

Module 1. Understanding Hearing Loss

Why...

Students' motivation to engage in healthy hearing behaviours is significantly influenced by their beliefs about the real life impact of hearing loss on day-to-day life (See "Shaping healthy behaviours"). Students are more likely to be interested in protecting their hearing if they understand the extent of difficulties faced by people with a hearing loss.

What...

Module Aim: To raise students' awareness of the real life impacts of hearing loss.

Students will be able to:

- Appreciate what it is like to have a high frequency hearing loss. (This is the type of loss that occurs through noise injury).
- Better understand the need to maintain good hearing health

Lesson Components:

- Students discuss their knowledge of, and beliefs about, hearing and hearing loss
- Students experience simulations of different types of hearing loss through interactive and online activities.

Preparation

- Large piece of paper/smart board to record children's thoughts.
- Access to hearing loss simulations – For all activities this can be done live (via online resources). However some activities also allow for files to be accessed prior to the class and saved for offline use if preferred.

How...

1. Intro/Discussion

Procedure:

1. Begin with the question on the board/paper “**What do you know about hearing?**”

If desired, prompt a discussion with some of the following questions:

- How do we hear?
- Do you know anyone who has trouble hearing?
- Why is hearing important?
- What might you find hard if you had difficulty hearing?

2. Discuss students’ comments and introduce the idea that hearing is important for environmental sounds and particularly for communication. This is reinforced through the following activities.

2. Hearing Loss Simulations

The activities below allow students to explore how the world may sound to someone with a hearing loss. The simulations of different types of sounds can be useful for prompting discussions about the range of impacts hearing loss can have.

The aim of all activities is for students to appreciate the importance of good hearing health, and have a realistic understanding of how their life may be impacted by a hearing loss.

Both of the activities (A & B) may be used to emphasis different impacts of hearing loss on everyday life and the ability to communicate. Or, if time is limited just one may be chosen to explore in more detail.

A. Dangerous Decibels’ “What’s that Sound?”

Description:

An interactive “matching” game that can be done individually or in groups. Students experience how everyday sounds might hear with a hearing loss. The game plays a series familiar sounds (modified to simulate a hearing loss), and students are required to identify and match these to their actual source.

Link: <http://www.dangerousdecibels.org/virtualexhibit/1whatsthatssound.html>

Procedure:

Introduce the matching game as a way of explaining how even familiar everyday sounds may be difficult to interpret with a hearing loss.

Using smart boards or computers children play the game by trying to guess the item or activity that matches the sound they hear. Each sound can be done by the whole class, or individual students asked to take it in turns to guess the sound. (To make it harder, ask students to guess some sounds without the visual clues. Although this is very difficult). When the correct sound is identified, ask students to listen the same sound without the hearing loss simulation and discuss how they may sound different (i.e. quality and volume of sound).

B. Hearing Loss and Understanding Speech

Description:

Four audio speech files simulating different types and levels of hearing loss. Students are given the opportunity to explore the real life impact hearing loss may have on understanding speech, and thus its ability to impair communication with others

Link: <http://www.nal.gov.au/hearing-loss-simulations.shtml>

Procedure:

Introduce the activity by discussing the most important use of hearing for most people – communication with others. Discuss how different types of hearing loss can have different effects on your ability to understand speech.

Introduce and play each of the audio simulations, giving students an opportunity to discuss what information can or can't be easily extracted from the speech files.

Demonstrate to students that simply “turning up” the volume of the files does not necessarily improve comprehension.

A “fill in the blanks” or similar comprehension activity (based on the written transcript – link provided on the site) may also be developed to give students an understanding of the personal frustration resulting from difficulties comprehending speech.

Summary

The aim of this module is for students to better appreciate the value of maintaining good hearing health, particularly for communication. In doing so, students should develop an understanding of the type of difficulties and frustrations experienced by people with a hearing loss.

A short discussion may be useful at the conclusion of the chosen activity/s, including prompt questions such as:

- What sounds were most difficult to hear – did you sometimes confuse them with other sounds?
- Did turning up the volume help?
- What things might make it even harder to hear (e.g. background noise, not facing people)

Optional Extensions

Communication Activities

Description:

Inclusion of activities that reinforce the importance of good communication for team and relationship building. Highlight how easily communication breakdowns can lead to difficulties.

Task:

There are a wide range of activities already in use in most schools that demonstrated the importance of communication. Nearly any of these can be included here to reinforce that message, while also highlighting the role of good hearing for effective communication.

Procedure:

Discuss with students how significantly hearing loss can adversely impact our ability to communicate effectively. Difficulty communicating can lead to frustration. Furthermore it can lead to difficulties developing and building personal relationships.

Run 1 or more communication activities and discuss how communication breakdowns due to hearing loss may affect the outcome.

Preserving your hearing

Description:

A short (downloadable) flash player file from Sensimetrics including information about hearing loss and providing audio examples of mild, and moderate hearing loss as well as the experience of tinnitus. It also includes a simulation of severe hearing loss, as it might be heard with or without a hearing aid.

Link: <http://www.sens.com/pyh/index.htm>

Procedure:

This clip is less interactive than the other simulator options as it is presented in a straightforward “video” format without the ability to pause easily.

As such it is best presented with a brief description of what will be viewed and with a note for students to listen carefully to each of the simulations, concentrating on how hearing loss changes the sound of speech and music.

The clip includes information about hearing loss and hearing loss prevention which may also be discussed briefly at the end of the session.