



# Blind and Low Vision

## About blind and low vision

'Blind and low vision' refers to significant and ongoing challenges with the ability to see. Some young people may be considered 'legally blind' if they cannot see beyond six metres (compared to 60 metres for a young person with normal vision) or if their visual field is less than 20 degrees in diameter (compared to 140 degrees for a young person with normal vision). Some young people may be considered to have 'low vision' if they have permanent vision loss that cannot be corrected with glasses and their ability to complete everyday tasks is affected. Students with low vision may have some sight, but experience difficulties with visual acuity (being able to see detail), accommodation (being able to focus), field of vision (the area that can be seen), colour vision and adapting to different lighting between environments.

As a teacher you can best support the student by knowing about the type and severity of vision impairment they have. Some young people might be learning to read Braille, or use low vision aid technology like electronic magnifiers, closed-circuit television or iPads™. They might need large print materials. Understanding each young person's strengths and abilities will allow you to develop ideas about ways to make education safe, fun, and as inclusive as possible.

# Strengths

## What might be some strengths?

- Students who are blind or low vision may have the same capacity for learning as other students.
- They may have normal reading comprehension (i.e. they can understand what words and sentences mean).
- They might be skilled at identifying things through touch.
- Some might be able to learn number concepts through hearing.
- They can be resilient, adaptable, and have good emotional well-being.





## Where you might provide support?

- Some students might have challenges with reading. This could include getting tired easily after reading for long periods, taking longer to read, or making more reading errors.
- Some children may have trouble making eye contact, reading facial expressions and observing social cues.
- They may have much less access to educational material than their peers.
- They might at times feel frustrated or disappointed with their vision or with looking different. They might feel self-conscious about using low vision aids, which can be a barrier to making friends (e.g. magnifiers, CCTV, iPads™). They may feel like they don't fit in or have low confidence or low self-esteem.
- Some students might have delays with movement, balance and object control. This may make physical education and being independent challenging for them.
- Some students may have difficulties with starting tasks, problem solving, planning, organising and memory.
- Walking around in unfamiliar places can be difficult.

# Evidence-based strategies

### Identify different ways that a student can learn

- Find out the best size, type and spacing for printed materials: Some students only need bigger text to be able to read. Some students might have a certain size or font they like best. Providing extra material like this takes more time, so preparation is important.
- **Use hands-on learning:** Students who are blind or low vision might learn better using touch. Tactile materials (things to touch or hold) can be graphs, charts or drawings with raised printing, or 3D models, which let students use their hands to learn. These take time to prepare or need to be prepared before class. They also might take more time for students to use. The Statewide Vision Resource Centre has a range of tactual books and ideas.
- Describe images with words: Describing images verbally or in writing can help students access more types of information. Try combining descriptions of images with large print, Braille or low vision aids.
- Get students to re-read things: "Repeated reading", or getting students to re-read material, can improve understanding.





## Consider the environmental setup

- Let students choose their seat: If a student is able to read at closer distances or certain angles, let them sit wherever is best for them.
- Use large writing on boards: Students with low vision might benefit from larger-sized writing on whiteboards and screens.

## Social skills and acceptance

- Build social skills: Consider teaching students how to make friends and have conversations. It may be helpful to discuss with a student ways they can act or respond in common social situations (e.g. joining in an activity), or to role play situations and provide feedback to them.
- Encourage thought-provoking group activities: Small group activities where students are asked thought-provoking questions can help with friendships and acceptance. For example, students could consider within their small group what the world would be like if everyone looked the same.

# Best practice tips

#### Be proactive

Give students work early: Consider handing out work to students or their families before class so they can then get a head start or have it reformatted into Braille or large print.

#### **Encourage clear communication**

- Give clear directions: Words such as "this", "that", "there" and "here" might not make sense to some children who are blind or low vision if they can't see what you are indicating. Consider using specific words and statements to direct students, for example "Please put the box on the table".
- Read aloud as you write: Consider reading aloud anything you write on a board in a slow and clear voice. Check that the student has had time to complete their note taking.

#### **Encourage students to be involved**

Increase active participation: Giving students who are blind or low vision plenty of opportunities to be involved in class activities can help them feel a part of the class.





## **Curriculum considerations**

#### The Arts

Consider activities where students can use their hands and feel different textures.

## **English**

- Students who are blind or low vision may need more time to learn reading and writing skills
- They might 'guess' what a word or letter within a word is, instead of actually reading the word (these are called substitution)
- They may find decoding challenging (working out the basic sounds that make up a written word)
- Many students will read with Braille, and might use devices such as Braille-writers.
- Encourage students and families to read as much as they can at home.
- Some students might use assistive technologies like electronic magnifiers, closed-circuit televisions and text-to-speech devices for reading or taking notes.
- Refer to 'Identify different ways that a student can learn'.

### **Health and Physical Education**

- Physical education can help improve confidence, self-esteem and independence.
- Blind and low vision students might spend less time being physically active than peers, and could be less confident in physical education classes.
- Encourage students to have a go at activities in safe environments. This might mean focusing on just having a go at first rather than learning a specific technique.
- Some students may not be able to watch others modelling a skill.
- Consider whether physical prompts or describing the skill out loud may be helpful.
- Consider pairing blind and low vision students with sighted students/friends.
- Refer to AllPlay Footy and AllPlay Dance for more strategies and ideas.

#### The Humanities

Teaching strategies that may be relevant to this curriculum area are: 'Identify different ways that a student can learn'.





## Languages

Teaching strategies that may be relevant to this curriculum area are: 'Identify different ways that a student can learn'.

#### **Mathematics**

- Students who are blind or low vision may need extra support and time when learning maths, as maths can have a lot of visual content (e.g. tables, charts, graphs, plots)
- 3D models and tactile graphics (large diagrams, graphs, flow diagrams or pictures that have raised surfaces) may help. Refer to use hands-on learning and describe images with words.

#### Science

- Students who are blind or low vision may need extra support and time when learning science, as science can have a lot of visual content (e.g. tables, charts, graphs, plots)
- 3D Models and tactile graphics (large diagrams, graphs, flow diagrams or pictures that have raised surfaces) can increase student interest and knowledge in a topic, and give them more words to describe objects.
- Refer to Use hands-on learning and Describe images with words.

#### **Technologies**

- Some students may have expertise in this area through using technology to aid their vision.
- Refer to 'Identify different ways that a student can learn'.

## Other considerations

#### **Statewide Vision Resource Centre**

- The Statewide Vision Resource Centre has extra resources available for teaching students who are blind or low vision in all curriculum areas:
  - Teaching typing
  - **Physical Education**
  - Art
  - Tactual books





## Safety

- Students who are blind and low vision might need extra support with safety as they may be unaware of hazards in classrooms and outdoors
- New objects or furniture, or rearranging rooms, can be a safety concern. Students will need to be carefully oriented to new or changed environments
- Consider having a friend or peer help students navigate busy areas safely (i.e. lunch areas; basketball courts).
- Check that rooms are free from clutter and arranged simply

#### First aid

When applying first aid, talk to students about what you are going to do and check they are happy for you to apply first aid (e.g. "I am putting on a band aid. Is that OK?").

## **Safety Drills**

- Teachers will need to guide blind and low vision students through emergency drills. It may help to pair students with a buddy.
- Consider the accessibility of evacuation points and procedures.

#### **Behaviour**

- Some students might also show challenging behaviours. It's important to remember children are most likely trying to communicate a need or want that is not being met.
- Refer to the ABC approach for more information on how to reduce challenging behaviour by supporting the young person and promoting more helpful behaviour, and our emotions page for more information about supporting a young person with managing their emotions.

## **Friendships**

Directing students to friends or providing guiet areas for friends of blind and low vision students can be helpful. Check if the student is happy for a teacher to intervene.





Some students who are blind or low vision might be asked questions, or teased, about visual aids such as glasses, eye patches, strabismus (cross-eyed), canes or assistive devices. Consider teaching other students about blind and low vision if the young person and their family wishes for you to do so. This can help other students understand the young person's experience and develop empathy.

#### Homework

- Check that homework is accessible for blind and low vision students
- Some students may need extended due dates for homework and assignments.

## **Excursion/camps**

- Excursions/camps to places that are accessible for students with low vision or blindness, such as places where there are Braille signs and audio guides, can support their learning.
- Museums, galleries and science exhibits often have Braille signs and audio guides.
- Places with hands-on activities are ideal (e.g. the aquarium).

### Transition to and from secondary school

- For more information about supporting students with disabilities when transitioning across education settings, access AllPlay Learn's transition page.
- Students who are blind or low vision might need extra preparation for life after secondary school.
- The Expanded Core Curriculum (ECC) provides additional skills training for blind and low vision students.
- The Statewide Vision Resource Centre page has information on the ECC.

#### **Braille**

- Some blind and low vision students will be learning Braille. Braille is a system of raised dots which can be read by touch using fingers.
- Teaching Braille requires training, however teachers can support students using Braille. For example, organising for students' names to be written in Braille and providing materials in Braille may be helpful.
- Visit the Statewide Vision Resource Centre page for more information on learning how to teach Braille and strategies for supporting children using Braille.





#### Low vision aids

- Some children might use low vision aids (LVAs) like closed-circuit television (CCTV), tablets and electronic magnification to read standard printed material.
- Not all educational materials will be useable with LVAs.

## Other co-occurring conditions

Children who are blind or low vision may also be diagnosed with <u>cerebral palsy</u> or <u>anxiety</u> or have other challenges with learning and memory and social skills.

## Relevant resources

Visit our <u>resources page</u> for a range of resources that can help to create inclusive education environments for students with disabilities and developmental challenges. Some particularly relevant resources for students who are blind and low vision include our Audio Stories, and:

- Strengths and abilities communication checklist
- Peer mediation steps poster