



# Equal Access: Universal Design of Your Presentation

A checklist for making your presentation welcoming and accessible to everyone

**DO-IT** by Sheryl Burgstahler, Ph.D.

Increasing numbers of people with disabilities attend professional conferences and meetings. Most presenters have the goal that everyone who attends their presentation is able to fully participate and access information.

Reaching this goal involves efforts at many levels. To begin with, think about the diverse characteristics that may be present in your audience. Potential attendees may have different learning styles, may not be fluent in the language in which you are presenting, and/or may have difficulty

- seeing,
- hearing,
- moving,
- speaking, and/or
- understanding common phrases and jokes in your culture.

## Universal Design (UD)

A proactive approach to making facilities, information resources, and instruction welcoming to, accessible to, and usable by everyone is called universal design. Universal design means that rather than designing something for the average user, you design it for people with a broad range of characteristics such as native language, gender, race, ethnic background, age, sexual orientation, learning style, and ability.

To apply UD to your presentation, it is important that you know how to present your material effectively to people with a variety of disabilities and respond to requests for specific accommodations. Ensure that everyone feels welcome, and can

- get to the facility and maneuver within it,
- access the content presented,
- access printed materials and electronic resources, and
- fully participate in presentation activities.

For example, the author of this publication regularly employs UD when she delivers on-site presentations by taking the steps described below.

All presentation videos are captioned, website resources are universally designed, handouts are provided in alternate formats, presentation visuals use large bold fonts and are uncluttered, a microphone is used by the presenter, and, before the audience arrives, chairs are moved so that any wheelchair-users who might attend have multiple options for positioning themselves in the room. Efforts are also made to speak slowly and clearly, describe orally all content that is presented visually, avoid unnecessary jargon, define terms that might be unfamiliar to some attendees, make eye contact with and engage many members of the audience, and repeat questions asked by attendees before answering them. These proactive steps on the presenter's part minimize the need for special accommodations. Typically, the only disability-related accommodation requested in these presentations is a sign language interpreter or real-time captioner by an individual who is deaf; such arrangements would be requested ahead of time by the participant from the event sponsor. Particularly positive feedback given by attendees includes appreciation for the flexibility of the seating arrangement by individuals who use wheelchairs, for video captions by attendees who are deaf and by those whose first language is not English, for orally describing visual content by individuals who are blind, and for providing materials in multiple formats by many. (Taken from Burgstahler, S. [2011]. Universal design: Implications for computing education. *ACM Transactions on Computing Education*, 11[3], 19-1-19-17.)



To be prepared for any situation, universally design your presentation as suggested in the paragraphs that follow. These tips provide a good starting point for making your conference presentations accessible to anyone who might be in the audience. Some apply to on-site meetings, some apply to online presentations, and many apply to both.

## Presentation Facilities

Ensure physical access, comfort, and safety.

- Be sure that the presentation location is wheelchair-accessible.
- Keep aisles wide and clear of obstructions.
- Arrange chairs in the presentation room so that a wheelchair-user has multiple options for locations to sit.
- Arrange furniture so that everyone has a clear line of site to the presentation area.
- If your presentation includes hands-on computer activities, place at least one computer on an adjustable-height table. Be prepared to respond to requests for assistive technology. In most cases, it would be reasonable that such requests be made before the event; make the process for requesting technology-related accommodations clear in promotional materials and adopt a procedure to respond in a timely manner.

## Preparation

Prepare for a diverse audience.

- Consider the target audience and the wide variety of characteristics within that audience, especially with respect to the ability to hear, see, speak, understand the language you are speaking in, and move about.
- Create an accurate and inviting description of your presentation for promotional purposes. Include pictures of participants with diverse characteristics with respect to disabilities, race, ethnicity,



- gender to make members of these groups feel welcome at your presentation.
- Include a statement in promotional materials that tells how to request disability-related accommodations for the presentation. For example, the presentation organizer could include “Our goal is to make presentations and related materials accessible to everyone. Please inform staff of accessibility barriers you encounter and request accommodations that will make our presentations and materials accessible to you.”
- Be aware of issues related to communicating with participants who have disabilities. See *Presentation and Other Communication Hints* at the end of this publication for specific guidelines. For further suggestions, consult *Effective Communication: Faculty and Students with Disabilities* at [www.uw.edu/doit/effective-communication-faculty-and-students-disabilities](http://www.uw.edu/doit/effective-communication-faculty-and-students-disabilities).
- Know how to respond to requests for disability-related accommodations (e.g., presentation materials in alternate formats,



sign language interpreters).

## Presentation Materials

- Use multimedia such as videos, overhead slides, visual aids, props, and handouts.
- On visuals (e.g., projected slides):
  - use large (at least 24 point), simple, sans serif fonts (e.g., Helvetica) that can be easily read by most individuals from the back of a large room.
  - use background and text colors that are high in contrast and avoid combinations difficult for people who are color blind to read. Do not use color as the only method for conveying information.
  - make sure that backgrounds are not cluttered and leave plenty of “white space.”
  - use large, simple charts and tables.
  - avoid presenting images of complex charts or tables.
  - present your content in a well-organized manner; allow flexibility to adjust to your audience as appropriate.
  - use clear, simple language and keywords and phrases rather than full sentences.
  - spell out abbreviations and acronyms when first used.
- If you demonstrate web pages, present them in enlarged print that can be read by participants in the back of the room or who have visual impairments.
- Make sure that videos used in your presentation are captioned. It is also a good idea to have them audio described (where additional visual content is verbalized for someone who is blind) or have a transcription available in a text format.
- If appropriate, provide materials ahead of time for sign language interpreters and/or Computer Assisted Real-time Translation (CART) writers so that they can prepare for their translation for students who are deaf or hard of hearing.

## Distributed Materials

Universally design presentation materials for attendees so that they are accessible to everyone.

- If you distribute printed handouts, have a few available in large print and on disks in an accessible format.
- If materials are provided to attendees online, make sure that they are accessibility designed (e.g., format in text, provide a text-based description of the content of images; use a heading structure).

For guidance on how to prepare accessible Microsoft Word and PowerPoint documents, PDFs, and web pages, consult *Accessible Technology at UW* at [www.uw.edu/accessibility](http://www.uw.edu/accessibility).

## Delivery

Make your presentation welcoming, accessible, and inclusive.

- Promote a welcome and nonjudgmental learning environment.
- Warmly welcome participants as they enter the room, making eye contact with each person.
- Let participants know if you will field questions during or after your presentation.
- Speak clearly and in well-modulated tones. Avoid speaking too rapidly or softly. This is particularly important for participants whose first language is not yours and for individuals with hearing impairments and when sign language interpreters or CART transcribers are in the room.
- Use a microphone.
- Face the audience and maintain eye contact.
- Address different learning styles by incorporating a variety of instructional methods that use a variety of senses.



- Speak key content that is presented visually. For example, don't say, "As you can see on this slide" because some may not be able to see the slide. A good idea is to pretend you are presenting your talk as a phone conference and describe your content in the way you would describe it in that situation. Define all terms and acronyms that might not be known by someone.
- Illustrate key points with a variety of examples, real-life experiences, or stories that appeal to multiple demographic groups.
- Repeat questions participants pose to ensure that everyone in the audience understands them.
- Summarize key points.
- Redirect discussion that wanders from the topic at hand.
- Address accessibility issues for activities such as small group discussions.
- If you are using conferencing software, turn on the caption feature, if available.



## Checklist Updates

To increase the usefulness of this working document, send suggested updates to [sherylb@uw.edu](mailto:sherylb@uw.edu).

## Additional Resources

For more detailed content online consult:

- *Removing Barriers: Planning Meetings That Are Accessible To All Participants*  
[http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/other-resources/NCODH\\_RemovingBarriersPlanningMeetings.pdf](http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/other-resources/NCODH_RemovingBarriersPlanningMeetings.pdf)
- *How to Make Your Presentations Accessible to All*  
<https://www.w3.org/WAI/teach-advocate/accessible-presentations/>
- *Accessible Presentation Guide*  
<https://www.sigaccess.org/welcome-to-sigaccess/resources/accessible-presentation-guide/>

For more information about applications of universal design, consult The Center for Universal Design in Education at [www.uw.edu/doit/programs/center-universal-design-education/overview](http://www.uw.edu/doit/programs/center-universal-design-education/overview). The book *Universal Design in Higher Education: From Principles to Practice, Second Edition* published by Harvard Education Press shares perspectives of UD leaders nationwide. Learn more or order online at [www.uw.edu/doit/universal-design-higher-education-principles-practice-1](http://www.uw.edu/doit/universal-design-higher-education-principles-practice-1).

## About DO-IT

DO-IT (Disabilities, Opportunities, Internetworking, and Technology) serves to increase the successful participation of individuals with disabilities in challenging



academic programs such as those in science, engineering, mathematics, and technology. Primary funding for DO-IT is provided by the National Science Foundation, the State of Washington, and the U.S. Department of Education. DO-IT is a collaboration of UW Information Technology and the Colleges of Engineering and Education at the University of Washington.

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## Communication Hints

Treat people with disabilities with the same respect and consideration with which you treat others. Here are some helpful hints when it comes to delivering a presentation, hosting an exhibit, and otherwise relating to people with disabilities.

### General

- Ask a person with a disability if that person needs help before providing assistance.
- Talk directly to the person with a disability, not through their companion or interpreter.
- Refer to a person's disability only if it is relevant to the conversation.
- Avoid derogatory slang or negative descriptions of a person's disability. For example, "a person who uses a wheelchair" is more appropriate than "a person confined to a wheelchair." A wheelchair is not confining—it's liberating!
- Provide information in alternate means (e.g., written, spoken, diagrams).
- Do not interact with a person's guide dog or service dog unless you have received permission to do so.
- Do not be afraid to use common terms and phrases, like "see you later" or "let's go for a walk" around people with disabilities.
- Do not touch mobility devices or assistive technology without the owner's consent.
- Do not assume physical contact—like handshakes, high-fives, or hugs—is okay.
- Understand that not everyone uses eye contact.

### Blind or Low Vision

- Be descriptive. Say, "The computer is about three feet to your left," rather than "The computer is over there."
- Speak all of the projected content when presenting and describe the content of charts, graphs, and pictures.
- When guiding people with visual impairments, offer them your arm rather than grabbing or pushing them.

### Learning Disabilities

- Offer directions or instructions both orally and in writing. If asked, read instructions to individuals who have specific learning disabilities.

### Mobility Impairments

- Consider carrying on a long conversation with an individual who has a mobility impairment from a seated position.

### Speech Impairments

- Listen carefully. Repeat what you think you understand and then ask the person with a speech impairment to clarify or repeat the portion that you did not understand.

### Deaf or Hard of Hearing

- Face people with hearing impairments, and avoid covering your mouth, so they can see your lips. Avoid talking while chewing gum or eating.
- Speak clearly at a normal volume. Speak louder only if requested.
- Repeat questions from audience members.
- Use paper and pencil, or type things out on your cell phone, if the person who is deaf does not read lips or if more accurate communication is needed.
- When using an interpreter, speak directly to the person who is deaf; when an interpreter voices what a person who is deaf signs, look at the person who is deaf, not the interpreter.

### Psychiatric Impairments

- Provide information in clear, calm, respectful tones.
- Allow opportunities for addressing specific questions.