# Tactics for Teaching Deaf and Hard-of-Hearing Students

Deaf and hard-of-hearing students often present unique challenges and opportunities for instructors. This document serves as a starting point for understanding how to address those challenges and opportunities. First, it is helpful to better understand the nature of a student’s hearing loss. Often, students identified as deaf or hard-of-hearing can hear some sounds. The degree to which the student has any capacity for hearing often determines the most effective intervention.

## American Sign Language

Many, though not all, deaf and hard-of-hearing students rely upon an American Sign Language (ASL) interpreter. ASL is widely used among the deaf population. It is important to note that ASL is not a physical representation of English. ASL is its own language with its own unique grammar and syntax. Students who have been deaf since early childhood may have ASL as their primary language and English as their secondary language. Depending upon the learning objectives of a course, this can be an important consideration in courses which rely heavily upon written deliverables.

Many deaf students experienced language deprivation in their primary years. This is largely because 90% of deaf children are born to hearing parents. Less than 10% of those parents will learn ASL to communicate with their children. The consequences of language deprivation in early childhood can persist into post-secondary education.

When an ASL interpreter is present, instructors should look directly at the student when conversing, even though the student will primarily be looking at the interpreter.  This can be confusing for instructors. It helps to remember that their conversation is with the student, not the interpreter.  The interpreter is there to facilitate communication between them and is not a party to the dialogue. Indeed, interpreters are bound by professional ethics to keep the content of their communication with deaf students confidential.

Like their hearing peers, deaf students do not like to be singled out in the classroom. No deaf student wants to be asked how to sign a particular concept during class or be asked to speak broadly about the deaf experience.

## Create a Clear Line of Sight

Make sure that the deaf student can see both the ASL interpreter and the focus of attention, usually the instructor. Allow the interpreter to choose the location from which they will work. Usually this means they will position themselves between the student and the instructor, facing the student (who normally will choose to sit near the front). This way, the student can see the interpreter and easily transition to seeing the instructor or the dry erase board.

Also, it helps when the instructor faces the class while speaking—instead of facing the board—since many deaf students rely upon lip reading to comprehend spoken words. In a classroom where masks are worn, consider using a clear mask to facilitate lip reading. There are many on the market. Instructors can check with AES for availability of clear masks. Fogging of clear masks can be a problem. This is often solved by applying a thin coat of dishwashing soap or commercial anti-fog solution.

In classes where there is a lot of interaction with students, you may consider positioning the students in a circle so that the deaf student can see all participants. A circle arrangement is often best for small group discussions.

## Technology

There are many technological resources to support the learning of deaf students. *Voice lift technology* employs a microphone and a speaker system which amplifies the speaker’s voice. Some units are self-contained and worn by the speaker. The wearable units include the microphone, amplifier, and speaker. Other systems involve microphone and speakers installed at various locations around the room.

Other systems employ wireless technology, often connecting components via Bluetooth. Some students will wear hearing aids or rely upon a cochlear implant. Some students will have both. Technology exists that allows those devices to connect wirelessly to a microphone (which is usually worn by the instructor). Other technologies connect a lapel microphone to the student’s computer which can allow them to listen via headphones (depending upon their hearing capacity).

Another technological option may be *Communication Access Real Time (CART).* Often referred to as “live captioning.” In this circumstance a CART provider listens to the speaker and keys the dialogue using a transcription device. Different than a standard keyboard, the transcription device allows the CART provider to enter text much faster. The output on a video screen—usually the student’s computer—is a textual representation of the spoken word.

Recorded media allow for the use of professionally-created *closed captions*. These are captions displayed during the playback of media which are usually videos or recorded lectures. The captions are created and/or edited by humans. The fidelity of the captions is of the highest quality. The use of closed captions often benefits hearing students as well as deaf and hard-of-hearing students.

Many software applications (i.e. YouTube, Zoom, Google Slides) include an *auto-captioning* feature. The output is similar to the output of closed captions. However, the fidelity is low and these captions are generally not adequate for deaf or hard-of-hearing students. Sometimes auto-generated captions are used temporarily until professionally captioned media are created. This often takes up to 24 hours.

*Otter.ai* is a mobile device app that converts voice to text. It is well-developed and has high fidelity. However, it is not a recommended substitute for an ASL interpreter or CART services. It is, however, highly effective as an ad hoc tool when advanced preparations for other services are not possible.

## Teaching Methods

When speaking, it is important to avoid covering one’s mouth and to enunciate clearly. It is also helpful to avoid speaking too fast and to maintain a steady volume. Sometimes, speakers will drop the first syllable in a sentence. Instead of saying, “I am going to the store.” It sometimes is spoken as “Mm going to the store.” It is a subtle, even imperceptible, difference to those with hearing. For deaf and hard-of hearing students, it makes the message more difficult to decipher.

It is helpful to provide students with written instructions and notes. When a student relies upon an ASL interpreter or CART services, it is very difficult for them to take comprehensive notes. Providing written artifacts supports all students, not just deaf or hard-of-hearing students.

If background noises exist, it is helpful to reduce or eliminate them. This might be a simple as closing the classroom door to block out hallway noises. It also helps students when the instructor repeats questions from the class. A deaf or hard-of-hearing student—or an interpreter—seated in the front of the class may not be able to hear a question from a student in the back of the classroom. Repeating the question is good practice regardless of the presence of a deaf or hard-of-hearing student.

It can also be helpful to ask the deaf or hard-of-hearing student how the class is going for them. This gives them an opportunity to provide feedback and suggestions. The same courtesy can be extended to all students.

## General Guidance

When a disabled student expresses any concern or has any questions related to an accommodation or their disability, it is essential to refer that student to Adaptive Educational Services. To maximize the educational opportunities for disabled students, it is imperative for the student to develop a cooperative relationship with AES. A referral to AES not only supports the student, it also reduces liability for the university. Also, when the student uses a staff interpreter from AES, it is important to understand that the interpreter is there to facilitate communication. They are not there to serve as a representative or liaison for AES. Students should be encouraged to share questions and concerns with AES directly and not through the interpreter.

## Resources

Many resources exist to support faculty when teaching deaf or hard-of hearing students. [Adaptive Educational](https://diversity.iupui.edu/offices/aes/index.html#:~:text=Adaptive%20Educational%20Services%20%28AES%29%20is%20the%20disability%20services,ensure%20the%20implementation%20of%20those%20accommodations%20whenever%20possible.) Services is eager to consult with faculty to offer guidance and advice. Technology interventions will likely involve IU’s [Assistive Technology and Accessibility Center](https://atac.iu.edu) (ATAC). Sometimes, it becomes necessary to involve IU’s [Classroom Technology Services](https://cts.iu.edu/). In addition, [the National Deaf Center on Postsecondary Outcomes](https://www.nationaldeafcenter.org/topics/dsptoolkit) offers many resources online.