

# KNOW YOUR STUDENT

FACT SHEETS TO GUIDE THE  
LEARNING AND ASSESSMENT  
OF STUDENTS WITH SPECIFIC NEEDS



## Deaf or hard of hearing (support personnel and technology)

This factsheet is one of three relating to people who are Deaf or Hard of Hearing. It should be read in conjunction with the other two fact sheets:

- Teaching, learning, assessment and workplace communication; and
- Working with Auslan interpreters.

### Assistive strategies

These strategies are suggestions only. Customisation for individuals is necessary. The strategies may be applicable to teaching, learning and assessment and to the workplace.

### Support personnel

- **Auslan interpreters** – Auslan interpreters may be employed to facilitate communication between people that use spoken language and people who use signed language. The accompanying factsheet 'Working with Auslan interpreters' provides information on the role of the interpreter and how to work with them effectively for the benefit of everyone.
- **Notetakers** – A person who is Deaf cannot look at you, the interpreter and written information at the same time. Notetakers may be employed to assist people who are Deaf. However, this does not negate the need for people who are Deaf and interpreters to be provided with comprehensive notes in advance of meetings / training sessions.

### Technology

- **Assistive listening devices** – such as FM units, hearing aids or cochlear implants can be used to reduce background noise or amplify the speaker's voice.
- **Captioning** – provides access to television, DVD and video by displaying audio information as text. There are three types:
  - Open captions – superimposed on a television, DVD or video presentation. They do not require any additional equipment to see them.
  - Closed captions – embedded in a television, DVD or video presentation and usually appear at the bottom of the screen. They require a closed caption decoder.

- Live captioning – text is typed and displayed on a computer in ‘realtime’ (immediately after the words have been spoken) by a ‘stenocaptioner’ in the same location. Where the stenocaptioner is in a different location, this is called live remote captioning. Live remote captioning uses an audio phone connection, the internet and a computer.
- **Hearing Loop** – is a coil of wire around a room or part of a room that amplifies sound and reduces background noise. Users of hearing aids can access the loop by adjusting their aids to a certain setting.
- **Text Telephones** (TTYs) – allow typed messages to be sent between two people over the standard telephone line. A TTY is needed at both ends of the conversation. If you do not have a TTY the National Relay Service will act as an operator by typing whatever you say to a person who is Deaf and speak their typed response back to you.
- **Text Messages** –
  - Short Message Service (SMS) – messages sent between mobile phones or between a computer and mobile phone.
  - Email – asynchronous messages and documents sent between computers.
  - Instant messaging – synchronous communication sent between computers.
- **Literacy software** – may be of assistance for people who are Deaf and have English as their second language e.g. Texthelp Read and Write Gold, Freedom Scientific WYNN. Spelling and grammar checkers that are part of word processing programs may also be of assistance.
- **Voice Recognition software** – converts the spoken word to electronic text in real time e.g. Dragon Naturally Speaking. The speaker uses a microphone (lapel, headset, handheld) and the person who is Deaf or hard of hearing uses an electronic device (e.g. computer, Personal Digital Assistant) to view the text. A small amount of time is required for the speaker to ‘train’ the computer to their voice.
- **Video Remote Interpreting** – provides an Auslan user with a sign language.
- **Interpreter** in a different (remote) location. It uses video or web cameras, headsets and a video conferencing tool (software) to connect the interpreter with the person who is Deaf and the speaker.

## Setting up the environment

- Reduce and absorb background noise and reverberation e.g. use a smaller room with curtains / carpet / mats, avoid rooms close to main roads, building sites or similar.
- Arrange seating so that as many faces as possible are visible to the person who is deaf / hard of hearing.
- For people who are hard of hearing, consider that they may wish to sit at the front of the room, or on a particular side of the room (e.g. if they have unilateral hearing loss).

- Auslan users need personal space for signing (approx. 2 meters). The interpreter will also need space and be positioned near the speaker and any visual presentation.

## **Utilising technology to maximise student engagement**

- A reader/scribe can assist learners with reading and writing material.
- Learning materials and information can be converted into formats that are accessible for the learner e.g. audio files (such as MP3 format), Braille (a tactile reading and writing code, which is read using the fingers) or large print.
- Screen reading software such as Job Access With Speech (JAWS) reads electronic material aloud to the user. It provides audible access to electronic information, software applications and the internet.
- Electronic magnification devices are available in portable, transportable, desktop and laptop based forms. They magnify or scan print based materials and objects.
- Magnification software (e.g. Microsoft Magnifier, ZoomText) enlarges the whole computer screen including text and application buttons / navigation.
- Anti-glare screens and reducing the brightness or changing the contrast of computer screens can benefit.
- Connect (also referred to as Desire2Learn) has numerous options to increase accessibility to information provided within Connect. Options such as screen readers, keyboard-only navigation, colour contrast accessibility features and zooming options are all available within Connect. Educators can access information about these options at: <https://connect.tafeqld.edu.au/shared/help/student/content/en/Accessibility.html>.
- Audio recording of training delivery or note taking (a person or digital note taker such as the Neo Notetaker) to assist learners with handwriting difficulties and / or with mishearing and misquoting.
- A Disability Coach or Disability Support Worker can assist the learner with planning and organizing. The benefit to requesting a Disability Coach/Support Worker is that they may be able to look holistically at the support and learning needs of the student and provide some helpful ideas regarding software, or education strategies to help increase the student's understanding, participation and engagement.

## **All of the delivery strategies may be of assistance for assessment**

- *Extra time* – consider providing extra time so that people who are Deaf can check their grammar and syntax in written responses. This may require the use of a computer or dictionary or to have their work proofread.
- *Content focus* – focus on the content rather than English competency, unless English competency is a core requirement of the assessment.

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Where a written response is not clear due to inappropriate English structure, people who are Deaf could be asked to 'read' their work through an interpreter.

- *Oral testing* – consider oral tests with the assistance of an interpreter.
- *Feedback* – be available to provide feedback on draft work / assignments.

## References

- Australian Disability Clearinghouse on Education and Training (ADCET): 'Assistive Technology for Hearing Impaired Students'; 'Communication: Communicating with students with disability'; 'Deaf: Working with sign interpreters'; 'Deaf and hard of hearing – the impact of hearing impairment on learning at university'
- ANTA, 2002, 'A Fair Go in Training for People with a Disability – Meeting your Quality Training Framework obligations'
- Australian Sign Language Interpreters Association (ASLIA) 2007
- Department of Families Community Services and Indigenous Affairs 'Fact Sheet 'Communicating with People who are Deaf or Hearing Impaired' July 2006
- Disability Resource Kit, DET 2004 'How Do I Support a learner who is Deaf or hearing impaired?'
- Deaf Services Queensland 2007
- Swinburne University of Technology 'Teaching Strategies for Deaf/Hearing Impaired Students, Working with Sign Interpreters for Deaf Students'
- Hearing Impairment Department of Education Queensland 1998, 'Teacher Aides Working with Students with Disabilities
- ANTA 2004 'Working With Diversity'

## Further Resources

- Auslan sign bank – an online dictionary of Auslan signs, <http://www.auslan.org.au/>
- Deaf Children Australia, <https://deafchildrenaustralia.org.au/>
- Tasmanian Education Department – strategies for working with students who have a hearing impairment, <https://www.education.tas.gov.au/parents-carers/students-with-disability/>
- The Centre of Excellence for Students who are Deaf and Hard of Hearing (VET Victoria), <http://www.deafconnected.com.au/>
- Deaf Services Queensland, <http://www.deafservicesqld.org.au>