

COMPLEX LEARNING DIFFICULTIES AND DISABILITIES RESEARCH PROJECT (CLDD)

SENSORY IMPAIRMENT

This is a general overview of the implications of vision impairment, hearing impairment and multi-sensory impairment. The impact of impairments for individual students with complex learning difficulties and disabilities would need to be analysed in depth.

What is sensory impairment?

The term **sensory impairment** covers:

- 1 **vision impairment (VI)**, including blindness and partial sight
- 2 **hearing impairment (HI)**, including the whole range of hearing loss
- 3 **multisensory impairment (MSI)**, which means having diagnosed visual and hearing impairments with at least a mild loss in each modality.

Challenges students with VI may face

As these will vary depending on the degree of visual loss and the nature of the problem, it is important to know: the type of VI (e.g. ocular, cortical vision impairment), and condition, the age of onset, how much useful vision students have and any aids they use. Students are likely to have:

- delay in other areas of their development
- difficulties reaching key developmental milestones, such as acquiring communication skills, social skills, mobility and life skills, and understanding abstract ideas
- delayed social use of language, which hinders their ability to make friends.

Supporting students with VI

The following approaches may help students with VI:

- 1 making sure there is access to a VI specialist and a habilitation (mobility and rehabilitation) specialist, providing appropriate resources, such as low vision aids, braille, large print, specialist computer hardware and software etc
- 2 using text with the highest possible contrast (light letters on a dark background may be more legible than dark letters on a light background), with large, bold fonts and simple typefaces (such as Arial), on an uncluttered background
- 3 ensuring lines of text are widely spaced and providing thick paper (so that text does not come through from the reverse side), with a matt finish to cut down on glare, together with large felt pens and pencils and raised or bold lines to aid writing skills
- 4 providing opportunities for hands-on learning involving the use of real-life objects which the students can handle, and supporting verbal instructions with tactile pictures they can feel

COMPLEX LEARNING DIFFICULTIES AND DISABILITIES RESEARCH PROJECT (CLDD)

SENSORY IMPAIRMENT

- 5 repeating instructions and giving plenty of opportunities for multisensory learning, through using taste and smell as well, when appropriate
- 6 helping students to become familiar with classrooms when other students are not there; furniture and flooring can be used to distinguish between different areas of the room, as can sounds and smells; helping students to be organised by having specified places for items to be kept
- 7 considering glare within the classroom with regard to reflection from lighting and the sun; means to reduce glare, such as blinds, indirect lighting and dimmers may be needed, and careful consideration given as to where the students sit
- 8 giving students specific strategies to help them gain social skills.

Difficulties for students with HI

These will vary depending on a variety of factors including the degree of hearing loss, but language and communication may be affected the most. Students are likely to have:

- delays in the development of both receptive and expressive communication skills, including vocabulary, grammar and word order, both orally and through sign language
- developmental, psychological and emotional problems
- difficulties in developing speech, lipreading or signing: British Sign Language (BSL) is sometimes used; Makaton or other simplified signs may be used to support the understanding of spoken language for children with complex needs.

Supporting students with HI

The following approaches may help students with HI:

- 1 helping students to make maximum use of their hearing aids, including cochlear implants, if worn, and using amplified sound systems where available and appropriate
- 2 providing access to teachers of the deaf, specialist and advisory teachers for HI, communication support workers (CSWs), audiologists and speech and language therapists
- 3 being aware of where to stand in relation to students, making sure they can see who is speaking and that the speaker is not standing in front of the window, which makes it harder for the students to see their face
- 4 seating students where they can see their classmates; a U-shape is useful for this, when it can be used appropriately
- 5 improving the acoustics within a classroom by using carpet, putting rubber tips on chair legs, using soft furnishings such as tablecloths and curtains, placing acoustic tiles such as carpet tiles on the walls, and trying to cut down on external noise

COMPLEX LEARNING DIFFICULTIES AND DISABILITIES RESEARCH PROJECT (CLDD)

SENSORY IMPAIRMENT

- 6 providing alternative forms of communication, such as Makaton, pictures or symbols to support communication; make use of visual information to support understanding
- 7 providing opportunities for hands-on learning, so that students can learn by doing
- 8 using Total Communication as an approach – a combination of speech, sign support and fingerspelling.

Difficulties for students with MSI

Although these students will have a combination of hearing and visual impairments, which intensifies the impact of each, the type and degree of hearing and visual impairment will vary from student to student. However, students with multisensory impairment are likely to have:

- 1 much greater difficulty in accessing the environment and the curriculum, than those with a single sensory impairment
- 2 particular difficulties in:
 - communication and developing relationships
 - mobility and interaction with the physical environment
 - putting together information from residual hearing, vision and other senses, and then processing that information
 - understanding time and space
 - transferring skills they have learned and generalising them to other contexts
 - developing abstract thinking.

Supporting students with MSI

The following approaches may help students with MSI:

- 1 having consistent routines and cues to help students to know what will happen next; a secure and stable environment (both social and physical), that provides the best possible conditions to support vision and hearing
- 2 using a wide range of communication options including speech, gesture, sign language, braille, objects, symbols, etc; try to interpret students' behaviour as being a form of communication
- 3 encouraging students to see their hands as tools that provide them with information and help them to communicate
- 4 providing an appropriate curriculum; this may need to be highly individualised, topic based and include opportunities for learning through movement



COMPLEX LEARNING DIFFICULTIES AND DISABILITIES RESEARCH PROJECT (CLDD)

SENSORY IMPAIRMENT

- 5 introducing an interactive approach such as 'intensive interaction', where a close relationship is built up between the learner and the supporter, who follows the learner's lead and tries to establish rapport with them; the pace of interaction is matched to each student's sensory abilities, with the aim of helping them to learn to develop some form of communication.

Encouraging students with no useful sight or hearing to use their hands to explore the world

This can be achieved through:

- watching/touching the student's hands and learning to 'read' them
- instigating shared attention on any object being touched, and encouraging the student to touch objects
- using a hand-under-hand touch to explore objects together and thus lay the foundation for communication
- make your own hands available for the student to manipulate as they wish
- playing interactive hand games

A variety of specialists such as orientation and mobility specialists, physiotherapists and occupational therapists, may be required to ensure that these students reach their potential in terms of mobility and independence.

All strategies and approaches suggested are listed as a general guide and might not be effective/appropriate with all children and young people you are working with. It is important to be aware of context and the specific profile and needs of the child or young person you are working with, creating adaptations and interventions in a way that is personalised to them .