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Technological Issues in ASL and Interpreters

Kirkpatrick, Keith. "Technology for the Deaf." *ACM*, 1 Dec. 2018, cacm.acm.org/magazines/2018/12/232889-technology-for-the-deaf/fulltext.

This article shows the difficulties that the deaf and hard of hearing world has to go through to bridge the gap between the two different worlds. Many hearing people have tried to make convenient technologies to make communication easier for them instead of thinking about how the Deaf world will feel. In an ideal situation, a deaf person would always have an interpreter with them when needed but this is almost impossible for every deaf person to be accompanied by an interpreter. To deal with this issue, Video Remote Interpreting has surfaced. This often takes the impersonality out of the conversation. Not only does the information have to go through the interpreter first, but it then has to go through a screen to the deaf person. Communication through screens is not always beneficial. The true meaning can be lost as well as both people getting confused. Any glitch on the screen can cause words to not be seen or misunderstood. Since these issues are too common with Video Remote Interpreting, people have been working to come up with new technologies to help the hearing and deaf world communicate easier. Gloves were synced with "SignAloud" that allowed sensors to capture the motions of the signer's hands and then is transferred from ASL to English. While this was initially a smart idea, many deaf people were against the invention. ASL is more than just signs.

It includes body language, facial expressions, and also the movement of the mouth. The other issue is that ASL sentence structure differs from English so the translations were often very different and the meaning and intent were lost. Other devices are being created as well that uses machine learning and AI (artificial intelligence) to try and "read" the person who is signing. The improvement of this technology is that it would also be able to capture the body language and facial cues of the signer.

Video Remote Interpreting to me seems like a different version of what we would consider as FaceTime. They often use this as a way to save money from not having interpreters on-site and having to pay them when not being used. It is very frustrating as well to know that the hearing world is willing to only give the basic necessities to deaf people. It was very upsetting to read that the majority of the technological advances for the deaf and hard of hearing communities have been made because federal laws mandated them. This shows that the hearing world has no care for the needs of the deaf world and only worked on these technologies because they were required to, not because they wanted to help the deaf population. I think that convenience should go both ways. The deaf world is forced to conform to the ways of the hearing world while the hearing world does nothing for deaf people. The hearing world would rather create technologies than learn the language and understand the culture. I do think that Video Remote Interpreting is a good back up method in case something happens and people need an interpreter quickly. Such as a medical emergency, or just a quick, simple interaction that can be translated easily through a screen would be an exception to use VRI.

Snoddon, Kristin. "Technology as a Learning Tool for ASL Literacy." *Sign Language Studies*, vol. 10, no. 2, 2010, pp. 197–213. *JSTOR*, www.jstor.org/stable/26190568.

Accessed 23 July 2021.

Communication and literacy are important for everyone, including people with disabilities such as deafness or being hard of hearing. This article talks about how technology can help increase people's desire to learn, especially in young children and students in school. These technologies included videos of the students and stories they signed for them to look back and see what they signed. There were also interactive technologies that allowed for reading and completing assignments. It also brings into play different cultural backgrounds and diversity. Deaf people take pride in their culture and this can affect their ways of learning. It can also affect if they want to learn to speak or strictly use sign language or a combination of both. Technology can play a major role in young deaf students when they are first introduced to the language. It will increase their cognitive engagement with what they are learning. They can rely on video or digital texts that teach them different signs. The technology was not only important for their learning but also to allows the deaf student to find and understand their identity. They were able to use technology to share stories about their life. Technology is important in the classrooms for learning, but to continue students' desire to learn, the technology is also needed at home for the learning to be successful in the end.

We understand that it is hard for marginalized and poverty-stricken groups. They struggle to have the same access to technology (for the classroom or home), and this is the same for the deaf population. They are not considered equal to the hearing world, therefore their opportunities are less. This is especially noticeable in the classrooms that have deaf students. The school systems do not accommodate to deaf children nor do they adapt the curriculum to their needs. If new technological advancements are created, then deaf students might be able to lower the chance of educational failure happening to them or their peers. Deaf culture is also lost in the new generations because they struggle to find their history (because it was not documented due

to lack of technology), and they also struggle to find ways to document their culture for future generations. Relying solely on technology and not on a personal interpreter removes a child's ability to learn about deaf culture and history. The technology teaches signs but not the whole background and history that the Deaf world experiences. This proves to me that the technology is not adapted enough to fit the needs of deaf people. It also shows how deaf people are considered an inconvenience in school systems because they have to stray from their normal in order to help others succeed.

Maartje De Meulder, et al. "The Impact of the Covid-19 Pandemic on Sign Language Interpreting Working Conditions." *Acadeafic*, 12 June 2020, acadeafic.org/2020/06/10/interpreting/.

Interpreters play a major role in the communication between the deaf and hearing world. COVID has had a major impact on interpreters and their jobs as well. Many interpreters and people in the deaf community agree that face-to-face technology should not be replaced by video technology. These complimentary services can be used for short amounts of time, or when needed in emergencies. Some studies prove that interpreting is hard enough without the added stress of having to interpret through a screen. It is also very hard for interpreters to make sure they have all the necessary technology to successfully interpret, no matter the situation. Many organizations around the world work to establish the best communication conditions for both deaf people and their interpreters. It is important that interpreters are well taken care of so that they can communicate effectively to avoid miscommunication. There are certain mandates in place that protect interpreters, such as only allowing them to sign for a certain amount of time before taking a break or switching with a different interpreter. This has become an issue with the pandemic. Many organizations want to keep the number of people in a room to a minimum to decrease the chance of contracting the disease. This meant that a single interpreter would have to

sign for over an hour at a time with no breaks. In the end this could lead to cognitive overload and lead to miscommunication from the interpreter on accident. This also became an issue when meetings went online. The companies were not scheduling enough interpreters for the time frames of the meetings. When signing through a screen it adds stress to the interpreter because not only are they worried about the information they are signing, but they also began to worry about whether the deaf person could clearly see and understand all the signs. The pandemic also caused stress to interpreters because they quickly had to go buy new technologies that were sufficient enough for interpreting meetings.

I have personally experienced these issues with technology (specifically Zoom calls) while taking ASL classes online during high school. I struggled with many internet connectivity issues that would cause me to miss what was being signed and not fully understand the assignment. This was very stressful for me even though my teacher was hearing. I was able to verbally ask as a last resort but it was frustrating for the deaf students in our class because they could not always get the teachers attention if they missed any information. Face - to - face interpreting allows for instant feedback from the interpreter or the deaf person if there is a miscommunication. They can also expand more on the topic so that there is no lost information. Another way that Covid has impacted deaf people was the mask mandate. When deaf people have conversations they focus on facial expressions and also lip reading. When masks are worn, half of the face is no longer available for the deaf person to "read" and fully understand the context of the conversation. I believe that there can be some good to Video Remote Interpreting. This is a way for interpreters to find work and make income when there is no other work available. Possible problems could arise in the future though. Businesses could take advantage of interpreters and begin to pay them less or just ask them to interpret remotely for cheaper.

"Through Deaf Eyes . Deaf Life . Technology as a Cultural Force." *PBS*, Public Broadcasting Service, Mar. 2007, www.pbs.org/weta/throughdeafeyes/deaflife/technology.html.

New technologies positively impacts the hearing community, but on the other hand, it negatively affects the deaf community and creates a greater barrier between the two populations. These advancements included: talking films, radio, music, weather warning, and also telephones. Other advancements such as hearing aids and cochlear implants were not always accepted by deaf people. At first, telephones separated the deaf population from the rest of the world. They were denied promotions at work if it required the use of a phone, they had to use different techniques at home as well that hearing people could accomplish with an easy phone call. They also would drive long distances in order to have face-to-face conversations. A serious issue with this was that in an emergency, many deaf people had no way to connect emergency services like the police, firemen, or ambulances. This feeling of disconnect led to developments for the deaf populations. The "telecommunications device for the deaf", also known as the TDD and the teletypewriter, TTY, were able to transmit and receive information and then translate it as printed text that deaf people could read. The alert for this device was a flashing light that would get the deaf person's attention. This opened up a new way of communication between deaf people for anyone who had a TTY. This also closed the gap a little between hearing and deaf people and allowed them to be able to work side by side in the workplace. Many businesses and government agencies at the time also had them available. Hearing aids have gone through a lot of advancements as well. They became smaller and lighter over time and also began to stray away from being battery operated to the modern day version of the behind-the-ear hearing aids. Sometimes the deaf community is split within itself. A major reason for this is whether people view their deafness as an impairment or if they see it as an identity within their culture. Cochlear

implants go along with this as some people see it as a way to make them "normal" like the hearing population and others want to stay deaf and respect their culture.

What hearing people consider to be "conveniences" are a real struggle for deaf people. The conveniences are often taken advantage of and not appreciated by the hearing world. Before messaging apps were a thing, it was very inconvenient for deaf people to communicate and often if they were out in public they would have to write on paper. When approached by deaf people in today's society they often have their message written on their phone because not many people know sign language to be able to communicate. People in today's society, especially teenagers, would struggle if they had to meet people to have a conversation instead of just quickly calling or texting their friends. I also feel like it would have been very stressful if I was not able to get in contact with emergency services when I needed them. We see the effects of deaf culture around us today. When fire alarms go off in public spaces, the flashing lights are for deaf and hard-of-hearing people so that they can get to safety as well. I have met deaf people who use hearing aids and deaf people who don't. It was interesting at first when I learned that some deaf people do not want to be a part of the "hearing world" but instead, they want to fully be a part of their Deaf culture.