

Effective Communication: Faculty and Students with Disabilities

DOIT

Tips for faculty to fully engage students with disabilities

The effectiveness of communication between students and faculty directly affects each students' success. There is a great deal of stigma associated with disabilities that affect human interaction, and many individuals still hold the misconception that intelligence is somehow correlated with clarity of speech and other communication abilities.

Some students might hear and understand everything that is happening in your classroom, but their contribution is limited because they cannot fully participate through speech. This could be due to specific speech patterns, the stress of putting together clear ideas in a crowded room, or even just the full inability to speak. Students may choose not to use their own voices if they expect they will not be understood. Some use computer-based communication to share their thoughts through a synthesized voice.

The origins of communication-related difficulties may be focused around abilities within the mechanics of speaking, but other conditions impact communication abilities as well. A student with a significant phobia or anxiety disorder may take an extended amount of time to begin speaking. A neurodivergent student may have difficulty getting across a succinct idea in a small group situation. Some students who have chronic medical conditions such as asthma may simply need extra time to express themselves verbally. Side effects of medication can impact spontaneity in speaking.

Even students without diagnosed disabilities may be reluctant to participate verbally in class. Many accommodation strategies that promote effective communication with students who have disabilities can be integrated into how you design your courses as an application of the proactive approach called universal design (UD). This publication provides tips for faculty to ensure that students with communication challenges can fully participate in course activities.

UD Strategies

All forms of communication in class may present minor or major barriers to students with a range of disabilities. Described below are general strategies that may minimize the effect of a communication-related disability.

- Add a statement to your syllabus inviting students who have disabilities to discuss their needs and accommodation strategies with you. Read the statement aloud on the first day and repeat the statement within the first two weeks of class.
- If you plan to lecture or otherwise use primarily auditory delivery, use visual support, such as digital slides. Provide downloadable access to notes or slides with key content.
- Select course materials and media early so that if captioning or alternate formats are required, they can be procured in a timely manner, perhaps with the assistance of disability support services on your campus.
- Provide multiple methods for students to participate and share ideas (e.g., in-class or small group discussions, online forums, live chat options)
- Offer multiple methods for evaluating student achievement (e.g., written assignments, projects, demonstrations, inclass or online participation).

For more UD strategies, consult *The Center for Universal Design in Education* at *www.uw.edu/doit/ CUDE/*. In particular, read the publication Equal *Access: Universal Design of Instruction*.

Accommodation Strategies

Described below are accommodations that may benefit specific students. Be sure to ask each student individually to share with you what strategies have worked and what accommodations would be useful for your class. Use the disability support services available on campus to help with accommodations.

Sign Language and Oral Interpreters

One of the most visible accommodations for a student with a communication-related disability is the presence of an interpreter at the front of the classroom. A professional interpreter translates spoken language into sign language. If a student cannot speak, the interpreter will also voice what the student signs. If the student does not know sign language, an oral interpreter may enhance his/her lip reading skills. Oral interpreters are professionals who understand which words are visible on the lips and can make spoken language more accessible to a lip reading deaf student. Oral interpreters also finger spell or point to help the student follow conversations. Interpreters often work in pairs so that they can take turns to prevent physical and mental fatigue.

Interpreters are not allowed to add or change anything they interpret and sometimes must ask the instructor for clarification or repetition. Using unfamiliar jargon may cause an interpreter to ask for information that the student (who is more familiar with the content) might not have asked. Be aware of the difference between the interpreter asking and the student asking for information. Pacing of presented materials can be challenging to interpreters when passages are read aloud, the speaker talks very quickly, or many technical terms are used. Take time before the presentation to discuss technical vocabulary and other issues with the interpreters.

Captioning Media

When showing films or videos, it is best to use a captioned version that displays subtitles with all information presented orally. If you are not able to get a captioned version of the media, it might be necessary to provide a transcript or use a sign language interpreter during the presentation. Captioning has the advantage of presenting both video and text together. Students who are learning English as a second language also benefit from seeing the English subtitles while hearing the audio. Students who are deaf, hard of hearing, or who have difficulty processing spoken language might need extra time to process this information because they cannot watch the video or film and also read the text or follow the interpretation at the same time. Making the video presentation available for reviewing can benefit these and other students.

Real-Time Captioning

Court reporting techniques have been adapted to classroom use so that people who rely on text to communicate have instant access to the spoken word. A professional captioner sits with equipment to enter what is spoken and presents it on a computer monitor for the student. Sometimes these services include note taking; the student is given an electronic version of the presentation or group discussion. These systems are particularly useful for students who do not effectively follow content aurally but for whom reading printed English is a strength.

Amplification, Headphones, and Assistive Listening Devices

In large lecture halls, using a microphone often assists students who need louder sound but do not use personal listening devices. If a student is using any type of headphone or hearing aid that is receiving sound from the microphone, none of the room noise, including comments, will be accessible. People who have difficulty processing sounds, because of hearing loss or learning disabilities, may benefit from using headphones that directly process sound to the ears and block out environmental noise. People who already have hearing aids may benefit from assistive listening devices such as FM systems, infrared transmissions, and loops. These devices are designed to bring sound directly to the hearing aid from a transmitted location. When assistive listening devices are used, it is important that the person with the microphone repeat questions posed and comments made by people who are not using the microphone.

Note Takers

For some students, listening requires all of their energy. Intense concentration is needed to follow the sign language interpreter, to lip read the instructor, or to process what is being heard. These students may often be unable to take notes and still maintain attention to spoken information. It is important for these students to have access to notes for review. Providing accommodations such as a sign language interpreter or FM system will not replace the need for notes in the same class. Student note takers are often recruited and trained to provide the student who has a disability with notes. Instructors may also provide copies of their lecture notes.

Visual Aids, Reinforcements, and Warning Systems

The use of visual information is a benefit to students with auditory processing difficulties. Visual examples, icons, diagrams, charts, and illustrations can reinforce information delivered verbally. Since, in most classes, a great deal of information is presented verbally, it is helpful for instructors to make references, images, or other information available outside the class that reinforces what was taught verbally. This can be done with printed materials or on a web page.

For students who cannot hear, it is also important that any auditory warning signals for fire, smoke, or other emergencies are available in a visual form (e.g., using a strobe light). This is especially important for students working in isolated locations, labs, study rooms, audio, video, or computer work areas.

Written Assignments, Written Exams, Alternative Lab Work

Sometimes an accommodation adjusts how homework is to be done, but not what is to be done. For example, instead of an oral presentation, a student might be allowed to videotape their presentation or submit a written assignment; an oral exam could be changed to written; or work that is normally done in a lab might be completed with an assistant operating as the limbs and fine motor skills of the student. Make sure that assignments assess student knowledge and skills relative to course content, not the ability to hear, speak, or move.

Email and Written Communication

Classroom comments and student questions can be done by online forum, email, or even handwritten notes if verbal communication in class is difficult, especially when due to anxiety or voice production. These methods allow students more time to compose their thoughts and to provide meaningful participation without using their literal voice.

Communication Assistance, Peer Support, and Extended Time

A third party might be useful for providing communication support. This person might be someone trained to interpret a speech pattern, read a communication board, or help a person make words more clear. Sometimes a student may benefit from having a peer or fellow student provide this support, but this should occur only with prior agreement and coordination between both students, taking care not to put a student on the spot, breach confidentiality, or assume an arrangement without consent.

Extended time on a test or homework is often needed for communicating orally or in writing with or without the aid of communication devices. Even using an interpreter may require more time due to a lag between the reception of the original language and the translation to the output language. Seating, Pacing, and Alternative Arrangements Many students who are deaf or hard of hearing will want to sit close enough to see interpreters, captions, and/or lip read the speaker. Students with some visability-related disabilities may also prefer the front of the room to see presented materials easier. Students who use wheelchairs or have another mobility-related disability may need adjustable-height desks, more space, or another adjustment; having more than just one option and location for adjustable work spaces helps students feel more welcomed and included.

In situations with circles or non-traditional seating arrangements, students with disabilities may have preferences for where they sit. Think about ease of access, ability to see the instructor and interpreter or captioner, desire to sit near a safe-feeling door or away from a distracting window, and more. A student using an assistant may need extra seating for the second person and a student who requires technical aids may need to sit near power outlets or close to a specific piece of equipment. When in doubt, provide options and ask the individual privately.

Consider the pacing of your sessions. If possible, allow for quiet pauses and slowerpaced answers to questions presented in class. Sometimes slowing the pace slightly can facilitate the participation of a student with a communication disability. Alternatively, consider providing smaller groups, seminars, and one-to-one opportunities so that the benefits of interaction are not lost for the student who cannot participate in large classes.

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.

For more information, to be placed on the DO-IT mailing list, request materials in an alternate format, or to make comments or suggestions about DO-IT publications or web pages, contact:

DO-IT

University of Washington Box 354842 Seattle, WA 98195-4842 *doit@uw.edu www.uw.edu/doit/* 206-685-DOIT (3648) (voice/TTY) 888-972-DOIT (3648) (toll free voice/TTY) 509-328-9331 (voice/TTY) Spokane 206-221-4171 (fax)

Acknowledgment

This publication was developed under a grant from the U.S. Department of Education, #P333A050064 and updated with funding from NSF (Award #2118453). Any questions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the federal government.

Copyright © 2024, 2012, 2009, 2006, 2002, University of Washington. Permission is granted to copy these materials for educational, noncommercial purposes provided the source is acknowledged.



University of Washington College of Engineering UW Information Technology College of Education