



# ALL TECHNOLOGY IS ASSISTIVE

(but not always accessible)



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NETSPEED 2017



# CONTENT/TRIGGER WARNING



This presentation focuses on Assistive Technology. As such, we will be speaking about the reasons people use technology. Discussion will focus on disability, involve marginalized groups, and may stray into areas involving abuse, sexuality, politics, and religion.



Also, this topic is important to me and I may get a bit “enthusiastic.” I apologize in advance if my filters drop and some colourful language escapes.



# ABOUT ME

- I am Autistic. ...Yes, really.
  - Like most disabled people, I have a number of symptoms and co-morbid conditions including, but not limited to:
    - Dyspraxia
    - Difficulties with Social Interaction
    - Sensory Processing Disorder(s)
    - Poor Working Memory.
    - Allergies and food allergies
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# CO-MORBIDITY

- Co-morbidity basically means that if you have or are affected by one set of conditions, you are likely to be affected by additional conditions.
- This means most disabled people are multiply disabled, and most members of marginalized groups are affected by multiple factors.
- Examples:
  - Disabled people are more likely to be homeless, and vice versa.
  - Monetary wealth affects health and vice versa.
  - Minorities are more likely to be targeted by authority figures.
  - Autistics are more likely to be LGBTQI2S+ than Allistics.

The background is a dark blue gradient. In the corners, there are white line-art illustrations of circuit boards or neural networks. These lines connect to small white circles, resembling nodes or components. The patterns are symmetrical, with lines extending from the top-left and top-right corners towards the center, and from the bottom-left and bottom-right corners towards the center.

# WHAT IS ASSISTIVE TECHNOLOGY?

SERIOUSLY, WHAT IS IT?



# OFFICIALLY, ASSISTIVE TECHNOLOGY:

- Is (supposedly) designed to aid those with disabilities.
  - Is aimed at specific markets and goals.
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## BUT... IT ISN'T ALWAYS USEFUL

- A lot of tech specifically designed to be Assistive is built based on assumptions by people outside of the conditions they are “aiding.”
- Often the tech works for one very specific use case, but not anything else.
- Even if you meet the use case perfectly, the tech often requires modifications to fit your actual life, and they can cost more than the equipment.
- Societal and physical barriers prevent usage.
- It implies that only disabled persons need assistance, further stigmatizing it and people who need it.
- Or vice versa, if “normal people” use it, it becomes less acceptable or impossible for disabled people to use it (fidget spinners)



# THIS IS (MOST OF) WHAT I USE DAILY

- Soft, tagless clothing
- Wide, rugged shoes.
- Hoodie
- Backpack
- Stim toys ( “fidgets” )
- Auto-tinting glasses
- Computer, Tablet, E-reader
- Games
- Smartphone
- Headphones
- Apps
  - Social media
  - Music
  - Tools







## BUT THAT'S (ALMOST) ALL “NORMAL” STUFF!

- In order to get access to “Assistive Tech,” you have to both identify as disabled and qualify.
  - Even when tech would work for you, there are societal or physical barriers.
  - Assistive tech doesn't really exist for Autistics. When it does, it's designed for parents to control children, often abusive, not assistive.
  - The reasons for using and the ways I use them are different than most people. And others use these things differently as well.
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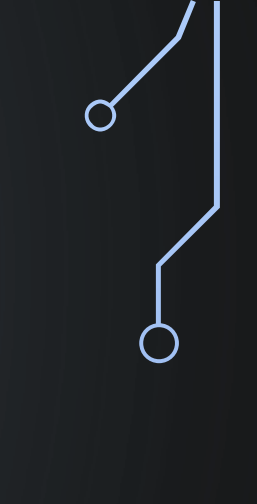



# EVERYONE'S NEEDS AND ABILITIES ARE DIFFERENT

- Yes, everyone. Even you.
  - You use tech daily to aid you, but it's not labelled "Assistive," even if you can't function without it. (Think corrective eyewear)
  - Not only are individual situations different, but co-morbid conditions are different, and how they all interact is different.
  - There are very few one-size fits all solutions, so we tend to adapt our own.
  - Often marginalized people need to use "normal" things to "pass" or otherwise minimize chances for abuse.
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## EXAMPLE: TECH FOR SPD

- Soft, tagless clothing helps prevent sensory overload. Hoodies help with warmth and pressure needs.
  - Auto-tinting glasses also help with light sensitivity.
  - Audio overload is very easy in ballrooms, gyms, busses, etc. Headphones/earplugs, etc. can help with this.
  - Special fonts (even the dreaded Comic Sans) can be used to help people with text recognition problems.
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# FOCUS: IT'S NOT "JUST A PHONE"



- Music lets me tune out noises that would overload me, and helps me with "timing" my movements to counter my Dyspraxia.
  - Texting lets me communicate when I'm overloaded and I can't speak.
  - Apps let me "stim" when I need to while looking normal ( "passing" ).
  - Social media gives me access to my support network anywhere.
  - Text-based communication lets me process conversation more effectively.
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## FOCUS: SMARTPHONES (CONTINUED)

- Many disabled people carry the phone so they can call for help in case of accident. Anywhere, including the bathroom.
- Others have issues like mine.
- Built-in functions allow phones to read out loud, or otherwise do things previously restricted to very expensive dedicated equipment.
- For a wide variety of people, it is a private link to resources they need.
- For a lot of these same people, it's literally a lifeline.
- Others use cameras to showcase unfair or illegal actions.



# FOCUS: ONLINE RESOURCES

- Many marginalized people use social media and apps for community resources unavailable elsewhere.
  - Health info when you have uncommon or socially unacceptable issues is difficult to get, and communities of people with your condition can help.
  - Online communication is easier for many people with social anxiety, who have chronic illnesses, or are otherwise “spoonies.”
  - Apps/websites also let people order food, schedule deliveries of needed products, etc.
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# BRIDGING THE GAPS

WHERE LIBRARIES CAN HELP







# PROBLEM: SOCIETY FROWNS UPON USAGE

- “You don’t need/shouldn’t have” a <piece of technology>.
  - “You’re being rude.”
  - “All they do is use Facebook.”
  - Rules are designed poorly and create additional barriers instead of doing intended job.
  - By being different, many people who need tech draw attention and become targeted while others slide past breaking rules without consequence.
  - Disabled people are often trained NOT to bring up issues.
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# SOLUTION: LOOK OUT FOR UNMET NEEDS

- Too often, unmet needs lead to “failure states” where patrons stop coming.
  - Rather than banning unintended use, look at why people are using things “incorrectly.”
  - Are your rules actually addressing a need, or is it only a problem because of perception?
  - Look at how you word and present rules, as well as how you enforce them.
  - Enforce your rules evenly and consistently; review your rules often.
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# PROBLEM: WHEN THE TECH IS THERE, WE OFTEN CAN'T USE IT

- Technology is often expensive.
  - There are many barriers to using technology.
  - Websites often don't work for people with disabilities.
  - Even tech designed for the disabled is marketed to abled people, but in ways that do disservice to both and help neither.
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# SOLUTION: MAKE PHYSICAL SPACES ACCESSIBLE

- Make sure computers are easy to get to and have enough space.
  - Look at lending out technology.
  - Set up charging stations.
  - Pay attention to allergies and sensitivities when choosing products and cleaning.
  - Get disabled people to test your equipment spaces.
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## ADDITIONAL PROBLEMS:

- Need for monetary assistance for required tech keeps many people in harmful situations.
  - Abusers can spy on their targets.
  - It allows abusive and dangerous people to gather, spread misinformation, and target people.
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# SOLUTION: PROVIDE SAFER SPACES

- Computers/study areas:
    - Allow usage without requiring ID/Tracking
    - Keep filtering to a minimum: many necessary sites get blocked by automated filters.
    - Provide areas with more privacy (but not out of sight)
    - Allow Wi-Fi after hours if possible.
  - When you run programs for marginalized groups:
    - Allow for private entry/exit.
    - Don't force participation in public events.
    - Don't allow photography at non-public events.
    - Remind people of the rules and that sharing membership can be a privacy issue.
    - Pay attention for signs of hate speech or groups.
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# SOLUTION: CURATE YOUR COLLECTIONS

- Libraries are the first resource for many people, and they require accurate information.
  - We don't need to censor, but if resources are weighted toward negative outcomes, that's what will occur.
  - Involve the communities you're serving (not allies/parents).
  - This ties into Safer Spaces. If all the info and experiences I have about or at the library is negative, I'm not going to visit.
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# SOLUTION: MAKE ONLINE SPACES ACCESSIBLE

- Use Descriptive Text.
  - Give links unique and descriptive names.
  - Make sure it can be navigated by keyboard.
  - Use responsive design so it can scale nicely.
  - Limit distracting features.
  - Use headings and sections.
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# REMEMBER: STAY INFORMED

- Not expecting everyone to know everything.
  - Involve marginalized groups in your planning, and make it easy for them to help.
  - Compensate them if they're doing the work of a consultant.
  - LISTEN to them.
  - Act on their suggestions.
  - Steal ideas from everyone.
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# THANK YOU!

- Remember to consult your local communities!
- If You want to talk to me re: library things: [jbuckmaster@chinookarch.ca](mailto:jbuckmaster@chinookarch.ca)
- If you want to talk with me about non-library things/specifically disability things: [theautistech@gmail.com](mailto:theautistech@gmail.com)
- If you want to follow me on Twitter: [@buckybits](https://twitter.com/buckybits)
  - WARNING: This account is filled with lots of disability stuff, a fair amount of tech stuff, many bad words, lots of politics, and occasionally beer.