Amplifying opportunity:
Videoconferencing for people who are d/Deaf or hard of hearing

THE PROBLEM

When Kelsey Sandella learned that a well-known public university was offering a live webinar on COVID-19’s impact on people with disabilities, she was eager to attend. Because she is Deaf, Kelsey looked to the registration form for information on accommodations. Seeing nothing there, she reached out directly to the university. The response? No captioning would be available. They might be able to send her a transcript afterward, but no guarantees.

Putting aside the irony of a webinar about people with disabilities not accommodating people with disabilities: A university receiving federal funds must adhere to accessibility requirements outlined in the Americans with Disabilities Act (ADA), making this a clear violation. “They’re a renowned university with the financial means to accommodate people, and they still didn’t think about it,” said Kelsey. “I’ve had this type of experience a lot, but I felt very dismissed.”

According to the 2011 American Community Survey, about 11 million people in the United States, or 3.6 percent of the population, consider themselves d/Deaf or live with a serious hearing loss. In the era of COVID-19, they, like so many people, are watching educational opportunities, work meetings, health care appointments, and more move onto video streaming platforms. So in today’s world, equal access to these opportunities and obligations is just as important as curb cuts or accessible parking spaces. The technology exists to make it possible. And yet on a regular basis, people who are d/Deaf or hard of hearing are shut out.
THE BACKGROUND

A generation before the ADA, the Rehabilitation Act of 1973 demanded that people with disabilities receive reasonable accommodations from their employers to do their jobs. Section 504 applied to federal and federally funded programs and institutions such as private and public colleges and K through 12 schools.

When the ADA became law in 1990, it extended similar protections, requiring both private and public entities to provide reasonable accommodations to those with disabilities. Title II of the ADA primarily applies to local and state governments and public schools and colleges; Title III applies to “places of public accommodation,” such as doctors’ offices, movie theatres, parks, and private schools and colleges.

The ADA mandates that communication with people with disabilities be “as effective” as communication with others. All Title II and Title III entities must provide “auxiliary aids and services” when needed, so that someone with a vision, hearing or speech disability “can communicate with, receive information from, and convey information to” that entity. Though the original legislation did not address digital accessibility — the world’s first webpage would not go live until 1991 — requirements have since been broadened and further defined to include online media.

Over the past decade, as video platforms have grown in popularity and sophistication, accessibility options have popped up in their wake. Here is a look at the leading ones today.

**Automated or auto-generated captioning** employs automated speech recognition technology to generate on-screen captions in real time.

- Advantages: This feature comes free on some video conferencing platforms, such as Microsoft Teams and Google Hangouts, and is activated with a simple toggle switch.

- Disadvantages: Automated-captioning technology cannot differentiate among speakers, making it unsuitable for larger meetings with multiple presenters or active participants. In addition, accuracy rates can be as low as 60 percent, which creates comprehension barriers and falls short of the ADA mandate.

**Communication Access Realtime Translation (CART), or human captioning,** is real-time captioning provided by certified CART writers. On some platforms, this captioning can be integrated and embedded directly within the video, which is generally preferred; on others, it may run in a separate window through a service like StreamText, a third-party “player.”
• Advantages: Trained captioners can type up to 260 words per minute with 98 percent accuracy and can differentiate among speakers. Also, some platforms that integrate CART, such as Zoom, allow the user to increase font size for easier reading; StreamText does this as well.

• Disadvantages: Human captioning can be costly, with charges anywhere from $60 per hour to $200-plus per hour.

People who are d/Deaf often prefer **Video Remote Interpreting (VRI)**, in which a third-party ASL interpreter is invited into a video meeting to offer on-the-fly translation of spoken words into ASL. Some service providers, such as Linguabee, even offer interpreters who have special expertise in fields such as law and health care.

• Advantages: VRI can work with any major video conferencing platform, and is irreplaceable for people who rely on ASL.

• Disadvantages: With rates often around $2 per minute and common two-hour minimums, costs can quickly add up.

There is a common misconception that individuals who are d/Deaf or hard of hearing can be accommodated with either an ASL interpreter or captions. However, some d/Deaf people do not know ASL. On the other end of the spectrum, those who use ASL may not be able to readily understand captions, because the grammar and format of ASL differs from spoken English. Ensuring that online meetings are fully inclusive means accommodating requests for either.

THE SOLUTION

When making arrangements to work online, leaders in business, education, health care, and other sectors must go beyond considering the usual issues of cost and security. Especially today, they also must factor in accessibility.

It starts with choosing a video conferencing platform. Because all should be able to integrate ASL interpreting, the major question is what each platform’s captioning options are.

In a pinch, automated captioning may be good enough to make quick, small meetings effective. But the technology’s inability to distinguish among multiple speakers, and its general lack of accuracy, renders it insufficient for exchanges ranging from telehealth conversations to university webinars.

That leaves human captioning, or CART, as the go-to solution for many businesses and institutions. Here’s how some of the most popular virtual meeting platforms stack up.
<table>
<thead>
<tr>
<th>Platform Name</th>
<th>Integrated Captioning</th>
<th>Automated Captioning*</th>
<th>Call-out to Attendees**</th>
<th>Instructional Links***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Connect</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td><a href="https://helpx.adobe.com/adobe-connect/using/accessibility-features.html">https://helpx.adobe.com/adobe-connect/using/accessibility-features.html</a></td>
</tr>
<tr>
<td>Big Blue Button</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td><a href="https://www.youtube.com/watch?time_">https://www.youtube.com/watch?time_</a></td>
</tr>
<tr>
<td>BlackBoard Collaborate</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td><a href="https://blackboard.com/resources/collaborate-live-captioning">https://blackboard.com/resources/collaborate-live-captioning</a></td>
</tr>
<tr>
<td>Facebook</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td><a href="https://www.facebook.com/">https://www.facebook.com/</a></td>
</tr>
<tr>
<td>Google Meet</td>
<td>(must be encoded)</td>
<td>Yes</td>
<td>Yes</td>
<td><a href="https://support.google.com/meet/answer/7313544">https://support.google.com/meet/answer/7313544</a></td>
</tr>
<tr>
<td>GoToMeeting</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td><a href="https://support.goto.com/meeting/help/what-accessibility-features-are-available-in-goto-meeting">https://support.goto.com/meeting/help/what-accessibility-features-are-available-in-goto-meeting</a></td>
</tr>
<tr>
<td>Platform Name</td>
<td>Integrated Captioning</td>
<td>Automated Captioning*</td>
<td>Call-out to Attendees**</td>
<td>Instructional Links***</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Youseeu</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>[<a href="https://bongolearn">https://bongolearn</a> zendesk.com/hc/en-us/](<a href="https://bongolearn">https://bongolearn</a> zendesk.com/hc/en-us/)</td>
</tr>
<tr>
<td>YouTube</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td><a href="https://support.google.com/youtube/">https://support.google.com/youtube/</a></td>
</tr>
<tr>
<td>Zoom</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td><a href="http://support.zoom.us/ch/en-us/">http://support.zoom.us/ch/en-us/</a></td>
</tr>
</tbody>
</table>

*Automated captions are embedded into the platform. However, they rely on speech recognition software rather than human transcription; as such it is less accurate than professional captioning services.

**This feature is important for attendees with low-vision or blindness. The host can have the platform call the entered number and allow the attendee to have audio access by answering the phone; this is NOT the same as a call in feature.

***StreamText can be used with any platform. The meeting host must pay an additional fee to have a professional captioner present to provide live captions which will be linked in a second window.

For all of the above options, the best practice would be to contact a Communication Access Realtime Translation (CART) service, who will provide quotes as well as explain if the platform of choice will allow embedded (integrated) captioning or if a second window will need to be used.
Once a platform has been chosen and implemented, organizations should advertise that accommodations are available, and ask attendees which one(s) they need. These should include options not only for those who are d/Deaf or hard of hearing, but also for those who are blind or low vision. (See “Make it simple.”)

Beyond ADA compliance and simply doing the right thing, accessibility-minded decision-making yields other rewards. For one thing, people without disabilities also benefit from good captioning; they can follow a meeting even when they need to mute their device, and enjoy better comprehension. It also improves the viewing experience for non-native speakers and people with learning disabilities. In addition, if there is consent from all participants, CART providers such as Alternative Communication Services (ACS) will produce a meeting transcript that can be shared and kept for future reference.
Accessibility is mandated by law, and it’s time to change how we approach it. As we move more of our lives into the virtual realm, we must ensure that everyone — regardless of age, background, or ability — has the same opportunities to connect, learn and grow. By implementing accessible practices for people with disabilities, individuals and organizations can create a more inclusive, connected world — during COVID-19 and beyond.

MAKE IT SIMPLE

Once the technology is in place, there’s one more important piece to ensuring accessibility: inviting people to make accommodation requests.

On their registration and appointment forms, smaller organizations can simply encourage people to call or email a designated contact person to communicate their needs. Larger organizations, however, should allow participants to request accommodations directly within their online forms. Here is some sample language:

If you have a disability, please indicate which accommodation(s) you need to participate:

- American Sign Language (ASL) interpreter
- Communication Access in Real Time (CART) captioning
- Conference call-out to your phone
- PDF of presentation prior to event
- Transcript following the event
- Other (please specify)

To discuss a specific need or request not covered above, please call (enter phone number here) or email (enter email address here).
WHO DOES THE IC HELP?
For people with disabilities who want more independence, The Independence Center (The IC) can walk with them on their journey to achieve their goals.

We serve people with disabilities in El Paso, Cheyenne, Kit Carson, Lincoln, Park and Teller counties. Services vary from county to county.

WHAT TYPES OF DISABILITIES?
- Deaf & Hard of Hearing
- Blindness & Low Vision
- Physical
- Mental Health
- Cognitive

ABOUT THE IC
Started in 1987, The Independence Center is a local nonprofit organization that provides traditional and self-directed home health care, independent living, and veterans’ and advocacy services for people with disabilities. These services range from providing peer support, skills classes, and employment assistance to individual and systems advocacy. In addition, The IC runs a Certified Nurse Aide training program to equip the area with qualified CNAs.

The IC has over 300 employees today, with over 51% of their Center for Independent Living staff and board having a disability.

HOME HEALTH CARE
The IC offers home health care that is skilled and unskilled, self directed or physician-directed, for all ages, and with the caregiver of your choice or an employee of The IC.

CNA TRAINING
The Independence Center’s CNA Training Program offers day and evening classes to become a qualified Certified Nurse Aide.