



Effective Communication: Faculty and Students with Disabilities

DO-IT

Communication between faculty and students with disabilities can directly affect the students' level of success. If interactions are ineffective, student performance is hampered. There is a great deal of stigma associated with disabilities that affect human interaction and a misconception that intelligence is somehow correlated with clarity of speech.

Some students might hear and understand everything that's happening in your classroom, but their contribution is dramatically limited because they cannot participate through speech. For example, some students who have Cerebral Palsy or certain types of brain injuries may experience difficulties in making their ideas clear through speech. Sometimes only close friends and family members can understand their speech. People who have speech impairments 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. Oral exams, oral presentations, and group work may present difficulties if students are not accommodated properly.

Although most of the origins of communication-related disabilities are speech, language, or hearing impairments, there are other reasons a student might have difficulty communicating. A student with a significant phobia or anxiety disorder may take an extended amount of time to begin speaking in public. The same student might also have a great deal of difficulty answering a question posed to him in a small group situation. Some students who have chronic medical conditions such as asthma or cancer may simply need extra time to express themselves verbally. Side effects of medication or difficulties breathing can impact spontaneity in speaking. Even students without diagnosed disabilities may be shy or unwilling

to participate verbally in class even if they are paying attention and following all presented information. Accommodation strategies may be useful for students with different abilities and disabilities. Most accommodation strategies can be integrated into how you design your courses but some are tailored to specifically meet an individual's needs.

Accommodation Strategies

It is important for instructors to be aware that all forms of communication in class may present minor or major barriers to students with a range of disabilities. Below are some general strategies that may minimize the effect of a communication-related disability of a student in your class. They are followed by details regarding specific accommodations.

- Add a statement to your syllabus inviting students who have disabilities to discuss their needs and accommodation strategies with you. Read the statement out loud in case students have problems with print format. Repeat the statement within the first two weeks of class.
- Ask a student who has identified himself as having a specific disability to share with you what strategies have worked and what accommodations will be useful to him in your class. Use the disability support services available on campus.
- If you plan to lecture or use primarily auditory delivery, ensure you use adequate visual support, such as a computer-based projection system. Provide printed handouts 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.



- If your classroom activities involve verbal participation, ensure alternatives or support for students who have difficulty speaking. Examples are provided in the subsections below.
- Use multiple or alternative methods for evaluating student achievement (e.g., written, projects, demonstrations, in-class participation).

Sign Language and Oral Interpreters

One of the most visible types of accommodations for a student with a communication-related disability is the presence of an interpreter at the front of the classroom. A professional interpreter is trained to translate spoken English (and other languages) into sign language. If the student cannot speak, the interpreter will also reverse interpret or voice what the student signs. If the student does not know sign language but needs to be able to lip read consistently, an oral interpreter is used. Oral interpreters are trained professionals who understand which words are visible on the lips and can make spoken language more accessible to a lipreading deaf student. Sometimes 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 often 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 out loud, the speaker talks very quickly, or many technical terms are used. Discuss with the disability services office options for training and orientation using interpreters. It is also recommended to take time before the presentation to discuss technical vocabulary and other issues with the interpreters themselves.

Captioning Media

When showing films or videos, it is important 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 to use a sign language interpreter during the presentation. 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. 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.

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 trained professional sits with equipment to enter what is spoken and presents it on a computer monitor for the student. Sometimes these systems also provide a note taking service by giving the student an electronic version of the presentation or group discussion. These systems are particularly useful for students who do not follow aurally but for whom reading printed English is a strength.

Amplification, Headphones, and Assistive Listening Devices

In large lecture halls, using a microphone for amplification might assist 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 which 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 device methods are used, it is important that the person with the microphone repeat or rephrase questions posed and comments made by people who are not using the microphone.

Notetakers

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 write 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 that reflect what was taught in class. If a student note taker is not made available, sometimes instructors will provide copies of their lecture notes.

Visual Aids, Visual Reinforcements, and Visual 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 purposes 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

Most students with speech disabilities can complete required homework as assigned. When an accommodation is arranged, it usually adjusts how the homework is to be done and not “what” is to be done. Sometimes an assignment needs to be created or replaced if the original is not feasible for a student with a specific disability. For example, a student who was expected to make an oral presentation might be allowed to use an interpreter or submit a written assignment; an exam that is normally given orally could be arranged in writing; work that is normally done with headphones or in a lab situation might be done in writing or with interpreter support. Make sure that assignments assess the students’ knowledge and skills relative to course content, not their ability to hear or speak. All students should be assessed fairly.

Electronic Mail and Written Communication

Classroom comments and student questions can be done by email or handwritten notes if verbal communication in class is difficult, especially when due to anxiety or voice production. The use of electronic mail allows students more time to compose their thoughts.

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. Never put students on the spot or breach confidentiality by identifying a student with a disability in need of support.

Extended time 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. Extended time in class, for assignments or exams, should be arranged through the disability services office on campus.

Seating, Pacing, and Alternative Arrangements

Most students who have a hearing impairment will want to sit close enough to lip read the instructors and see interpreters or captions. This is usually, but not always, near the front of the room. In situations with circles or non-traditional seating arrangements, the student may have to sit across from the instructor and have the interpreter or real-time captioner sit in the middle. Students with other learning needs may prefer to sit near a door, away from windows that bring in outside noise, or near the instructor. A student using an assistant may need extra seating for the second person and a student using technical aids may need to sit near power outlets or close to a specific piece of equipment.

Consider the pacing of your sessions. If possible, allow for quiet pauses and slower-paced answers to questions presented in class. Sometimes just 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. Following these guidelines will ensure that students with communication difficulties have equal access to information and self-expression.

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. The contents of this publication were developed under a grant from the Department of Education, grant #P333A050064. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

For more information, to be placed on the DO-IT mailing list, or to request materials in an alternate format, contact:

DO-IT

University of Washington

Box 354842

Seattle, WA 98195-4842

doit@uw.edu

<http://www.washington.edu/doit/>

206-221-4171 (FAX)

206-685-DOIT (3648) (voice/TTY)

888-972-DOIT (3648) (toll free voice/TTY)

509-328-9331 (voice/TTY) Spokane

Director: Sheryl Burgstahler, Ph.D.

Copyright © 2009, 2008, 2007, 2006, 2002, University of Washington. Permission is granted to copy these materials for educational, non-commercial purposes provided the source is acknowledged.

Grants and gifts fund DO-IT publications, videos, and programs to support the academic and career success of people with disabilities. Contribute today by sending a check to DO-IT, Box 354842, University of Washington, Seattle, WA 98195-4842.

Your gift is tax deductible as specified in IRS regulations. Pursuant to RCW 19.09, the University of Washington is registered as a charitable organization with the Secretary of State, State of Washington. For more information, call the Office of the Secretary of State, 800-322-4483.



DO-IT

University of Washington

College of Engineering

UW Technology

College of Education