Interhab Technology Training: Technology Accessibility

 $\bullet \bullet \bullet$

Gretchen R. Ward, MS, OTR/L PowerUp Occupational Therapy Consulting, LLC August 2, 2023

Overview

- Introduction
- Technology in Context
- Technology Disparity
- Technology Accessibility
- Techmentor Model
- Next Steps



SCAN ME





Introduction

- Child of a parent with a disability
- Occupational Therapist
 - \circ Schools
 - Behavioral Health
 - \circ Group Homes
 - Former Clinical Director for Assistive Technology Company
 - Therapeutic Consultation Provider in Virginia





Introduction- Format of sessions

- Hybrid Design- virtual sessions with asynchronous content in between
- INTERACTIVE
 - Think about a specific client, population, or setting you want to integrate technology coaching into
 - How will you support the movement for people with disabilities using technology?
- Consultation- complimentary individual consultation for any provider interested in learning more about how to implement these strategies in their setting.



Discussion

- How do you use technology?
- How comfortable are you with new technology?
- What barriers do you have to technology access?
- What barriers do your participants and residents have to accessing technology?



Technology in Context

- Standard Technology: Developed by Neurotypical people for Neurotypical users
- Necessary for Participation in Modern Society
- Individuals with disabilities often have barriers to cognitive access and digital society that leave them disconnected from their support systems (Johansson, et.al, 2015)
- We use technology for these three main areas of functioning...

Activities

•Education •Work •Shopping •Money Management •Leisure Cognitive Support •Alarms •Reminders •Biofeedback Notifications Social Interactions •Call •Video Chat •Text •Virtual Hangouts •Social Media

Technology Disparity

Technology disparity is the difference between how much people with disabilities benefit from their personal use of technology and how much everyone else benefits from theirs.

Technology has the power to....
Eliminate Systemic Disparities
Transform Human Relationships
Empower Self-Determination



Guidelines and Regulations:

The Americans with Disabilities Act passed in 1990 has limited inclusion of digital access regulations Web Content Accessibility Guidelines (WCAG) https://www.accessibility.works/blog/2022-ada-wcagwebsite-accessibility-standards-requirements/

Section 508 compliance

Legislation that requires federal agencies to...

give disabled employees and members of the public access to information comparable to the access available to others

Accessibility Requirements Tool (ART)

Technology must be...

•Perceivable

- •Operable
- •Understandable
- •Robust





Standard Accessibility & Assistive Technology

Due to rapid changes in technology, accommodations are reactive instead of proactive.

Primarily address physical and sensori-neural deficits



Perception: How content is delivered Screen readers Visual Optimization Captioning

What other features do you know that improve perception?

Standard Accessibility & Assistive Technology

Due to rapid changes in technology, accommodations are reactive instead of proactive.

Primarily address physical and sensori-neural deficits

Operation: How content is accessed •Keyboard access •Switch access •Voice input



What other features do you know that improve operation?

Standard Accessibility & Assistive Technology

Due to rapid changes in technology, accommodations are reactive instead of proactive.

Primarily address physical and sensori-neural deficits

Understandable...

Able to be comprehended •Content •Operation Instructions



What features do you know that improve how understandable technology is?

Standard Accessibility & Assistive Technology

Due to rapid changes in technology, accommodations are reactive instead of proactive.

Primarily address physical and sensori-neural deficits

alamy video Chat alamy

Robust...

Able to be used in various ways •Interpretation across multiple platforms

What features do you know that improve how robust technology is?

Conclusions:

- Current systems vary in methodology and can be confusing to use.
- Lack of consistency across platforms makes learning to use technology challenging for people with additional cognitive processing support needs.

How can we overcome these barriers?

Next Steps- Discussion Where do We GO From Here?

- Accessibility features
- Assistive technologies
- Technology Coaching– TechMentoring
- Any other ideas?



Promote Digital Inclusion



Next Steps- Discussion WHAT do YOU need to do?

- Review your website and digital materials for accessibility
- Review policies and procedures for use of technology with participants
- What can you do better?



SCAN ME

https://forms.gle/MopCk2PBPgL27qW46

Next Steps- Discussion What CAN I do for YOU?

- Answer questions-
- Support Ideas
- Help Connect to Resources
 - Send me an email at gretchen@powerupot.com



Promote Digital Inclusion



References

Accessibility Works Blog

https://www.accessibility.works/blog/2022-ada-wcag-website-accessibility-standards-requirements/

Technology Related Assistance for Individuals with Disabilities Act of 1988. PL 105-394 Sec (3) (a) 3-4

Johansson S., Gulliksen J., Lantz A. (2015) Cognitive Accessibility for Mentally Disabled Persons. In: Abascal J., Barbosa S., Fetter M., Gross T., Palanque P., Winckler M. (eds) Human-Computer Interaction – INTERACT 2015. INTERACT 2015. Lecture Notes in Computer Science, vol 9296. Springer, Cham. https://doi.org/10.1007/978-3-319-22701-6_31

Kulkarni, M. (2019). Digital accessibility: Challenges and opportunities. IIMB Management Review, 31(1), 91-98. doi:https://doi.org/10.1016/j.iimb.2018.05.009

Kinney, A., & Gitlow, L. (2015, June). A consumer-centered approach to evaluating assistive technology usability outcomes. Technology Special Interest Section Quarterly, 25(2), 1–4. https://www.aota.org/~/media/Corporate/Files/Secure/Publications/SIS-Quarterly-Newsletters/T/TSIS-June-2015.pdf