. (started 2012) is a joint effort located in Charlotte Mecklenburg School District to improve student outcomes.

Lindsey Sipe, project LIFT Technology Facilitator, described the Civic Tech Experience which includes

Digital Inclusion Institute - parents and children 6 week for two hours once a week with paid leaders, teachers and assistants.

Charlotte Trajectory - JCS University Masters of Social Work students provide referrals and support resources to students and families.

Pop-up Village - carnival style resource fair held for families.

Kevin, High School Tech Coordinator, talked about teacher retention and incentive program which uses paid coaches to provide observation and feedback to other teachers.

These initiatives combine private and public funding

Welcome Reception, sponsored by PCs for People and Mobile Citizen @ Duckworth's

[Photos by Glen McKnight, Creative Commons](#)



PBDD Partner Get-together, sponsored by PBDD at Ri Ra Irish Pub

We collected stories that inspire us for our next white paper, and made connections. Thanks to all who joined us.



Resources:

1. Livestream of some sessions - <https://livestream.com/internetsociety/netinclusion2019>
2. [Photos by Glen McKnight, Creative Commons](#)
3. Schedule with links to presentations (usually after short speaker bios) - <https://netinclusion2019.sched.com/>