

# Working with Hearing Impaired Students who use Radio Aids



## ▶ What is a hearing impairment?

People are described as having varying degrees of hearing loss: mild, moderate, severe and profound. Even a mild hearing loss will mean the person will have some difficulty following a conversation or lecture. If the person uses a hearing aid they may benefit from an induction loop or radio aid. These devices are described below. A profoundly deaf person may have to rely on lip-reading and/or sign language through an interpreter if they know that language. So as not to discriminate against a student, you may need to use induction loops, radio aids or infrared systems in different teaching rooms and situations.



## ▶ What is an induction loop?

“An induction loop is a cable that encircles the audience area. It is fed by a loop amplifier. This gets its signal from a microphone placed in front of the person speaking or by means of a direct connection from a sound system or other sound source. The resulting electric current in the loop produces a magnetic field corresponding to the speaker's voice. This magnetic field can then be picked up by anyone within the area of the loop if they switch their hearing aid - or loop listening aid - to the ‘T’ setting. Listeners will need to adjust their own hearing aids for volume. You can choose to supply receivers to people who do not have a suitable hearing aid.” (RNID factsheet ‘Induction loops and infrared systems in public places’ - Aug 2002).

Remember:

1. Check that the induction loop is turned on
2. Put on and turn on the microphone
3. Try and face the audience as much as possible

## ▶ What is a radio aid?

A student may ask you to wear a radio aid transmitter. This is for use with a hearing aid and is an amplifying device that transmits sound into the hearing aid via a neck loop or direct input connection. This particular device has a very high clarity of sound as it cuts out background noise and directs the desired sound electronically into the hearing aid. A transmitter and receiver are needed. The system is wireless and can be worn discreetly. The student will wear the receiver and will either plug that into their hearing aid, wear a neck loop (like a mini induction loop) or wear headphones. Whoever is speaking, for example the lecturer, or individual speaker in a seminar, will need to wear or hold the transmitter.

If there are questions as part of a lecture it may be more practical for the lecturer to repeat the questions before answering, to save passing the transmitter around a large hall. However, for a smaller seminar group, it is important that the group leader ensures that people in the group are aware that they should only talk when they are holding the transmitter. It also helps the hearing impaired person to know who is speaking so they can also lip-read if they need to.

### ▶ **What is an infrared system?**

“Infrared systems use invisible infrared light to carry sound to receivers worn by listeners. The complete system consists of infrared radiators, a pre-amplifier or mixer unit and a microphone or other audio input source. Sound - perhaps the voice of someone talking into a microphone - is fed into the pre-amplifier or mixer, where it is processed and passed to the radiator for transmission as invisible infrared light. Radiators cast infrared light over the listening area, rather like floodlights. You may need one or more infrared radiators, depending on the size of the venue.” (RNID factsheet “Induction loops and infrared systems in public places Aug 2002).

Remember:

1. Check that the infrared system is turned on
2. Put on and turn on the microphone
3. Try and face the audience as much as possible

### ▶ **Quick guide**

- Ask the student how best to manage a seminar, as these situations can be very difficult to follow and it is important they feel included.
- Ensure that members of the seminar group are aware of the etiquette, i.e. that only the person holding the transmitter should be talking.
- If the student misses something that is said, it should be repeated by the person holding the transmitter.
- It is important that the deaf student can see people’s faces, so try and arrange the seminar group in a circle or square to help the student with lip-reading. N.B. Hearing impaired students will often employ a number of strategies to pick up as much information as possible. A radio aid will help make their hearing better, but it will not make it the same as someone without a hearing loss.
- If someone is sitting against a window, it will put his or her face in silhouette. Try and avoid this as it will make lip-reading difficult. If possible close curtains or blinds and turn on room lighting.

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