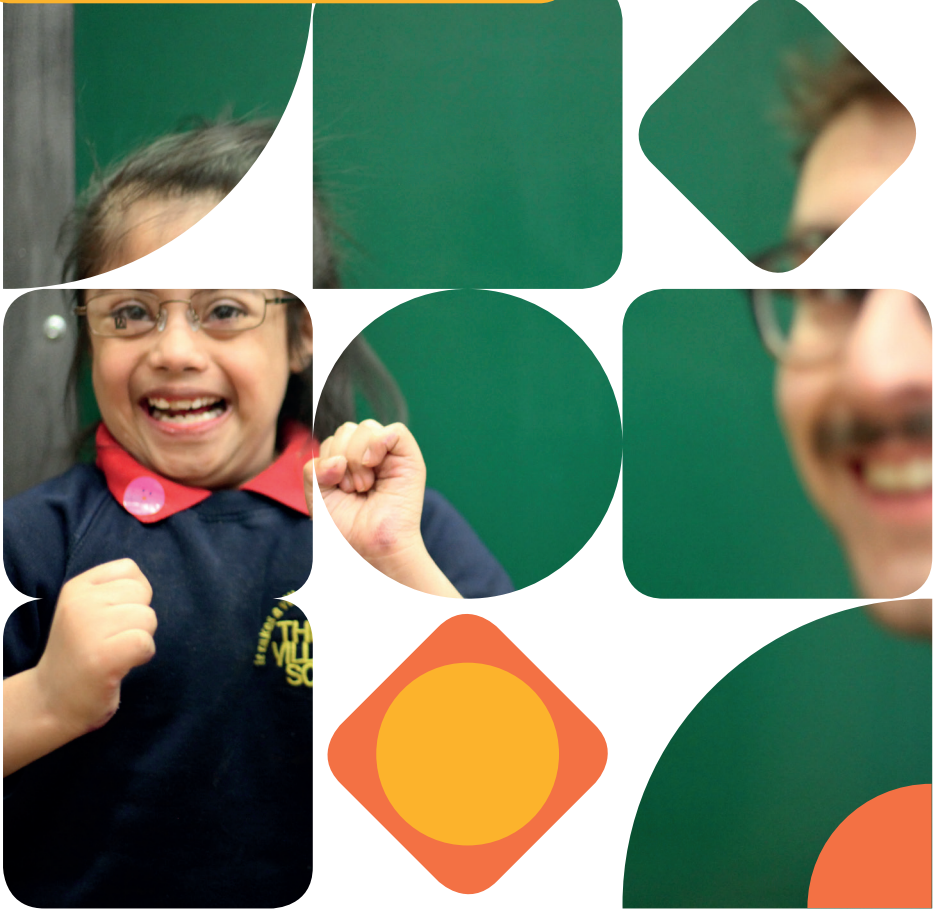


# Understanding the eye care and vision needs of pupils with special educational needs and disabilities

A practical guide to ensure all pupils with SEND attending mainstream and special schools are enabled to make the most of their vision



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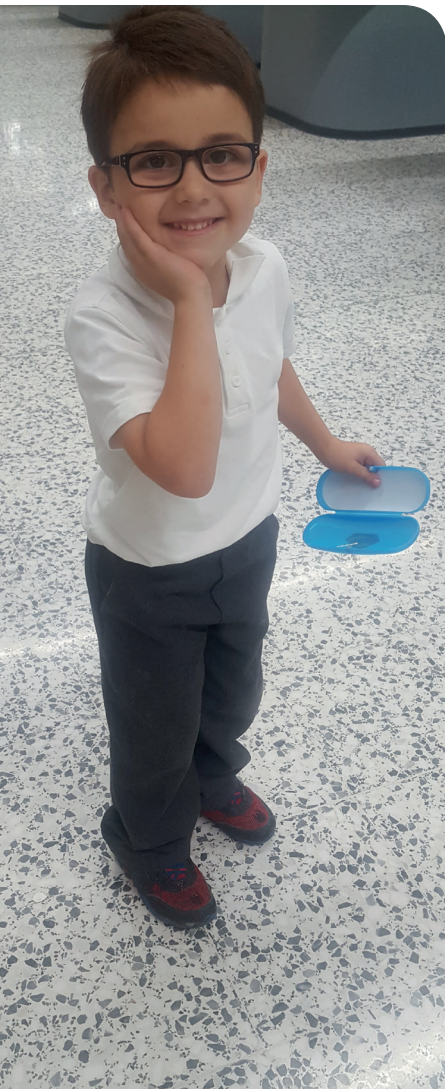
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# Understanding the eye care and vision needs of pupils with special educational needs and disabilities

Written by Laura Christie and others from SeeAbility

This guide is for teaching and support staff, SENCOs, therapists and health staff from mainstream and special schools.



This guide aims to:

- Give an overview of how vision develops in children
- Explore the higher prevalence of sight problems experienced by pupils with learning disabilities
- Dispel some of the myths about eye care and vision
- Share the impact on learning and development of undiagnosed sight problems
- Suggest strategies for supporting children to wear glasses and cope with sight problems
- Give explanations of some common eye problems
- Explain the different eye care and vision professions and their roles
- Provide practical solutions to ensure pupils are making the best use of the vision they have

‘Sight is such an important aspect of children’s learning and life. As a school, we strive to do everything we can to support and enable our children to use their vision effectively. We have learnt so much from working with SeeAbility, which is all packed into this essential guide’

*Claire Barnes, Deputy Head, Willow Dene Special School*

# Introduction – thinking about eyes and vision

Our eyes and vision are used in **everything** we do including:

- Learning – understanding visually presented information and copying actions of others
- Developing skills – following instructions to handle and manipulate objects and materials
- Communication – observing responses and reactions of others
- Moving around – exploring new and familiar places
- Attention – focusing on an activity
- Motivation – exploring things of interest
- Making relationships – gaining trust
- Social interaction – knowing how to behave and respond in different circumstances by observing others
- Keeping safe – avoiding danger and feeling secure



- Appreciating the world – enjoying people, activities and the environment

It is estimated that 80% of everything we learn is processed with vision and it is the sense many people fear losing the most.

Having **good** vision is important for everyone and even more important for those who rely on it more than most.

Most causes of visual impairment can be treated but the leading cause of having poor vision is not wearing glasses when they are needed.

It is essential to understand the impact untreatable visual impairment has in order to make effective adaptations to teaching to provide optimal learning opportunities.

When thinking about a pupil's readiness to learn, we often talk about having their basic needs met so that learning can then take place. Being able to see as well as possible is an essential basic need and impacts on many others.

An eye test is the only way of knowing for certain that the eyes are healthy and vision is good so regular eye tests should be encouraged by schools for **all pupils**. This guide specifically focuses on the eye care and vision needs of pupils with SEND but the information can be applied to all.

**Do you know if and how eye care is promoted in your school?**



## How do we see?

Eyesight, or vision, is produced by the brain, which interprets signals detected by the eye. The eye collects and focuses signals formed when light falls on special cells at the back of the eye (retina) and the signals are sent along the visual pathway, starting with the optic nerve, to a region at the back of the brain. Normal vision therefore depends on having a healthy eye, a clear visual pathway, and a normally structured, healthy brain.

## How do we learn to see?

At birth a baby does not see as clearly as an older child or adult. As the baby grows and develops, the brain undergoes a process of maturation, which involves new brain cell connections being made and others being discarded. As the visual pathway matures vision becomes less fuzzy and other visual skills develop, for example the ability to look actively at things. Vision improves over time and this can be encouraged by having a visually stimulating world to explore.

## How does vision help with development?

Vision is a very important sense in many areas of early childhood development. When a baby turns towards a sound made by an object that is out of sight, they begin to learn that the sound and the object that makes the sound are connected. If a baby can see an interesting toy that is out of reach, this can motivate the baby to reach out for it or to try to crawl towards it.

## When is vision fully developed?

Vision continues to develop and improve up until the age of 7 or 8 so it is crucial that the brain has the opportunity to process a clear image by this time. When this doesn't happen, vision will be poor - this is sometimes referred to as 'lazy eye(s)' or amblyopia. Not having the right glasses or having poor vision for other reasons will cause this. This is why the National Screening Committee (and Public Health England) recommends all children have their vision checked at school entry to make sure problems are identified early.

## What about children with SEND?

Children with SEND also benefit from having good quality vision to support all these different developmental processes. We know that children with learning disabilities are much more likely to have a serious sight problem than other children. If a child has a learning disability, they are more likely to have problems with their eyes, visual pathway or brain, resulting in vision that isn't as developed as another child of the same age. If vision is less developed this could compound developmental delays or cause difficulty for the child. It is therefore very important that any potential visual problems are identified quickly so that appropriate treatment and/or support can be given. Sometimes treatments can correct the problem itself, for example glasses, patching or surgery. Sometimes strategies need to be put in place to support a

child whose vision is impaired to use the vision they have as effectively as possible. This involves everyone around the child understanding their visual abilities and limitations.

## Why is it particularly important to think about vision for all pupils with SEND?

Good quality vision is important for all children as it helps with all parts of learning and development. If a vision problem is present it can be easier to identify in a typically developing child, and treatment and advice can then be given. However, for a number of reasons, a vision problem may not be identified so promptly in a child with SEND, especially those with complex needs, meaning that opportunities for treatment or advice are not taken or explored. This can lead to further unnecessary disadvantage in learning and development for the child. Depending on the type of disability, some children may use their vision for a wider range

of purposes than a typically developing child, for example visually operated communication aids. It is therefore essential that schools ensure they know how well all children with SEND can see and are promoting access to eye care. It has been suggested that all people with severe or profound learning disabilities should be considered visually impaired until proven otherwise (van Splunder et al, 2006)<sup>1</sup>.

Although some vision problems cannot be fully corrected, it is important that they are known about and recorded so that appropriate adjustments to learning can be made. Sometimes vision problems can be overlooked if there is no obvious eye abnormality or at times when other health problems are causing concern and taking priority. Sensory processing difficulties associated with learning difficulties and autism can also mask underlying vision problems.

**Do you know what all your pupils with SEND can see?**



## '28 times more likely'



# 28x more likely

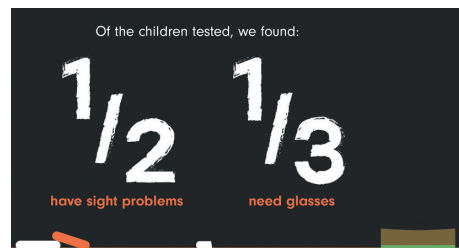
Children with a learning disability are 28 times more likely to have serious sight problems.

Children with learning disabilities are 28 times more likely to have a serious sight problem than other children. This is based on a study looking at the prevalence of visual impairment in children with learning disabilities (Emerson and Robertson, 2011)<sup>2</sup>. The reasons for the higher prevalence, as discussed earlier, are linked to the increased likelihood of problems with the development of the eye, visual pathway and brain (Salt and Sargent, 2014)<sup>3</sup>. This can be due to the syndrome or condition which has caused the learning disability. For example, Down's syndrome almost always causes vision problems including needing glasses (DSA, 2014)<sup>4</sup> and cerebral palsy can cause problems in the brain processing visual information. The incidence of vision problems in children with SEND is growing, possibly due to the increased survival rate of pre-term and low birth weight babies.

Given that the prevalence of visual impairment increases with severity of learning disability, recent studies in UK

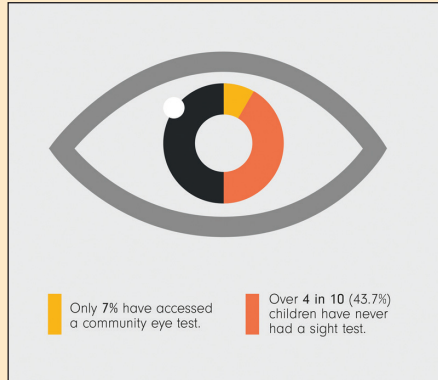
special schools have confirmed a high prevalence of vision disorders in these settings. Studies in Wales (A Clear Vision, 2012)<sup>5</sup>, Scotland (Das et al, 2010)<sup>6</sup> and now, through SeeAbility's work providing eye care in 10 special schools, across England (SeeAbility, 2018)<sup>7</sup>, have all identified high levels of vision problems:

- Half of pupils attending special schools have a problem with their vision
- 30-50% of pupils attending special schools need glasses, often of a high prescription.



However, SeeAbility's work also shows how challenging it can be to access an NHS sight test in the community for some children with learning disabilities. This research suggests:

- More than 4 in 10 pupils in special schools have no history of any eye care
- Only 7% of pupils in special schools have ever been to an optical practice/opticians
- Almost half of children have to use hospital eye clinics instead
- Of the pupils SeeAbility found had a vision problem, 28% was previously not known about by parents or school.



'We recognise how difficult it can be to assess our children's sight, which is why we are so pleased to be working with SeeAbility to provide highly specialist eye-testing to all children at our school. This not only offers them the best possible eye care but also fantastic aftercare, including regular check-ups and help with selecting, fitting and supporting wearing of glasses'

*Claire Barnes, Deputy Head at Willow Dene Special School, which is part of SeeAbility's project.*

Below we highlight some useful facts and dispel some common myths about eye care and vision:

- No one is too disabled to have an eye test
- You can't be too young to have an eye test
- You don't have to be able to read, talk or sit still to have an eye test
- NHS eye tests are free for all children under 16 and under 19 if in full time education
- An eye test isn't just about checking for glasses, it's also an eye health check and can pick up other health problems too
- An optometrist can accurately measure if glasses are needed by shining a light in the eye
- You can take the voucher for glasses to any opticians to choose the right glasses.



- Not all frames fit everyone – choosing the right glasses should be as much about a good fit as appearance
- All children by law must have their glasses fitted by a qualified optician (known as a dispensing optician)
- People with diabetes need to have additional tests on their eyes. This is called diabetic eye screening
- Eye tests are even more important for people with a family history of glaucoma
- People from some ethnic minority groups are at additional higher risk of eye problems
- Less than 10% of visually impaired people have no vision at all.

 **What do you think are the most common reasons that parents do not access eye care for children at your school?**

## Diagnostic overshadowing

Awareness of the need to wear glasses has been shown to be lacking in plans to support children with special educational needs, risking the wrong conclusions to be drawn as to why a child has difficulties with school tasks (Little and Saunders, 2015)<sup>8</sup>. A study of the data which the Department of Education collects in England has also found that only **1%** of **all** pupils with learning disabilities (moderate, severe, profound and multiple learning disabilities) had visual impairment recorded as their primary or secondary SEN, when the prevalence is known to be so much higher (Keil, 2017)<sup>9</sup>. This all shows that vision can be overlooked.

Pupils with SEND, especially those with complex needs, autism and communication difficulties, may have a range of associated physical and behavioural difficulties. This means there is a constant risk of **diagnostic overshadowing** where ongoing or new behaviours are attributed to a pupil's disability rather than being questioned and explored in their own right (Stanford and Shepherd, 2001) .

It is very important to rule out problems with eyes and vision when carrying out assessments, planning teaching and responding to changes in behaviour.

'SeeAbility are fantastic at working with our pupils and have been able to identify need that we had no idea existed'

*Tina Harvey, Head Teacher at Perseid Special school*

Below are some questions to regularly ask about all pupils with SEND:

### **Have they had a recent eye test?**

- Do you know the outcome of the eye test?
  - Encourage access to eye care or ask for feedback from parents/carers

### **Should glasses be worn?**

- Do you know if glasses have been worn in the past or should be worn now?
- Do you know when glasses should be worn and how they improve vision?
  - Ask for information about glasses from parents/carers
  - Offer support to help to get used to wearing glasses

### **What do their eyes look like?**

- Do eyes turn in or out?
- Do eyes wobble or always move around?
- Do eyes look red, bloodshot or sore?
- Do eyes look sticky or crusty?
- Are the eyes watery or weepy?
- Do eyes look milky or cloudy?
- Do eyes bulge or look pointed at the front?
  - Take action on any concerns
  - Ask parents/carers how your observations of the appearance of eyes affect vision



### **What is their behaviour like?**

- Do they poke, rub or touch their eyes?
- Are they fascinated with looking at lights?
- Do they have unusual head positions or movements when looking at things?
- Do they frown or screw their eyes up when looking at things?
- Do they flap their fingers in front of their eyes?
- Do they seem startled by sudden noises?
- Do they seem startled if they are touched without warning?
- Do they make eye contact when communicating?
- Do they track moving people or objects with their eyes?
- Do they only recognise people when they speak?
- Do they seem less confident on stairs than flat surfaces?
- Do they shut their eyes in bright light?
- Do they hold onto walls, objects, people when moving around?
- Do they hesitate when moving from one floor covering to another?
- Do they hold objects very close to their eyes to look at them?
- Are they clumsy?
- Do they seem less confident in new environments?
- Do they seem to see better on one side than another?
- Do they touch, smell, taste objects more than look at them?



### ***Has behaviour recently changed?***

- Have instances of challenging behaviour increased?
- Have they become more disruptive?
- Is the face, head or eyes being touched/rubbed/poked/banged?
- Have they stopped wanting to take part in usual activities?
- Do they seem less able to do tasks they know how to do?
- Has reading or writing skills reduced or slowed down?
- Have their self-care skills reduced?
- Have trips or falls increased or have they become clumsy?
- Have they become withdrawn or low in mood?
- Have they stopped recognising people, places or objects?
- Have they reported any changes?
- Have headaches started?
- Has any pain in or around the eyes been reported?
- Have they said that bright light hurts their eyes?
- Have they said there is something in their eye?
  - *Explore what the existing or new behaviour means and take action on any concerns that could indicate a vision problem*

All of the above signs, symptoms and behaviours could be due to an eye or vision problem. Many may also be attributed to the cause of a pupil's learning disability such as a syndrome, autism, developmental delay or it could simply be just the way they are. It is still always worth asking the question 'Could it be about their eyes or vision?'

In SeeAbility's sight testing project in special schools they came across many children whose behaviour had been wrongly interpreted.

They met a pupil in primary school with autism who had previously been prescribed strong glasses for seeing in the distance but wouldn't wear them. The school were made aware of this and together provided support to get her used to wearing her glasses. She now wears them all the time and this has resulted in an improvement in confidence, engagement and anxiety which had all been attributed to autism.

They met a teenager with learning disabilities, a hearing impairment plus mobility and communication difficulties who was being educated in a specialist class due to increased instances of challenging behaviour. His eye test revealed he was extremely short sighted and could only see clearly a few centimetres in front of his face which no one knew about. His glasses made an instant improvement to his behaviour and he is now successfully studying at college.

More stories like these can be found at [www.seeability.org](http://www.seeability.org)

### How often do you ask the question 'Could that behaviour be a sign of a vision problem?'

Are questions about vision included in annual reviews or assessments by therapists and health professionals used by the school?

## Impact of undiagnosed sight problems

If you think about all the behaviours listed in the previous section then it's important to think about the implications they will have if they are not responded to.

The impact of undiagnosed sight problems can lead to feelings of being:

- Distressed and angry
- Anxious and frustrated
- Withdrawn and frightened
- Deskilled and de-motivated

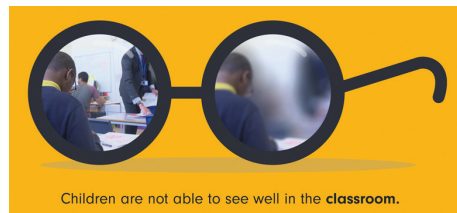
And impact upon all aspects of the person including:

- Behaviour – changes in vision can be confused with an inability to concentrate, disruptiveness or irritation
- Motivation – poor vision may affect the motivation to explore objects and environments if they can't be seen
- Communication – poor vision may contribute to difficulty in using communication aids rather than understanding how to use them
- Learning – information presented visually may not be seen properly rather than not understood
- Social interaction – seeing body language and the behaviour of others is key to joining in
- Development of vision – blurry vision may hinder the development of good vision

### How would you feel or behave if you couldn't communicate a change in how you see?

## Wearing glasses

Studies have shown that up to half of children in special schools will need to wear glasses (A Clear Vision, 2012)<sup>11</sup>.



Some children will need to wear glasses all the time to make the world, both close and far away from them, clearer or just for some activities such as close work or watching TV or the whiteboard.

Top tips to wearing glasses:

- Make sure you know and record what the glasses help with, when they should be worn and what activities they should be worn for
- Find out about the strength of the glasses and how they will change how the pupil sees or how poor their vision is without them
- Make sure children are fitted with glasses by a registered dispensing optician. The voucher they get for glasses after an eye test can be taken to any optical practice
- Glasses should be cleaned regularly with a soft cloth and be in good condition
- Glasses should fit well around hearing aids, wheelchair headrests and for pupils with certain facial characteristics e.g. children with Down's syndrome who have small nose bridges
- There are glasses with frames that are flexible, durable and some brands designed specifically for children with complex needs. Advise parents/carers to shop around for glasses
- Don't remove glasses for physical activities or swimming, this is when they are needed most to understand the new and different environment
- New glasses don't instantly improve vision, the brain has to learn to process the new clear image, this may take even longer for pupils with SEND
- Take a photograph of pupils in their glasses so they can be matched to them if they get lost in school - and use that photo for their ID pictures
- Create plans and develop strategies to encourage increased wear of glasses for pupils who are struggling to wear them. Occupational therapists and QTVIs (Qualified Teachers for the Visually Impaired) may be able to support with this
- If prescribed glasses aren't being worn ensure adaptations are made to the environment and learning materials based on the level of poor vision.



Top tips for helping pupils to get used to wearing their newly prescribed glasses:

- View your role as helping to learn to see the world with their new vision
- Try little and often, small improvements are still progress
- Keep associations positive
- Massage the nose and ears to desensitise the face if the sensation of the glasses is a problem
- Introduce glasses before or during a favourite or motivating activity
- Introduce glasses when all the senses are stimulated, such as outdoors, on a swing, soft play, music session or physical activity
- Introduce glasses when they will have their most impact. If they make near vision better try the glasses when eating, looking at books or a tablet or for distance vision when outside
- Record and monitor glasses wear to see if there are patterns and improvements and share with parents/carers to follow up at home
- Keep trying and don't give up!

SeeAbility has a range of factsheets and resources about wearing glasses  
[www.seeability.org/wearing-glasses](http://www.seeability.org/wearing-glasses)

### Do you know which pupils should wear glasses in your school?

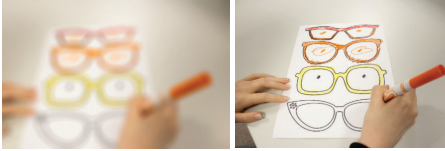
Is information about wearing or getting used to glasses recorded in support plans?

## Common eye problems and terminology

Below are some brief explanations of common eye conditions that may be experienced by children with SEND. It's important to remember that some pupils may have more than one of these problems at different times in their life.

### **Refractive error – the need to wear glasses**

- **Refractive error** – to see clearly, light coming into the eye needs to be focused onto the back of the eye (the retina). If it is not, then vision will be blurred. Glasses can correct this blurring and focus the image onto the retina. This can occur because the eye is too small (hyperopia or long sightedness) or too big (myopia or short sightedness) or because the eye is irregular in shape (astigmatism). It may also happen if the eye cannot change focus well (an inadequate 'zoom' function of the eye called accommodation).



Without glasses

With glasses

- **Myopia** – if a child is myopic or ‘short sighted’ they will struggle to see in the distance without glasses- they may be able to see close work adequately without glasses, depending on their level of short sightedness. Because our eyes grow as we get older, for children who are born myopic, their myopia increases as they get older/grow. Some children who were previously not myopic will develop myopia as they grow. Short sightedness is much more common in children who were premature babies.
- **Hyperopia** – if a child is hyperopic or ‘long sighted’ they will struggle most with close work but may also have blurred distance vision, depending on how hyperopic they are. Children will use the ‘zoom’ lens inside their eye to overcome long sightedness - this may mean that the first sign of it is one eye turning in (squinting) as they struggle to focus and align the eyes successfully. Long sightedness is more common in children with disabilities.
- **Astigmatism** – this occurs when a child’s eye is irregular in shape and it causes their vision to be distorted. This often occurs in children with Down’s syndrome and other learning disabilities. Glasses to correct astigmatism can be hard to adjust to at first.

- **Weak accommodation/ accommodation insufficiency** – this is when a child has a reduced ‘zoom’ lens capacity, they cannot change their focus sufficiently to shift from close to far viewing (focus on your own hand and notice how blurred the distance is!). This can happen on its own or associated with long or short sightedness. This may mean a child needs bifocal or varifocal or 2 pairs of glasses. We know this is much more common in children with Down’s syndrome, autism and cerebral palsy.

## Eye Conditions

- **Cataract** – this is clouding of the lens inside the eye. Some children are born with cataracts and need surgery as infants, others may have some cataract which means they need extra light but not an operation. Cataracts are much more common in children with a learning disability.
- **Keratoconus** – this is progressive thinning and protrusion of the front surface of the eye, the cornea. This is much more common in children with learning disabilities, especially those with Down’s syndrome. It is important to get it identified and treated early.
- **Glaucoma** – this is caused by raised pressure in the eyes, which causes poor peripheral vision and can run in families.
- **Retinal detachment** – an emergency situation which results in sudden loss of vision in one eye requiring urgent

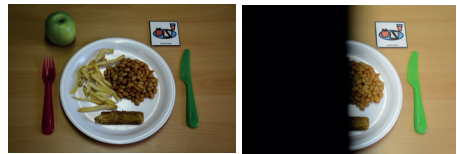


treatment. Being highly myopic (short sighted) is a risk factor. It may also be caused by a blunt head or eye injury and so is more common in children with SEND who self-harm or at risk of head injury.

- **Retinitis pigmentosa** – a condition resulting in progressive loss of vision starting with poor vision in low light levels and may be associated with some syndromes.
- **Nystagmus** – uncontrollable wobbling or shaking of the eyes which may be better or worse when looking in a certain direction so children may be best positioned in a certain way in class or need to tilt or turn their face to get better vision.
- **Strabismus (squint)** – misalignment of the eyes. It is often a sign that a child is struggling to focus and needs glasses. It often means vision in one eye is poor and the child has trouble judging depth and distance as they lack binocular (3D/stereo) vision.
- **Cerebral visual impairment (CVI)** – This is when there are problems in the brain with processing visual information. The eyes may be perfectly healthy but a child may have limited or no useful vision because they cannot 'make sense' of what they see. CVI can range from having trouble recognising shapes, being able to recognise faces, see more than one object at a time or following a moving object to having no useful vision at all. It may vary in its effect and may be worse when a child is tired or engaging their

other senses. CVI is common in children with cerebral palsy and some aspects are linked to autism (The Dana Foundation)<sup>12</sup>.

- **Hemianopias** – This originates in the brain rather than the eye. It is loss of one half (hemi) of the visual field in each eye. The two left or right, top or bottom halves of both eyes may be affected. It is much more disabling than loss of vision in one eye as vision is 'cut in half'. Positioning and the presentation of information is important for pupils to use their good field of vision. It is common in cerebral palsy and may be associated with a hemiplegia.



*Left hemianopia*

- **Low vision** – this is when the level of vision is reduced from what is normal. A child can have low vision because they aren't wearing glasses when they need them or because they have damage to their eye or brain which means that they have poor vision even with glasses.
- **Visual impairment** – this is low vision that cannot be corrected with glasses. It can be from birth, through injury or due to an eye condition but means that even with glasses your level of vision, for example the smallest size letter or picture you can see, is reduced from what is normal. This means you may need support from visual impairment services such as Habilitation Officers who can offer enlarged print, magnifiers, mobility, equipment and adaptations.

- **Certificate of Visual Impairment** – this is completed by an ophthalmologist (hospital eye doctor) to register or certify someone is sight impaired (used to be ‘partially sighted’) or severely sight impaired (used to be ‘blind’), depending on their level of vision. It’s important to remember that less than 10% of people registered as severely sight impaired have no vision at all which is why this process opens up support from visual impairment services to make adaptations to learning and the environment. If someone is not certified when they are eligible, it is likely that their vision needs will not be fully recognised in the future.

SeeAbility have created a range of easy read factsheets for people with learning disabilities to explain some eye conditions in easy to understand language with supporting pictures.  
[www.seeability.org/eye-conditions](http://www.seeability.org/eye-conditions)

## Roles in the eye care and vision world

**Optometrist** Also known as an ophthalmic optician, they are trained in assessing vision, glasses and eye health in adults and children. They can also assess for and supply magnifiers and optical visual aids to help someone with visual impairment. They may work in a high street opticians/optometry practice or within the hospital eye clinic.

**Dispensing optician** Trained to advise about and fit glasses, frames and lenses. By law all children under 16 must have their glasses supplied

and fitted under the supervision of a dispensing optician or optometrist. Dispensing opticians can also assess for and supply magnifiers and optical visual aids to help someone with visual impairment and low vision.

**Ophthalmologist** A medical doctor who has specialist training in eye diseases and eye surgery. They are able to check vision, glasses, diagnose, prescribe medicines for eye diseases and carry out operations. They are able to certify if a patient is eligible for sight impairment registration.



**Orthoptist** They often work in hospital eye clinics alongside ophthalmologists. They may also carry out school vision screening. They are trained in assessing vision and eye movements in children and adults.

### **Eye clinic liaison officer (ECLO)**

They provide advice and support for patients with visual impairment in hospital eye clinics. ECLOs are a link with community support services and can signpost to resources, activities and financial benefits which families may be eligible for.

**Habilitation Officer** They work with children with visual impairment to develop strategies and skills for example mobility training, cane skills, use of low vision aids/magnifiers.

**Qualified Teachers for the Visually Impaired (QTVI)** Specially trained teachers who support children with visual impairments, families and staff in mainstream and special schools to provide appropriate resources and approaches to maximise educational progress.



**Do you know how to access these services in your area?**

## **Access to eye care**

Some areas may have access to local school entry vision screening services when a child first enters school. Vision screening is a test of the level of vision a child has in each eye and is not a full eye examination so may miss some eye and vision problems (O'Donoghue et al, 2012)<sup>13</sup>.

Some children may have access to fuller eye tests or examinations in their special schools. All children also have the right to free NHS sight tests in community optical practices.

Due to the heightened risk of pupils with learning disabilities having problems with their eyes, professional optical bodies have agreed on a framework of the eye care that should be provided in school to pupils attending special schools in England, supported by Public Health England.

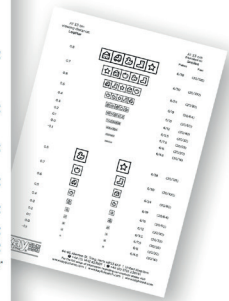
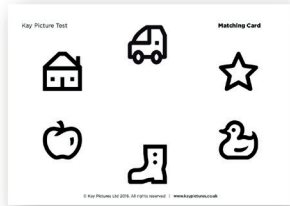
Full details of the framework: [www.seeability.org/framework](http://www.seeability.org/framework)

The key recommendations of the framework are:

- All children should be offered a full eye examination at least annually, in their special school environment. This should include an assessment of their level of vision, a check for glasses (refraction) and eye health check.
- Supply of glasses and ongoing support with them should be offered as part of the service, as should a written report which explains the child's visual abilities, needs and limitations.

Below is a summary of what happens at a full eye test and a brief description about how the test is adapted for pupils with SEND:

- Checking how well you can see detail by measuring the smallest size of letter, number or picture a child can name or match across the room and at a reading distance. This can also be measured using fading pictures and gratings or different size balls/beads.



- Checking if the eyes move accurately and smoothly and work together to give 3D vision.
- Checking for glasses, this is called refraction and is done using an instrument called a retinoscope. It measures how the eye is focussed by looking at the light reflected from the back of the eye which tells the optometrist the accurate prescription (strength) of glasses is they are needed.
- Checking the health of the eyes, this may be done using either or both an ophthalmoscope or slit lamp biomicroscope. These instruments can be used to check for problems with the health of the outside and inside of the eye including the cornea, conjunctiva, eyelids and lashes, lens and retina.

SeeAbility has created more information about eye tests for children with learning disabilities  
[www.seeability.org/eye-tests-children](http://www.seeability.org/eye-tests-children)

Some pupils will need to be prepared for what happens at an eye test. Below

are some suggested activities to explore or practice if eye tests take place in your school or pupils have appointments outside of school:

- Use SeeAbility's booklet and film 'Having an eye test for Makaton users' [www.seeability.org/makaton-signs-for-eye-tests](http://www.seeability.org/makaton-signs-for-eye-tests)
- Talk about or look at pictures of people having an eye test
- Read or watch appropriate stories where characters go for an eye test e.g. Peppa Pig, Topsy and Tim
- Practise naming, matching or signing letters or pictures
- Practise moving the eyes up, down and side to side while keeping the head still
- Practise sitting close and looking into their eyes
- Practise covering one eye up at a time
- Practise being in the dark

**Do you know if vision screening or eye tests happen in your school?** ?

## Recommendations and strategies

Based on the fact that some children with SEND are more likely to have problems with their vision, below are recommendations and strategies that can be adopted in the classroom and the wider school environment to benefit all pupils:

- Ensure information about eyes and vision is included as standard practice in assessments, reviews, support plans and EHC plans
- Actively seek information about vision to be shared with school by parents/carers and health professionals – SeeAbility has an 'About your child and their eyes' form that can be used to capture this information  
[www.seeability.org/eye-tests-children](http://www.seeability.org/eye-tests-children)
- When assessing progress and attainment against statutory and school assessments, make sure progress or problems with vision is included
- Think about positioning in the classroom for those who have poor vision, such as sitting nearer the front of the class or with their support sitting on their good side
- Consider the impact of artificial lighting and direct light from windows – is it too bright?
- Make sure vision is checked prior to assessments for communication aids and adaptations and reconsider those who have been deemed unsuitable to

use them; could it be because of not being able to see the equipment rather than not being able to use it?

- Make sure vision is checked and problems ruled out prior to referrals and assessments in relation to mobility, behaviour and communication
- Think about the classroom environment for pupils who struggle with clutter and visual sensory overload; could less stimulating smaller areas be created in the classroom?
- Remember the 3 Bs for visually impaired pupils or those who won't wear their glasses:
  - Bigger – think about the size of text, pictures or objects – do they need to be bigger or smaller?
  - Bolder – use colour and contrast – good contrasting colours e.g. black on yellow, are easier to see in relation to displays, printed materials and food on a plate
  - Brighter – think about lighting in the classroom, task lighting for specific activities or if bright sunlight causes problems with glare
- Are pupils who are registered as severely sight impaired or sight impaired getting the support they need? Could visual impairment services help?

**Who else do you need to share this guide with in your school?  
How can the information be incorporated into staff induction?**



## Useful sources of further information:

### Eye care and vision for people with learning disabilities

Including:

- Easy read information and factsheets about eye care, glasses and eye conditions
- A database of optometrists and the services they provide for people with learning disabilities
- Our residential and supported living services for people with learning disabilities and autism
- How to support our work through fundraising and campaigning

[www.seeability.org](http://www.seeability.org)

### Eye care

[www.nhs.uk/NHSEngland/Healthcosts/Pages/Eyecarecosts.aspx](http://www.nhs.uk/NHSEngland/Healthcosts/Pages/Eyecarecosts.aspx)

[www.lookafteryoureyes.org/](http://www.lookafteryoureyes.org/)

### Visual impairment

[www.visionuk.org.uk/startingpoint/](http://www.visionuk.org.uk/startingpoint/)

[www.rmib.org.uk/](http://www.rmib.org.uk/)

[www.sightlinedirectory.org.uk/](http://www.sightlinedirectory.org.uk/)

### Eye conditions

[www.nhs.uk/](http://www.nhs.uk/)

[www.nystagmusnetwork.org/](http://www.nystagmusnetwork.org/)

[www.cvisociety.org.uk/](http://www.cvisociety.org.uk/)

[www.cviscotland.org/](http://www.cviscotland.org/)

[www.rpfightingblindness.org.uk/index.php?tl=abouttrp](http://www.rpfightingblindness.org.uk/index.php?tl=abouttrp)

[www.keratoconus-group.org.uk/](http://www.keratoconus-group.org.uk/)

[www.glaucoma-association.com/about-glaucoma/](http://www.glaucoma-association.com/about-glaucoma/)

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## About nasen

nasen is the leading UK professional association embracing all special and additional educational needs and disabilities. The organisation promotes the education, training, development and support of all those working within the special and additional educational needs and disabilities sector. Membership of nasen is an invaluable source of advice, offering an exclusive and vital range of benefits to support teachers, governors, teaching assistants and the entire education support network in the delivery of high-quality inclusive practice.

Visit [www.nasen.org.uk](http://www.nasen.org.uk) for more information about what nasen can do for you.



## About SeeAbility

We provide extraordinary support.

SeeAbility provides extraordinary support for people with learning disabilities and autism, many of whom have sight loss. We have one of the best in-house teams of specialists in the country, which means each person gets the right expert attention they need, when they need it. Our approach is person focused and gets extraordinary results, so the people we support can live more independently, more actively involved their communities and making more choices about their everyday lives.

We champion better eye care.

SeeAbility is tackling health inequalities in eye care in several important ways, by:

- Changing the way the eye care system works through our research and campaigns.
- Providing expert information and advice through awareness raising, peer to peer education and free downloadable resources.

[www.seeability.org](http://www.seeability.org)

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