



Digital Accessibility & Remote Work Platforms

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July 22, 2020

Program Overview

- 1. Welcome** Laura Wilhelm, Executive Director, Disability:IN Chicagoland
- 2. Introduction** Dennis Rossow, Director, Human Resources, Comcast & Disability:IN Chicagoland Board Member
- 3. Presentation** Robin Jones, Director, Great Lakes ADA Center
- 4. Q & A** Robin Jones
- 5. Wrap-up and Close** Laura Wilhelm

Meeting Logistics

- ✓ We have muted all participants to minimize distractions
- ✓ We will have time for Q&A at the end of the training, please type your questions in the chat (Q&A section) and we will do our best to answer them
- ✓ Slides will be shared post-training

Disability:IN Chicagoland

- ❑ **Affiliate** of Disability:IN, a leading nonprofit resource for business disability inclusion in the U.S.
- ❑ Region's only **B2B network** helping Chicago businesses leverage disability inclusion in the workplace, supply chain & marketplace.
- ❑ Equips its members to build & implement better practices to increase **inclusion of people with disabilities** through:
 - **Education** (seminars and workshops)
 - **Engagement** (peer networks and access to experts)
 - **Resource-sharing** (information critical to the disability community)

Current Chicagoland Partners:



DIGITAL ACCESSIBILITY & REMOTE WORK PLATFORMS

Robin Jones, Director
Great Lakes ADA Center
University of Illinois at Chicago



30th Anniversary Note

July 26, 2020 marks the 30th Anniversary of the signing of the Americans with Disabilities Act

A lot has changed since that date but what remains the same is the fact that people with disabilities continue to face discrimination. Current times are evidence of both how far we have come but how far we have yet to go.

Celebrate your accomplishments and reflect on what you have achieved both professionally and personally.

Remember, the fight for equality is not over. Each day brings new challenges to address and opportunities to explore.

Use this time to recommit to inclusion, equality and justice for everyone.

HAPPY ANNIVERSARY ADA!!!!



Meaningful Quote:

For most people, technology makes things ***easier***.

For people with disabilities, however,
technology makes things ***possible***.

Mary Pat Radabaugh

Director of IBM's National Support Center for People with Disabilities

1998

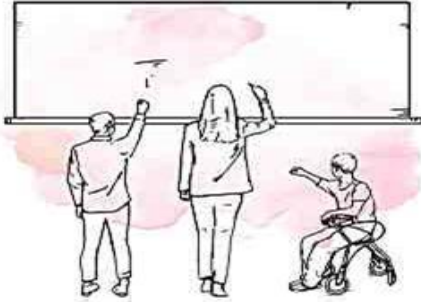
Common “In-Person” Accommodations

- Interpreters (American Sign Language (ASL), Tactile ASL, or Protactile)
- Support Service Provider, sighted guide, personal assistant
- Real-time captioning (CART)
- Automatic Speech Recognition* (AKA: automated/live captions)
- Assistive Listening Devices
- Documents in alternate formats
 - Braille or Large print
 - Audio format (text-to-speech)
 - Electronic methods (email or CD)
- Note taking
- Extended breaks
- Seating locations

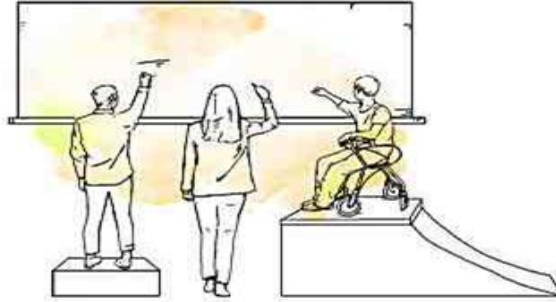


**Newer technology, not widely adopted as an in-person accommodation.*

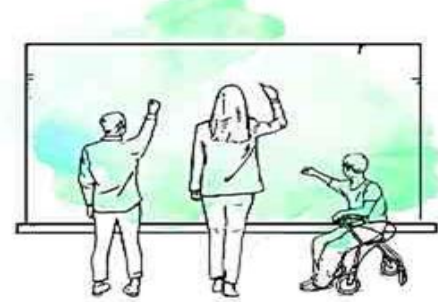
Equality



Accommodation



Accessibility



Accommodation is not the same as accessibility.

- Accommodations are for **individuals** and are **reactive**.
- Accessibility is for **populations** and is **proactive**.
- Accessibility should make content **available to all**, in equally effective ways, at the **same time**.
- Accessibility is the goal, accommodations are just tools to reach it.

Virtual Meeting Challenges

- Platform limitations (Technical)
- Environmental limitations (Security, budgetary)
- Licensing limitations
 - Some features not uniformly available (e.g. higher-tier licenses).
- Diverse access methods/user interface (UI)
 - Inconsistent user experience
- Limited ability to provide technical support
 - Screen share does not share screen share tools
- Turn taking awkwardness
 - Lack of access to conversational cues
- Conflicting accommodations
 - Limited screen space and bandwidth
- Lack of experience and/or training

Virtual Meetings Opportunities

- Ability to customize the Interface to meet needs of your audience
- Individual user control via their assistive technology
- Engage more people
 - Overcome geographic separateness
 - Eliminate disability related limitations for travel
 - Reduce time away from office/home
- Enhance productivity via “real-time” content sharing, etc.
- Improved engagement via remote interactions (as opposed to a “conference call”)
- Can you identify others...?

Meeting Management Techniques to Enhance Access for Everyone



Agenda: Distribute a detailed agenda prior to your meeting*



Attendee List: Make available a list of confirmed attendees



Moderator: Assign one participant to serve as meeting moderator

Name Announcements: Remind participants to identify themselves before they begin to speak



Manage turn-taking: Establish a clear procedure (or utilize a digital tool) to manage turn taking



Document sharing: Distribute any relevant documents well in advance of the meeting*

**Any/all document distribution should consider accessibility of those documents
(e.g. word format, PDF, plaintext, braille, videos to be captioned & audio described)*

Meeting Management - Continued



Communication style: Describe the content of the graphics, speak at a moderate rate and stay on topic for ease of communication



Check In: At the beginning of your meeting take a moment to ask whether all attendees have what they need for effective communication.



Solicit Feedback: Provide a contact for and specifically solicit feedback on accessibility of the meeting.



Screen share sparingly: Screen/content is not accessible to screen readers users, and can take screen space away from video that may be needed. Use with caution, and consider toggling shared content on and off only when needed.

Equipment and Technology Recommendations

Fine tune your audio



- Use a headset whenever possible (eliminates background noise, “tunnel” sound)
- Split your audio between input and output; input via device’s built-in microphone, output to headphones or other isolated audio device
- Only use **one** audio connection method (phone or computer, not both)

Fine tune your video



- Frame your shot
- Consider an external webcam
- Disable autofocus if possible
- Consider turning off your video when it is not needed
- Aim for a neutral background (can be distracting and problem for low vision)



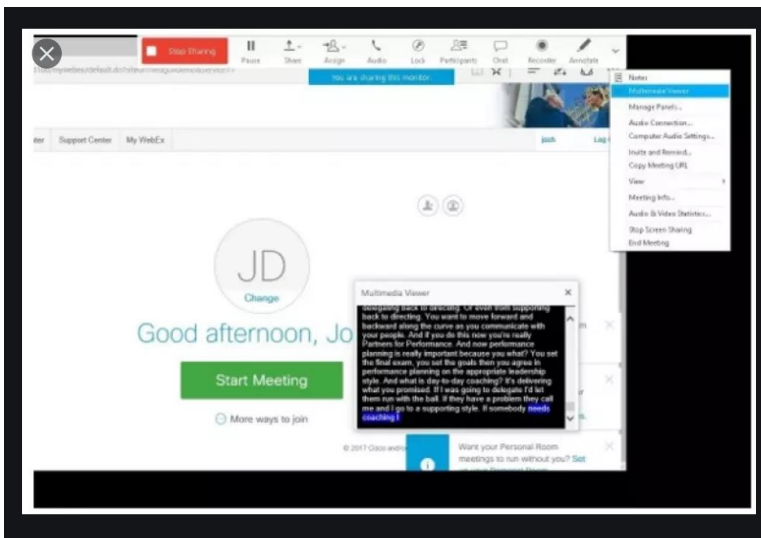
Provide multiple connection options

- Maintain flexibility for your attendees by allowing for as many different connections as possible (e.g. IP audio, phone audio, audio only, video only)

ACCESSIBLE FEATURES DISCUSSION

Captioning within Platform

Live captions input by a qualified CART provider into the platform

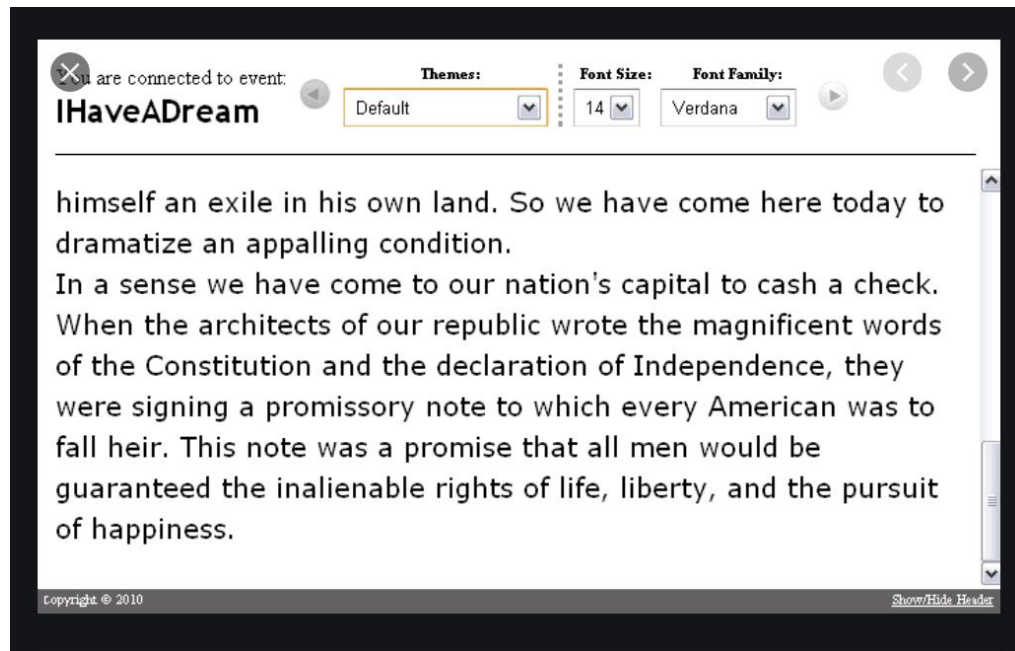


Examples:
Zoom and WebEx

Captioning External Link

External Link

- Requires opening a 2nd browser
- Audio Connection required to the original source
- Resize window (side by side with platform images)
- Allows ability to “scroll up/down” to review what you may have missed or get further clarification of what was said
- Customize size, font, background color
- Control Mobile Device – Only able to view one or



Use of Automated Speech Recognition (ASR) for Captioning



- More platforms and entities are engaging the use of ASR for performing captioning in virtual platforms
 - Some are “built in” and others are “add-on” features
- Example between 2 different platforms:
 - **Google Meetup** (using Google Cloud Speech to Text AI)
 - **Microsoft Teams** (using Microsoft Azure Speech AI)

Example: Edgar Allen Poe’s poem “The Raven”

*Once upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore—
While I nodded, nearly napping, suddenly there came a tapping,
As of some one gently rapping, rapping at my chamber door.
“’Tis some visitor,” I muttered, “tapping at my chamber door—
Only this and nothing more.”*

*Once upon a midnight dreary, while
I pondered, weak and weary, Over
many a quaint and curious volume
of forgotten lore— While I nodded,
nearly napping, suddenly there
came a tapping, As of some one
gently rapping, rapping at my
chamber door. “Tis some visitor,” I
muttered, “tapping at my chamber
door—Only this and nothing more.”*



*Once Upon a midnight dreary.
While I pondered weak and weary.
Over many **acquaint**, **incurious** volume of
forgotten lore.
While I nodded, nearly napping, suddenly
there came a tapping.
As of **someone** gently **wrapping wrapping up**
my chambered or just some visitor I
muttered tapping at my chain. **Would or**
only this and nothing more.*

*Once Upon a Midnight dreary while I pondered
weak and weary over many a quaint and curious
volume of Forgotten lore while I nodded nearly
napping suddenly there came a tapping as of
someone gently rapping rapping at my chamber
door tis some visitor. I muttered tapping at my
chamber door only this and nothing more.*

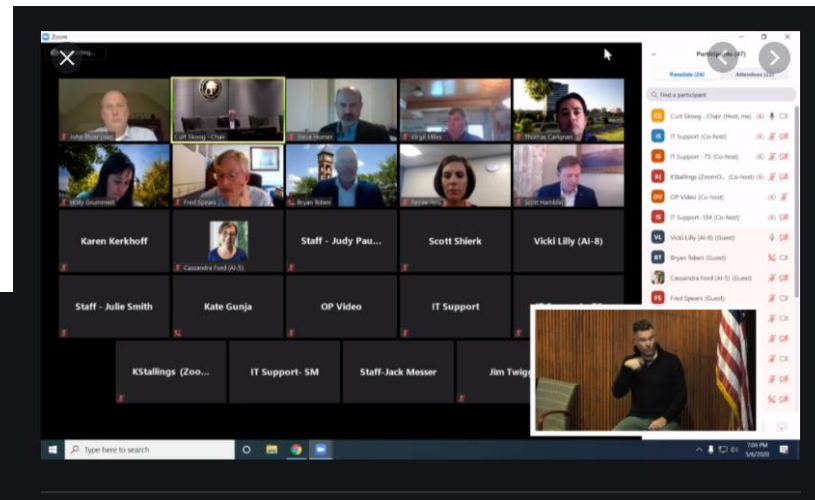
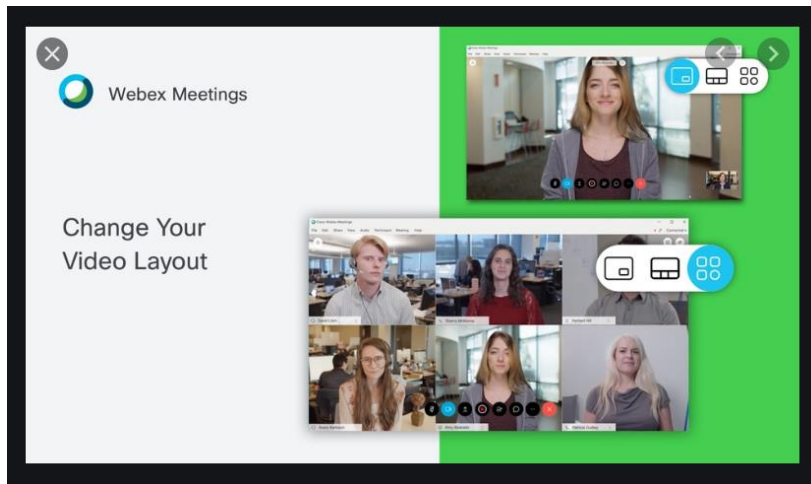


Microsoft



Video Sign Language Interpreter

Live Sign Language Interpreter
highlighted for focus during
meeting



Examples:
Zoom and WebEx

Video Remote Interpreter (VRI)

- External Link – 2nd Browser Required
- Resize screen for side-by-side view
- Audio Connection required to the source meeting



Access To Communication Features

- Chat – Focused area for instructions, communication with participants
- Q&A Area - Focused area for submitting question
- Microphone Mute/Unmute Control– Access for presenters or participants expected to speak
- Hand Raising Feature –Raise hand to respond and/or ask to be recognized
- Whiteboard – Area where presentation and/or documents are shared
 - Share Screen - Share participant/speaker computer screen and controlled by the individual's computer
 - Upload file into the platform - file is loaded into the platform and controlled through the platform
 - “Explore the Web” - Share websites through speaker's computer and browser (including playing videos from YouTube or other on-line platform)
 - Video – Play a video file from the speaker's computer sharing screen and computer audio

Common Platforms – Accessibility Features

ZOOM

Pros	Cons
<ul style="list-style-type: none">● Highly accessible via screen reader● Simple intuitive User Interface (UI)● Side by side mode/dual monitor support● High quality video/audio with low stutter rate● Non-video participants can be hidden● Built-in support for captioning (via participant or vendor)● Supports up to 100 video participants (350 total)	<ul style="list-style-type: none">● Integrated meeting management tools lack sophistication● Captioning display lacks customization, sophistication, consistency.● Security concerns continue to be prevalent, especially amongst government entities● No built-in live ASR

NOTE: Features identified as of July 2020. Platforms are continuously updated, and changes may be made that improve/enhance accessibility at any time and should be re-evaluated on an on-going basis

Common Platforms – Accessibility Platforms

CISCO WEBEX

Pros	Cons
<ul style="list-style-type: none">● Easy to procure; security and enterprise ready● Capability to create a separate module for captioning (Multimedia viewer)● Centralized feature management (administrators)	<ul style="list-style-type: none">● Not usable for screen reader users.● Complex user interface requires training to navigate● Unintuitive video “pinning” functionality● Inflexible video interface● Centralized feature management (administrators)

NOTE: Features identified as of July 2020. Platforms are continuously updated, and changes may be made that improve/enhance accessibility at any time and should be re-evaluated on an on-going basis

Common Platforms – Accessibility Features

Google Meets

Pros	Cons
<ul style="list-style-type: none">● FedRAMP approved for some agencies● Easy to use and intuitive● Automated captioning has high accuracy and names speakers (isolated audio channels)● Recently added grid layout for video● Screen reader and keyboard accessible● Audio via phone connection● Browser based- no download required	<ul style="list-style-type: none">● Not widely available to government agencies● Supports up to 25 video participants

NOTE: Features identified as of July 2020. Platforms are continuously updated, and changes may be made that improve/enhance accessibility at any time and should be re-evaluated on an on-going basis

Common Platforms- Accessibility Features

Adobe Connect

Pros	Cons
<ul style="list-style-type: none">● Majority of federal agencies use it● Easy to procure; security and enterprise ready● Grid layout for video feed● Maximum user interface flexibility; can add a dedicated pod for captioning● HTML client and desktop application available	<ul style="list-style-type: none">● Bandwidth intensive, deprioritize video● Complex user interface● Not usable for screen reader users● No video pinning functionality● Requires additional licenses for add-ons such as conference lines

NOTE: Features identified as of July 2020. Platforms are continuously updated, and changes may be made that improve/enhance accessibility at any time and should be re-evaluated on an on-going basis

Common Platform – Accessibility Features

Microsoft Teams

Pros	Cons
<ul style="list-style-type: none">● Easy to procure; security and enterprise ready● Available to almost all government agencies with Office 365● Built-in across Office 365 applications for real-time collaboration● Embedded invite for one click meetings via Outlook	<ul style="list-style-type: none">● “All-in-one” platform with numerous features that may confuse users● Supports up to 9 video participants● Accessibility issues (e.g. guests unable to pin, unreliable captioning, screen reader access)● Not user-friendly & not intuitive● Captioning only feasible using their Azure AI; no other way to feed captions from CART provider● License dilemma to obtain alternative methods for accommodations

NOTE: Features identified as of July 2020. Platforms are continuously updated, and changes may be made that improve/enhance accessibility at any time and should be re-evaluated on an on-going basis

Common Platforms – Accessibility Features

Streaming Content

Pros

- Less bandwidth
- More control of broadcasting various content and video feeds to audience, especially picture-in-picture ASL interpreter and burn-on captioning
- Ease of access to virtually everybody who has a computer or mobile device

Cons

- Requires many moving parts along with technical-intensive knowledge to implement solutions, especially with accessibility
- Burn-in or embedded captions on streams are not accessible to screen reader or refreshable braille display users
- Streaming services can be over reliant on ASR generated captioning
- Does not allow for a great degree of user customization



Other Considerations for use of On-line Platforms

- **Psychosocial Considerations** – Recognize that there may be some individuals with disabilities who may experience anxiety or other mental health conditions that could be exacerbated by high volume on-line activity/expectations and use of “video”, etc. Reasonable Accommodations may be needed on a case by case basis (i.e. exempt from using video for all meetings, limited time requirement for being “on-line” in meetings, etc.)
- **Bandwidth** – Recognize that some employees working remotely from their homes may be sharing internet bandwidth with spouses, children in school, etc. and their bandwidth may be limited for video or during certain times of the day
- **Device selection** – Recognize that some employees may find use of a mobile device easier due to disability related issues which may not have all of the same features in the mobile version that are available on the desktop version

Other Considerations - Continued

- **Document/Content Sharing Accessibility –**

- Ensure that videos are captioned (Open captioning demonstrates universal design)
- Distribute all materials to be discussed/reviewed in advance to participants in an accessible format (Accessible PDF, EXCEL, PowerPoint or Word Format)
- If visiting a “website” during the meeting provide the URL to individuals so that those that cannot view the “shared screen” can visit the website in their own browser for accessibility purposes
- If the presenter/leader of the meeting is a person with a disability who uses assistive technology verify that they can access the administrative controls necessary to be a presenter, etc. (advance slides, share screen, etc.)
 - Do a practice session with the presenter/leader using technology in advance to identify what assistance/alternatives may be necessary prior to the live session

Bottom Line – None check off all the boxes

Things to consider:

- Check with your organization to identify which platforms you already have access to
- Engage people with disabilities to test and evaluate those platforms with you
- Implement meeting management strategies to compensate for weaknesses in your platform
- Utilize other services as possible to compensate for weaknesses in your platform (e.g. separate captioning streaming website)

Contact Information:

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Great Lakes ADA Center

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Questions?

REMINDERS:

- ✓ Participants' lines are muted
- ✓ Please type your questions in the chat window and we will do our best to answer them
- ✓ Slides will be shared post-training

Celebrating the ADA at 30

JOIN IN – SUNDAY, JULY 26TH :

- ✓ Be a part of Disability:IN's Campaign - **ARE YOU IN?**
 - ✓ Visit www.inforinclusion.org to join 316 corporations, 15 CEOs & 22 investors in building a corporate roadmap for inclusion
- ✓ Access resources from the ADA National Network at <https://adata.org/ada-anniversary>
 - ✓ Toolkit, social media content, #ThanksToTheADA campaign & a calendar of events

Thank you for joining us!

FOR MORE INFORMATION CONTACT:

Laura Wilhelm, laura@di-chi.org or 312-480-6623

LEARN MORE:

Disability:IN Chicagoland - <http://www.di-chi.org/>

**AUGUST PROGRAM: *Accommodating Return to Work
Amidst the COVID-19 Pandemic*** - August 6th, 11:00am -
12:00 pm, registration coming soon