

## Supporting students with Hearing Loss

The spectrum of hearing loss ranges from severe generally referred to as deaf, to a moderate hearing loss, which is referred to as hard of hearing or hearing impaired. One percent of Canadians are deaf and nearly 10 percent have some degree of hearing loss. This common yet invisible disability isolates students from peers and instructors, and can diminish their potential for learning.

A student who is deaf will require a non-verbal means of communication, facilitated by reading lips or by interpreting sign language. In some cases a student's speech will be difficult to understand. The student who is hard of hearing may have sound augmented by hearing aids and other devices, and in most cases speech is unaffected.

Most students with hearing loss will speak with their instructors about their specific communication needs, and will have an accommodation plan set up by the Centre for Accessible Learning.

Students with hearing loss need to simplify communication, their speech and written work may be grammatically simple and direct. This is not indicative of level of education or understanding of material.



Methods of communicating can include:

- Lip or speech reading
- Assistive listening devices
- Writing
- Gesturing
- Email, Messaging, TTY Relay
- Sign Language

## Best Practices

In the classroom:

- Adopt Universal Design for Learning (UDL) strategies. UDL benefits all students and promotes a respectful classroom climate with: clear expectations and feedback; a variety of ways to demonstrate knowledge; natural learning supports; multimodal teaching methods; and technology to enhance learning.
- A student may be accompanied by sign-language interpreter or note-taker (transcriber); address any questions, comments or instructions directly with the student.
- Use all available assistive technology.
- Use either a wireless microphone or a mic wired to the teaching station. Repeat all relevant Q&A from other students. Turn off AV equipment not in use.

## Speech Reading

More than just lip-reading, speech reading involves watching the entire face and neck, so facial hair and gum chewing can inhibit it. Speech reading is difficult to master and is never a substitute for hearing. Even under optimal conditions, only 25 to 30 percent of speech is discernible on the lips and face. The rest – generated in the back of the mouth – is invisible. Many vowels and consonants look alike as they are formed on the mouth. For example:

- P,b,m – pack, back & mat appear the same
- “Island view” looks like “I love you”

Because a student cannot speech-read and take notes at the same time, note-taking services, at the student’s request, may be required.

- Allow only one student to speak at a time, and require that they raise their hands and be acknowledged before speaking.
- Repeat questions and comments made by other students.
- Summarize discussion or group work visually (chalkboard, projected image, etc.).
- Incorporate visual aids, handouts.
- Have students sit in circles during group work or if your class is small.
- Lecture only when you are facing the class, and avoid moving around the room.
- Plan a 10-minute break if your class is longer than 90 minutes.
- Consider alternatives to oral presentations when verbal communication is difficult.

#### In the lab:

- Tour the lab with your student and discuss safety concerns.
- Ensure all students have a lab partner.
- Provide lab instructions in writing, beforehand, and written summaries of demonstrations.

#### When communicating one-on-one:

- Maintain eye contact and ask if the student hears better through one ear than the other.
- Ensure you have the student's attention before speaking.
- Speak clearly and concisely, use gestures and keep a writing pad handy.
- A quiet location away from background noises (e.g., HVAC) is best.
- Confirm that the student understands you, ask him/her to repeat key points, and be prepared to rephrase your messages.

#### Avoid the following circumstances:

- Obscuring your face from the student – e.g., speaking while using the blackboard or with your back to a window
- Movement that interferes with voice transmission – e.g., pacing
- Switching topics abruptly

#### A Diverse Group

Students with hearing loss can include:

- **Hard-of-hearing** – the most common type, usually with mild to severe permanent hearing losses. They use hearing and speech to communicate and may or may not use hearing aids, other assistive listening devices, and visual cues to assist them with communication.
- **Deafened or late-deafened** – these people who grew up hearing or hard-of-hearing and then suddenly or gradually experienced a permanent, profound hearing loss. They may or may not use hearing aids, cochlear implants or other assistive listening devices, and rely instead on visual cues, visual assistive technologies or sign language.
- **Deaf** – are people with severe-to-profound permanent hearing losses. They use sign language, speech or a combination to communicate. They may or may not use hearing aids, cochlear implants and other assistive technologies or sign language to help with communication.
- **Culturally Deaf** are people who identify with and participate in the culture and community of deaf people and use American Sign Language to communicate. They may or may not use hearing aids, cochlear implants and other assistive listening devices, and rely on visual cues, visual assistive technologies and/or sign language for communication.

- Showing a film/video without close captioning
- Speaking during a film or video
- Drawing attention to the student's disability
- Speaking slowly, with a raised voice or with exaggerated gestures
- Extraneous classroom noise – students talking during lectures, using keyboards, eating, etc.

## Assistive Technologies

Assistive technologies for hearing loss include:

- **Hearing aids** – work best in quiet environments when listening in close proximity to just a few speakers.
- **FM systems** – A student may ask you to wear a wireless microphone. Frequency-modulated (FM) transmission systems amplify your voice above extraneous noise in the classroom. A student using an FM system can access the audio signal within the transmission range. FM systems have two components, transmitter and receiver. The audio signal travels from your wireless mic to the FM receiver worn by the student. You should repeat any questions or comments by other students before responding.
- **Visual Supports** – such as overhead and computer projection systems.
- **Closed captioning** –use only films that are closed captioned
- **D2L** – make full use of all features. Use it to provide information prior to each class session



## Accommodations that may be arranged by CAL

### In Class

- Wireless FM microphone
- Sign Language Interpreter
- Note taker
- Reserved seating
- Captioning or descriptive video

### Exams

- Additional time
- Instructions regarding exams or quizzes should be given to the student in written form to avoid misunderstanding.