Making Your Conference Talk Accessible

Richard E. Ladner
University of Washington

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Introduction

It is extremely common to give a talk at a conference with accompanying presentation visuals. At the same time there may be people in the audience who are blind or have low vision, who cannot see the visuals clearly or at all. There may be deaf or hard of hearing people in the audience who cannot hear your talk clearly or at all. Since the talk is for everyone, it is important to make the talk accessible. Indeed, even if there are no people with disabilities in the audience it is important to give the talk in a way that everyone can understand it. The purpose of this short article is to provide guidelines and resources for giving accessible conference talks.

Before giving the guidelines we would like to give some examples of practices I have seen in conference talks that make these talks not fully accessible. In each example I quote what the speaker says, then explain why the talk is not accessible.

- **Images**: "These are examples of X." On the slide are several images that represent examples of X. If an audience member is blind, then that member doesn't know what the examples are.
- **Video 1**: "Let me show you a video demonstrating process Y." The video is narrated but has no captions. If an audience member is deaf, then that member does not know what the narration is.
- **Video 2**: "Let me show you a video showing Z in action." The video has no narration, but just some background music. If an audience member is blind or has low vision then Z's action is not known.
- **Graphs**: "This graph shows that some growth of W over time." A blind or low vision audience member will not have any idea of the magnitude of the growth or the time period.
- **Pointing**: "Look at this equation that shows the relationship between X and Y." The speaker is using a laser pointer. A blind or low vision audience member will not know what the equation is or what the relationship is. A deaf audience member who is watching the interpreter might not catch to where the laser is pointing.
- **Allusion**: "You never know who you might meet." The slide shows a picture of the speaker and the President of the United States shaking hands. A blind or low vision audience member might not know who the speaker is meeting.
- **Animation**: "Watch how our algorithm manipulates the data." There is no narration to help blind or low-vision audience members understand the algorithm.

These examples are not meant to imply that images, videos, graphs, pointing, allusion, and animation should never be used. Instead they point out the perils of using these devices in talks.

Basic guidelines

What is the purpose of giving a talk at a conference? Having attended hundreds of conferences and perhaps thousands of talks in my career I have found that a great talk is one that inspires me to read the paper and want to talk to the speaker about the work. A great talk is not about the slides, but about the speaker. The focus of the audience should be on the speaker, not on the slides. The slides only amplify what the speaker is saying. How the speaker connects with the audience makes people want to listen, so it is paramount that the speaker know who the listeners of the audience are. Think of speaking at a conference as a teaching moment and the great teachers teach to the level of the students, not over their heads. Naturally, it is always good to progress slowly and deliberately through a talk so that everyone can keep up.

Common Accommodations

It helps to understand some of the common accommodations that are used among audience members and their implications in your talk.

Personal assistive listening devices for people who are deaf or hard of hearing include hearing aids and cochlear implants. Since these devices generally do not completely restore hearing, those wearing them often want to be able to read the lips of speaker simultaneously while listening. This may mean that the speaker should be a close as possible to the audience and face the audience as much as possible. Some assistive listening devices have FM capability. In this case the speaker may be asked to wear an additional microphone so that speaker's voice arrives more clearly at the listening device.

Sign language interpreters are often requested by deaf audience members. It is important to recognize that a deaf audience member using an interpreter can only focus on one thing at a time: the interpreter, the speaker, or the slides. Furthermore, interpreters are really language translators, so there is a slight delay from when the speaker says something to when the deaf person gets the same information. This means when referring to information on a slide, it is good to pause for a moment to give time for the translation and change of attention to the slide.

Real-time captioning is another request that can be made by deaf audience members. Such requests are typically satisfied by using a professional captionist, who in real-time creates a written transcript of what is said. The transcript could be output on a screen for everyone to see, or in some cases be output on a laptop display. It may be in the not too distant future automated or crowdsourced speech to text may replace professional captionists. Regardless of how real-time captioning is done, it is important to note that a deaf audience member can only focus on one thing at a time: the captions, the speaker, or the slides. Again, there is a slight delay in transforming speech to text. This means that the same principles that apply to sign language translation also apply to real-time captioning.

Advance materials may be requested by blind or low-vision audience members. A speaker may be asked to provide an advanced copy of the talk in an accessible format. Fortunately, PowerPoint and some other systems support accessibility such as alternative text for images. The notes section of each slide can be used to provide textual descriptions as well.

Some Additional Practical Suggestions

Here is a short list of practical suggestions for giving an accessible talk.

- **Minimize the amount of text on slides.** This should help keep the focus of the audience on what you are saying. As soon as the slide appears pause for a few seconds to let people read it before saying anything. This will allow deaf people and everyone else in the audience to read the slide before you start talking. Repeat the text on the slide to make sure blind people in the audience know what is on the slide.
- **Minimize the number of visuals on slides**. Again, this should help keep the focus of the audience on what you are saying. Each image should be described so that blind people in the audience will know what is there. Graphs and charts should be described and summarized.
- **Minimize the number of slides.** No one wants to be shot with a fire hose while trying to understand your talk.
- **Make graphics as simple as possible.** No one wants to read a complicated graphic when there are only a few important facts about it. Save the complicated graphic for the paper.
- **Use high contrast and take care with colors.** Audience members with low vision or color blindness will appreciate it.
- **Control the speed of animations** so they can be described fully.
- **Make sure that videos are captioned and audio described**. Sometimes it is good to give a brief description of what is in the video before it is played. This will help blind audience members to establish context for what they will hear.
- **Make sure the question and answer period is accessible.** If there is a microphone for questioners, make sure they use it. Otherwise, repeat the questions so everyone can hear them.

Resources

Here is a short list of resources that may be valuable in preparing your talk and your paper too.

- Anna Cavender, Shari Trewin, Vicki Hanson, General Writing Guide. http://www.sigaccess.org/welcome-to-sigaccess/resources/accessible-writing-guide/
- Shari Trewin. Accessible Conference Guide. http://www.sigaccess.org/welcome-to-sigaccess/resources/accessible-conference-guide/
- ClassACT. https://www.deaftec.org/classact
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- Holcomb, T. & Foster, S. (1992). Communication in mainstream classrooms: A matter of courtesy. *Perspectives in Education and Deafness*, 11 (2), 10-11.
- Sheryl Burgstahler. 2011. Universal Design: Implications for Computing Education. *Trans. Comput. Educ.* 11, 3, Article 19 (October 2011), 17 pages. See page 7.
- Cary Supalo. Techniques To Enhance Instructors' Teaching Effectiveness with Chemistry Students Who Are Blind or Visually Impaired. *Journal of Chemical Education* 2005 *82* (10), 1513