

Suggested Teaching Strategies: D/deaf and hard of hearing Students

Deafness is a term used to cover the whole range of hearing loss. The RNID (Royal National Institute for Deaf people) uses the term to cover people who are: D/deaf, partially deaf/partially hearing, deafened, deaf/blind, hard of hearing, or experience tinnitus. The following information is a basic guideline for effective communication with people with a hearing loss. Deaf and hard of hearing people vary greatly in their chosen communication methods, and the skill with which they do it.

However, main communication is likely to be via:

- Listening
- Facial expression
- Lipreading
- Gestures
- Speech
- Mime
- British Sign Language (BSL) which has its own structure and syntax, and is different from English which may effectively be their second language.
- Writing
- A combination of these!

How could this affect the student's work?

In the majority of situations deafness may not affect a student's work. The biggest problems experienced by deaf students at Newcastle are in hearing what goes on in lectures and seminars.

Although many lecture rooms are equipped with induction loops, not all students find these effective.

For information on facilities available in teaching rooms at the University see:

<http://www.ncl.ac.uk/iss/teaching/rooms/locations/roomlist.php> Deaf students will need more time to assimilate the new language of their subjects - limited access to the spoken language around them inhibits the assimilation of vocabulary and forms of expression. Also the auditory memory is likely to be less useful for them than for other students as an aid to study - it is thought that this aspect, vocabulary assimilation, and the lack of 'inner voice' when reading, can significantly affect reading fluency. For some, written expression may be affected by deafness.

How should tutors and teaching staff react?

Teaching Strategies

There are a number of strategies which can be used by teaching staff which will help enormously, and there is an important role for tutors in educating other student members of seminar groups, so that the simple tactics outlined below are used by everyone.

To effectively meet the communication needs of a deaf student in the context of higher education settings, the following should be considered:

1. Personal Delivery

Lipreading requires great concentration. Three quarters of it is guesswork and, for this reason, clear speech and contextual clues are vital for understanding.

Speech:

- Speak clearly and at a reasonable pace. Try to keep the rhythm of your speech as natural as possible. If in doubt ask the deaf student if the pace is right.

Visibility:

- To be able to lipread the deaf student needs to be able to see your face.
- When speaking make sure that your mouth is not covered in any way and ensure that you face the person to whom you are speaking .Try to keep beards and moustaches trimmed; do not cover your mouth with pens, cigarettes, coffee cups or hands while speaking.
- Try not to nod your head too much or speak while writing on the board or walking around the room as this creates nearly impossible lipreading conditions.
- Ensure that the light is on your face and never from behind you as this will leave your face as a silhouette.

Face:

- Try to maintain eye contact when talking to a deaf student one to one.
- Try to use expression in your face as well as gesture as this helps to convey the sense of your words to a lip reader. Make use of natural gesture and facial expression as a clue to meaning.
- Speak clearly; but avoid speaking artificially slowly, exaggerating your lips, or shouting as this affects the natural rhythm of speech.
- Check comprehension; encourage and direct questions.

Position:

- The deaf person should be seated to best advantage. She or he will know where best to sit. This will usually be a seat near the front, slightly to one side of the speaker (the optimum distance for lip-reading is about 6 feet).
- Allow the student to position themselves so that he/she can lip-read you easily and see the projector or board and as much of the class as possible if there is to be a group discussion.

Distractions:

- Try to keep light reflecting or bright jewellery to a minimum, and wear plain clothes. Bright clothes, especially checks, stripes or dots can make concentration difficult.

Gaining Attention:

- Be aware that you will need to attract the deaf person's attention before you start speaking.; firstly try to get into their line of sight, and if that is not effective consider touching the person gently on the arm, bearing in mind it may startle them. It may be useful to agree a "signal" with the student for when you are about to start. This could be a wave of your hand at the student, flashing the lights on and off or, if necessary, asking the person's neighbour to tap a shoulder or arm to alert him or her.

Equipment:

Deaf or hearing impaired students in your lectures and supervisions may be using one of the following amplification devices:

- Hearing aids.
- Radio frequency system or
- Cochlear implant.

Many lecture theatres have been fitted with an induction loop which enables people using hearing aids to have direct input from the lecturer's microphone, thus eliminating background noise. Please remember to turn on the microphone!

None of these devices replaces hearing but all will benefit the student in some way.

Working with interpreters

- BSL sign users will need interpreters during lectures. Make sure that the interpreter is within hearing distance and ready before you start talking.
- Speak directly to the student not the interpreter.
- The interpreter always lags a little behind the speaker. Be aware of this. You may have to pause or speak more slowly to ensure the interpreter is keeping up.
- If the interpreting has been intensive, provide a rest break every 15-20 minutes or negotiate an appropriate time with the interpreter as signing is intensive and tiring work.

2. Presentation

Context:

- Before starting a discussion or changing the subject let the deaf person know the topic being discussed.
- Try to include contextual clues whenever talking most lip-reading is guesswork. Lip-reading is much easier when the subject area is known.

Structure:

- Try to follow a logical structure for your session as this makes lip-reading easier to follow.
- If possible, let the student have a copy of your written notes before the lecture as this will help with following an argument.

Pace:

- Try to allow a little extra time for the deaf student to assimilate information and respond before going on to the next stage.
- Break the session up so that the deaf student is not lip-reading for long periods at a time.

Contributions:

- If you are speaking to a deaf person in a group try to ensure that only one person at a time speaks so that he/she can more easily follow the thread of the conversation.
- Questions and contributions from elsewhere in the room, especially if they are from behind the student will not be heard.
- Repeat the question before going on to answer it.
- Check comprehension; encourage and direct questions.

3. Use of Visual Aids

Vital Information:

- Ensure that students receive important information such as assignment details and changes in class times. Remember that deaf or hearing-impaired students may miss it if it is only advertised verbally so back it up with an email or written note for everyone.
- Write out vital information such as changes of meeting time or venue on the board or overhead projector to make sure that the deaf person is not left out.
- Make use of visual material, i.e. handouts, key vocabulary, diagrams, written instructions.

New Vocabulary:

- Try to provide new vocabulary in advance or write it on the board or OHP. Unknown words are impossible to lipread.
- Write important new words on the board to fix their form.

Reading Time:

- When using OHPs, boards or flipcharts, allow the students' time to read what is written before starting to speak.
- Be aware that a deaf person cannot read or take notes at the same time as lip-reading - allow time for a student to look at the relevant section of a handout, and then make sure you have his or her attention before you comment on it.

Boards and Flipcharts:

- Try not to speak when writing on the board. Students cannot lipread the back of your head.

Overhead Projectors:

- These can be particularly helpful, but remember that OHPs can be noisy which may be difficult for those who use hearing aids.

Slides:

- When using slides in a darkened room leave a curtain open or a spotlight on the speaker or interpreter or turn up the lights again before beginning the commentary.
- It is generally considered good practice to provide all students with a copy of OHTs and slides.

Videos and Tapes:

- Try to use subtitled videos where possible or obtain a transcript of the commentary.
- Alternatively an interpreter may interpret the video if the student uses BSL, but it will be useful if they have seen the video in advance.

4. Lectures

Handouts:

- Well prepared handouts provided in advance to allow reading time will increase the amount that a deaf student gains from your lecture.
- Some deaf people who communicate in BSL may find written English more difficult to understand, as the two languages are very different. Therefore, printed materials may need to be in plain English to assist deaf people to access these.

Position:

- Try to stay in the same place and not move around while you are talking.

Booklists:

- Make sure that you give the deaf student relevant booklists well before the start of the course. A deaf student may rely more heavily on text books than lectures and so easy availability is a great help.

5. Seminars

For deaf students group discussions are probably the most difficult situations to deal with. But there are ways of overcoming some of the problems.

Size:

- The optimum size of group for a deaf person is between 6 and 10. If a group is bigger than this it is unlikely that people will be near enough to lipread and following contributions to discussions becomes more complicated.

Seating:

- Arrange the room so that the student can see everyone by putting chairs in a circle or horseshoe shape – this allows the deaf student to locate the speaker more quickly. Make sure no one is silhouetted against the light.

Chairing:

- Allow the deaf student to take his or her share in chairing the discussion.
- When someone else is chairing make sure that this person controls the discussion, encourages mumblers to speak up and prevents unnecessary interruptions when people are speaking.

Equipment:

- If the student is using a radio microphone or loop system, remember that all contributors to the discussion will need to speak in to the microphone.
- Ensure that this is known to the group before discussion starts.
- Ensure that members of the group raise their hand before speaking, so that the deaf student is alerted to a change of speaker.
- Do not allow more than one person to speak at a time.

6. Practicals, Lab and Studio Work

A variety of different situations can arise in practical sessions.

Examples could be:

- Do not stand behind the student when he or she is working. Remember also that the student cannot watch the work and lipread you at the same time.
- When teaching points arise during the session as a result of supervising the work of other students, remember to attract the deaf student's attention before speaking.
- Make sure that the deaf student can see clearly what you are saying and doing when giving a demonstration.

7. Fieldwork and Placements

Special provision may have to be made for students on field trips or on placements.

- A student who copes well with lipreading in a lecture theatre may be quite unable to manage without further support when on a windy beach or moor or in a noisy factory.
- Be flexible and talk through the possible options and solutions with the student well in advance to avoid problems.

8. Timetabling

Rearranging the timetable slightly can make an enormous difference to a deaf student. Examples are given below:

Lectures:

- Try not to fill an entire day with contact teaching. Lipreading is tiring and a few hours every day is best.

Tutorials:

- If a student uses an interpreter or communicator remember that this needs to be taken into account in the timing of tutorials.

9. Choice of Room

This can be vital to maximise the amount which a deaf student can gain from a session.

Students will generally already have their personal hearing aid system if appropriate to their needs; the following outlines how these and other technical aids work in the teaching situation. Teaching staff should note that these systems will not work where students have insufficient residual hearing to use a hearing aid.

Lighting:

- Choose a room with good lighting where light will be concentrated on the speaker's face.
- Rooms with windows directly behind the speaker are not good as they will leave the speaker as a silhouette.

Background Noise:

- Choose a quiet room without background noise from traffic which may make it difficult to hear - hearing aid users are more distracted by background noise than hearing people.
- If students are being divided into groups for a session try not to put more than one group in a room as the discussion of another group can make it difficult to decipher what is being said nearby.

Acoustics:

- Try to choose a room that has been acoustically treated. Carpet, soft furnishings, ceiling tiles to absorb sound all make it easier to hear.

Amplification Systems:

- Check that the room is suitable for any technical equipment that may be used.
- Can the amplification system already installed be used in conjunction with a portable loop or with a radio microphone system?

Radio Microphone System:

consists of a microphone given to the lecturer which transmits to a receiver worn by the student.

- A radio microphone does not amplify your voice but transmits radio signals directly to the user's hearing aid.
- It helps to eliminate problems of distance and background noise and so is ideal for lectures and to a lesser extent seminars.
- A hearing aid user will only be able to hear what the microphone user is saying; they will not be able to hear anyone else.
- In a seminar situation, the deaf person will either place the microphone in the centre of the table to pick up individual contributions, or, if the microphone is not sensitive enough, it will have to be passed around to whoever is speaking.

Induction Loops :

also help to eliminate the effects of distance and background noise and are again used in conjunction with a microphone used by the speaker and sometimes with an existing amplifying system.

- The microphone is connected to an induction loop fitted around the perimeter of a room. The student is able to hear sound, picked up by the microphone, through his or her hearing aid within the loop. Again, anything not said into the microphone will not be heard by the deaf student.
- In general, induction loops are fitted into most lecture theatres.

Portable systems are also available which can then be moved from room to room. For information about the facilities in teaching rooms see:

<http://www.ncl.ac.uk/iss/teaching/rooms/locations/roomlist.php>

Decoration:

- Try not to choose a room with bright or distracting wallpaper or pinboards behind the speaker. This can make it difficult to concentrate on the speaker. If necessary, use a screen behind the speaker.

Digital Recorders:

- These can be used by students with a substantial amount of residual hearing and are useful for keeping a record of lectures to be listened to at leisure afterwards and stored on their computers if they wish as sound files.

- The advantage of recording or using ReCap is that any words or sentences which are at first difficult to hear can be replayed several times, possibly using a neck loop and hearing aid or a set of lightweight headphones.

Human Support:

A deaf or hearing-impaired student may use a note-taker, scribe or computer operator to write in lectures, tutorials or social events. This may be required in addition to an interpreter.

Note-takers:

- it is impossible to lip-read a speaker or follow an interpreter while at the same time taking notes. Using a note-taker may be the only way the deaf student has of obtaining a permanent record of the lecture.
- Note-takers should take down salient points, dates and references, they receive in-depth training from the external agency and will follow the instructions of the deaf student about what should be included or excluded.
- Note-takers in the University are employed by an external agency which works in close conjunction with the Student Wellbeing Service and the student.

Lipspeakers:

- Useful for those who do not use sign language but who find a tutor or lecturer difficult to lip-read.
- A lipspeaker repeats the words of the speaker without voice. They produce clearly the shape of words, the flow, rhythm and phrasing of natural speech and repeat the stress as used by the speaker.
- The lipspeaker also uses facial expression, natural gesture and fingerspelling (if requested) to aid the lipreader's understanding.
- Lipspeakers are used by people who use lip-reading extensively and who have a good command of the English language.

Interpreters:

- Used by students who prefer to communicate through British Sign Language (BSL) or Sign Supported English.
- A deaf person may use British Sign Language (BSL) as their first language. This is a language with its own grammar constructions that are different from English. An individual may have some difficulties communicating effectively in written language but may be a very good communicator in BSL.
- Some hearing impaired students may use Sign Support English (SSE) rather than BSL. SSE is not a language in its own right, but more a kind of English with signs.
- If a deaf person is accompanied by an interpreter you should speak directly to the deaf person. However, not all deaf people will know or use sign language.
- The interpreter will translate what is said by the lecturer or tutor into sign and will provide a voice over for the deaf student's own signed contribution if required.
- It is helpful to employ an interpreter who has some knowledge of the subject matter, especially if the vocabulary is highly specialized.
- Interpreters are qualified to a minimum of Level III Certificate in BSL (<http://www.signature.org.uk/> Signature – until January 2009 CACDP, the Council for the Advancement of Communication with Deaf People, administered training and examinations for sign language qualifications, etc.).

Sources of further information

TechDis: A Joint Information Systems Committee (JISC) funded service which provides information, advice and resources for supporting disabled students in HE and FE. Details available from :
www.techdis.ac.uk

“Accessible Curricula: Good Practice for All”

A guide published jointly by UWIC (University of Wales Institute, Cardiff), The Learning and Teaching Support Network Generic Centre and TechDis. Available from:

http://www.jisc-techdis.ac.uk/techdis/resources/detail/investinyou/Accessible_Curricula

A framework for assessing and addressing curriculum accessibility issues produced by a partnership of five West of Scotland HE institutions as part of a project funded by Scottish HEFC.

<http://www.teachability.strath.ac.uk/>

SCIPS - web based resource that provides Strategies for Creating Inclusive Programmes of Study) SCIPS is a resource, primarily for teachers and trainers, developed by Dr Val Chapman (NTF) at the University of Worcester. It offers strategies for promoting inclusive teaching, learning and assessment within programmes of study taught at degree level (including foundation degrees).

<http://www.scips.worc.ac.uk/challenges/auditory.html> The Open University provides a range of information on inclusive teaching and assessment across a range of disabilities, including deafness:

<http://www.open.ac.uk/inclusiveteaching/pages/inclusive-teaching/recognising-barriers-deafness.php>