
Advice Sheet D

Impact of vision impairment on access to learning

Pupils with vision impairment are entitled to the same opportunities and access to the curriculum as their fully sighted peers. The aim should be to create an environment in which their independence is promoted and where they can achieve their full potential both academically and socially. In order to achieve this, pupils with VI may require specific, targeted support. This has implications for classroom management, lesson resourcing and the school environment. This advice sheet outlines strategies to help with support for such pupils.

What are some of the implications of vision impairment?

- Many pupils wear spectacles glasses to correct their vision, but relatively few would be considered as being vision impaired. A pupil with severe vision impairment has a partial or total lack of vision in both eyes even if glasses are worn. His/her vision will remain blurred or distorted, or the field of vision (the total area that can be seen by one or both eyes in a particular position) reduced. It has been estimated that over 75% of classroom activities are based on vision, so a pupil who has vision impairment will need considerable support if he/she is to fully access a mainstream curriculum.
- Some pupils have usable vision in only one eye. This is known as monocular vision. If they have perfect or near perfect vision in their good eye the pupil will not be considered as being vision impaired. For most activities one “good” eye will enable a person to see sufficiently well. A pupil with monocular vision may have difficulties with activities that involve judging distance, depth and speed. They may appear a little clumsy and un-coordinated. This will have particular implications for PE/games, CDT, etc. Usually these difficulties improve with time, practice and maturity.
- Many pupils will be unaware that what they are seeing is quite different from what their fully sighted peers can see. Some pupils with vision impairment will have gaps in their understanding of the world around them. They may see very little of the details their fully sighted peers observe in an instant when travelling through environments. Such limitations can be reflected in their general knowledge and vocabulary.
- Pupils with severe vision impairment have a reduced ability to learn incidentally by imitation. Delayed motor development and poor social skills may result from a pupil being unable to easily copy the peer or adult behaviour modelled around them or notice other people’s reactions to their own behaviour.
- Inside the classroom, a pupil with vision impairment may be disadvantaged by not being able to see the teacher’s facial expressions and body movements or follow information presented over a distance. Additionally, a pupil may become dependent on adults to help and support him/her with activities that his/her fully sighted peers would be expected to do independently.
- The lack of acceptance of a pupil with vision impairment as an individual can be a greater drawback than the impairment itself.

Classroom Management

- Ensure the pupil is seated close to the teacher/focus of attention.
- Seat the pupil in a good light, but away from glare. Blinds should be drawn even when not obviously sunny. Glare is often worse in winter.
- Avoid standing with your back to a window as glare and light will silhouette you.
- Keep the classroom organised and orderly and avoid too many changes: the pupil may build up a mental picture of it and rely on memory to locate things. If changes are made to the layout of the room or the wider environment, the pupil should be given opportunities to be familiarised with the new layout.
- Promote self-help, personal organisation and independence skills. Adult support should be deployed thoughtfully to make a positive impact on learning. Avoid adult support becoming a dependency or a 'barrier' to a peer group interaction.
- The pupil will need his/her own copy of a textbook or worksheet. Sharing can mean that he/she cannot see the copy or hold it at the optimum distance that is necessary to suit his/her vision.
- Generally, the more contrasting information is to the background on which it is written, the easier it is to see, e.g. black or dark blue on white.
- Generally, the bigger something is the easier it is to see.
- If pencil is used within the classroom to record information, be aware that the pupil with vision impairment may not be able to see what other pupils are producing in their written work.
- Have an awareness of the association of increased levels of stress and tiredness with having vision impairment. Allow sufficient time for the pupil to hold and examine objects, pictures and materials. He/she may need more time than his/her normally sighted peers to complete tasks.
- Use a multi-sensory approach so that the other senses can be used to reinforce learning. The pupil may want to handle, smell and peer at stimulus object.
- The pupil should be encouraged to develop his/her word processing skills through the use of a laptop computer whenever this is practicable. This will minimise the effect of fatigue when completing near-vision tasks.
- Avoid clutter in board work and displays. Use sensible spacing.
- Display the pupil's work and information for reference at eye level. Draw the pupil's attention to any changes in displays.
- Access to a duplicate set of demonstration materials or resources can be helpful.
- The pupil will not pick up on non-verbal communication. Remember to verbalise when you might otherwise have relied on a look or a gesture.
- Directions need to be clear and specific. "Come over here" might be replaced with "Tom, come over to my desk by the window".
- Be aware of the pupil's vision difficulties in physical education. Colour and size of resources used, positioning in exercises and area over which a game is performed will all have an impact on the ability of the pupil to participate in a lesson.
- To promote good self-esteem, focus on what the pupil **can** do rather than on what they cannot do.

- Low level and high level obstacles that may be hazardous for a pupil with vision impairment should be removed from walls/floor spaces that they will be using.

The school may require an environmental audit to highlight safety and accessibility issues that need to be addressed. A QTVI can advise on this.

Lesson Resources

Checklist for the modification of materials	
The pupils will have to:	Possible teaching, learning and support strategies
READ <ul style="list-style-type: none"> • textbooks • fiction books • worksheets • instructions • atlases 	<ul style="list-style-type: none"> • modify text – preferably re-typed on a computer using good line spacing and an appropriately sized font • good quality photocopied enlargements • keep work on A4 sheets as A3 sheets are large and cumbersome and can make scanning more difficult • encourage pupil to use their prescribed low-vision aids (LVAs) such as a magnifier • record text onto audio • order a large print version of text from a large print publisher or from the local library service • use an adult as a ‘reader’
READ FROM <ul style="list-style-type: none"> • a whiteboard/blackboard • interactive whiteboard • an OHP • PowerPoint presentation 	<ul style="list-style-type: none"> • verbalise board work as it is written • use a clear and uncluttered layout • use an enlarged handwriting script/font • use an ink/font that contrasts well to the background it is presented against, eg black on white • allow pupil to view the information on the interactive whiteboard from the laptop computer to which it is attached or from a secondary monitor screen • print off a copy of the interactive whiteboard screen • provide pupil with a typed version/crib sheet of work presented over a distance to access information at desk • use an adult scribe • provide accessible hard copy of a PowerPoint presentation
COPY FROM <ul style="list-style-type: none"> • a blackboard • a whiteboard • an OHP • textbooks • worksheets 	<ul style="list-style-type: none"> • ensure pupil is seated in most beneficial position for vision (QTVI will advise) • use a clear and uncluttered layout • use an enlarged handwriting script / font • use an ink/font colour that contrasts well to the background it is presented against e.g. black on white • provide pupil with a typed or printed version of the work • in-class support

Checklist for the modification of materials

The pupils will have to:	Possible teaching, learning and support strategies
WRITE <ul style="list-style-type: none">• in draft form• an essay/assignment• a report• a project• instructions for homework	<ul style="list-style-type: none">• use of word processor• allow extra time. Use the opportunity to check for accuracy• accept a shorter piece of work

The pupils will have to:	Action for pupils with VI
RESEARCH <ul style="list-style-type: none">• information from a textbook, catalogue, manual, etc• refer to their own notes• scan & search for information• do research in the library• take notes from dictation• answer question orally• ask for information• participate in role play• join in discussion• give a talk/presentation	<ul style="list-style-type: none">• use computer/internet• check pupil is physically able to scan and search• check pupil's notes for legibility• support with using the library/internet• sufficient time for taking notes• audio recording• address by name when asked to contribute orally
INTERPRET <ul style="list-style-type: none">• diagrams• charts• maps• graphs• tables	<ul style="list-style-type: none">• use of low vision aids• in-class support• work with a 'buddy'• group work• modify/adapt materials/provide a good quality enlargement

The pupils will have to:	Action for pupils with VI
<p>ASSESSMENT/SCREENING Will it involve</p> <ul style="list-style-type: none"> • work of a practical nature • the use of equipment • written instructions • multiple choice • one-word answers • short written answers • essay form <p>completing graphs/diagrams</p>	<ul style="list-style-type: none"> • extra time • use of reader/amanuensis • use of specialist equipment • order large print (LP) or modified large print (MLP) materials from exam boards. Liaise with QTVI) if pupil is used to using LP or MLP materials • tests taken in familiar, well-lit environment.
<p>PRACTICAL LESSONS Will the tasks require</p> <ul style="list-style-type: none"> • location of equipment • use of potentially dangerous equipment • drawing/designing • good hand/eye co-ordination • accurate use of measuring equipment • working as part of a group 	<ul style="list-style-type: none"> • written instructions prepared and adapted in advance • use adult support for safety and to ensure ease of pupil access to tasks eg accurate measurement; to model accurate use of equipment
<p>EDUCATIONAL VISITS Will they involve</p> <ul style="list-style-type: none"> • travel by public transport • being near/crossing roads • use of worksheets • use of maps • observation from a distance • reading/writing while travelling • finding the way around unfamiliar places • an overnight stay 	<ul style="list-style-type: none"> • worksheets prepared and modified in advance of the visit. • use of a voice recorder for note taking • adult support for safety • mobility training • access visit in advance