

IncludeAll – Enhancing Practice

Visually-impaired students

What are the key issues?

The majority of visually impaired people, even if registered blind, have some vision even if this is limited to light perception which would tell someone where for instance the windows are, or the presence of major physical obstacles.

Different parts of someone's vision may be affected - central vision leaving only peripheral sight; just the centre portion being affected – 'tunnel' vision; or where the image is mottled or blurred.

Some visually impaired people have a guide dog to assist with day-to-day independent living. These are fully trained working animals and not pets. We have staff and students who have guide dogs and accommodate their needs.

With advances in technology and assistive technology fewer people are learning braille. However tactile messages in the environment such as door signs and lift controls remain important.

The physical environment needs good contrast, audio alerts and tactile indicators. Much of this is now part of the building regulations and incorporated in to the environment as a matter of course - handrails, tactile flooring to indicate the top of stairs, the contrast strip on the edge of steps, or textured paving to indicate a road crossing. There should be sound incorporated to inform and alert such as voice instructions in lifts and flashing indicators for fire alarms. Signage should be in a large and suitable font and with good contrast.

What are the implications for teaching and learning?

Students will need to be taught in a way, and have access to resources, in a format that suits their impairment. This may be braille, audio transcription or large/giant print. These take time to arrange but Information Services offers assistance - www.staffs.ac.uk/support_depts/infoservices/disabledaccess/librarysupportfordisabledstudents.jsp .

Increasingly computer hardware and software has accessibility as standard including audio alerts and screen readers. However, assistive software/technologies do not make everything fully accessible.

PDF do not always work with assistive technologies, and may not be adjustable for those needing different coloured backgrounds. Although usually incorporating a zoom function, cannot be printed in a larger font.

JAWS, or similar screen reading software, needs heading styles and correct layout to identify parts of the document for the user so they can follow the structure and flow. If these are not tagged then the document would sound like one long paragraph.

It takes additional time to read information even in large print or from computer screens with assistive software. It also takes time to assimilate information aurally particularly if the information is complex and has tables, diagrams etc.

Obtaining and organising materials for assignments in accessible formats takes considerable and effort – so the more accessible we make Word and PDF the smoother this will be for students with all kinds of needs.

However, this may not alleviate all the barriers and students may still be at a disadvantage to their sighted peers.

Proof reading and 'scanning' can be problematical so more guidance may be needed on which texts or sections to focus on and leeway in assessing work.

More time will probably be needed for some assignments and assessments due to the time to acquire identify and assimilate material. Access by screen readers or using an amanuensis is not easy and can be slow.

For some activities the student may need a personal assistant and in some environments, such as a lab, a risk assessment may be needed.

What works really well?

- Providing Word[®] documents as well as in PDF as this enables students to print out however they like – font size, different background etc.
- Electronic documents should incorporate heading styles where possible to make them easier to navigate and for use with screen readers (see Inclusive by Design: Producing accessible Teaching Materials).
- Allow recording of sessions; if necessary discussing issues around confidentiality.
- Introduce people, be clear about who is speaking and saying when you are leaving or ending the conversation.
- Visual description of images, audio subtitles and transcriptions.
- Reading out everything on a screen and any questions.

- Anticipating that completing assignments may take longer than usual.
- Some students may demonstrate their knowledge better through oral exams and coursework.
- Keeping the furniture layout reasonably stable. This of course may be difficult or there may be students who have mobility issues who need flexibility of arrangement. Discuss with the student concerned the best way forward.

Further hints, tips and background reading

- ECU (2009) *Sensory Access in Higher Education: Guidance Report*. London: Equality Challenge Unit
- RNIB – Starting University. Website: www.rnib.org.uk/cy/young-people/starting-university
- National HE STEM – Maximising the Potential of Students with VI 'I have a blind student in my maths/science class...' Website: <http://stem.ecs.soton.ac.uk/home>

Checklist for reflection

To take account of visually impaired students:



	✓
Do I ensure my materials are in a flexible and accessible format as far as possible?	
Do I choose film clips with audio sub titles or transcriptions which can be read by a screen reader?	
Does the student know how to access materials in braille or audio transcription?	
How do I communicate with my visually impaired students?	
Are the environments I teach in suitable for my visually impaired students? Can they be improved? Do any necessitate a risk assessment?	

Reflection into action



Having reflected on the above, my key priorities for making my teaching more inclusive are:

Changes I would like to introduce	By when	Indicators that it has made my practice more inclusive

This document is part of an inclusive practice 'toolkit' - *IncludeAll*. The whole Toolkit, as one complete document or as separate documents, can be found on the University website at www.staffs.ac.uk/inclusivepractice .

It is split into four sections: Core Concepts; Inclusive by Design; Enhancing Practice; Checklists for Self-reflection.

The *IncludeAll* Toolkit has been developed by: **Dr Marjorie Spiller** (Academic Development Unit); **Alison Hunt** (Equality and Diversity Manager); **Dave Allman** (Head of the Student Enabling Centre); **MINDSET Project Team** (Faculty of Arts and Creative Technologies).

Staffordshire University,
August 2015