



# Vision Impaired Physical Education Guide



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# About Vision Sports Ireland

Vision Sports Ireland is the National Governing Body (NGB) for sport and physical activity for blind and visually impaired people in Ireland. We promote both mainstream integration and visually impaired sports. Vision Sports Ireland was founded in 1988 and in March 2020 merged with NCBI – The National Council for the Blind of Ireland with the aim of increasing reach and opportunities. Vision Sports Ireland advocate for people with vision impairment (VI) to have equal access to and enjoy the health benefits derived from regular participation in sport and physical activity of their choice from recreational to elite level. Vision Sports Ireland supports individuals with a vision impairment to be active.

# About Vision Sports Ireland

Vision Sports Ireland supports individuals with a vision impairment to be active.

Our ambition is to support participants of:

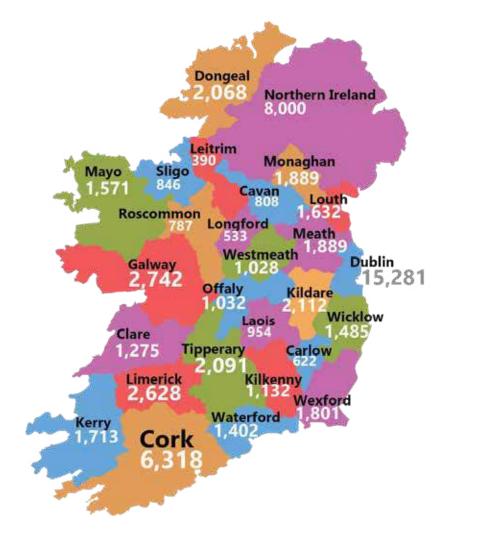
- All ages
- All levels of activity Inclusive of all vision impairments
- All sports and active recreation
- Anywhere in Ireland

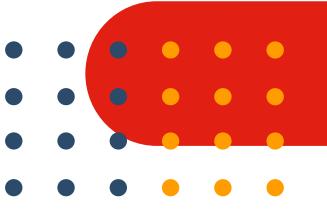
#### We Do This By:

- Connecting individuals with local clubs, coaches and guides
- Working with our partner National Governing
- Bodies to make their sports inclusive of people with a vision impairment
- Upskilling organisations, coaches, and schools to give them the tools to provide quality inclusive sport opportunities
- Advocating for inclusive sport opportunities in all areas of sport
- Supporting communities with programmes and events
- Supporting our members to advocate for supports that encourage participation



### There is a total of: 62,810 people with a Vision Impairment or Blindness in Ireland





# Introduction

This instruction manual has been designed to help introduce readers to the basics of vision impaired and blind sport, and coaching considerations for someone with a vision impairment.

This could include:

Someone with a vision impairment wanting information on sports or activities available.

A parent or guardian with a child with a vision impairment. Primary and Secondary school teachers with students who have a vision impairment.

Special Needs Assistants (SNA) wanting to learn about adapted sport.

Secondary school students learning about adapted sport. University students studying Sport, Exercise, Recreation or Physical Education (PE).

This resource is designed to complement the existing knowledge and skills of teachers and coaches. It is important to note that this manual includes guidelines and is to be incorporated into existing coaching qualifications held by the practitioner.

### Structure & Layout

This manual has been divided into sections based on different sports to allow users to find what they are looking for quickly. In each section you will find:

#### Section 1 – Considerations And Teaching Techniques

- Introduction to Visual Impairment
- Considerations before and during sessions
- Communication Techniques
- Environmental considerations

Section 2 – Adapting To The Physical Education Curriculum

## **Structure & Layout**

#### **Teacher And Coach Resources**

Each sport section includes a lesson plan designed to introduce primary and secondary level students to different adapted sports. They can be used by teachers and coaches both with and without a student with a visual impairment in their class. Sessions are designed to provide a fun and inclusive PE/sport session while teaching students about adapted sport and the importance of inclusion. Some lesson plans may require adaptations to suit the needs of individual students.

#### **Section 1: Considerations And Teaching Techniques**

Included in this section are considerations to take into account both before and during your PE session for students with a visual impairment, information on common eye conditions and useful techniques to ensure an optimum, fun engaging and inclusive PE session

# **Visual Impairment**

The World Health Organization (WHO) defines visual impairment as a reduction or limitation of visual acuity and/or visual field. A reduction in visual acuity details a reduction in clarity of vision, and a reduction in field of vision describes the area in which they are able to see. Having a 'vision impairment', means that an individual's vision cannot be fixed by corrective measures, including glasses or lenses. There are thousands of different diagnoses that may result in impaired vision. Listed below are a small number of common eye conditions, but it is important to note that even if two people share the same diagnosis, each person may experience different vision, and may respond differently in different environments or under different conditions

### **Diabetic Retinopathy**

Diabetic Retinopathy is the most common cause of vision impairment in adults. A person with diabetic retinopathy may have 'patchy vision' due to damage to the retina (back of the eye). The number, size, darkness, and location of dark 'patches' is dependent on the location of the damage and will be different for each individual.

People who have Diabetic Retinopathy, like many other conditions, may experience sensitivity to glare/direct light, and difficulties with fine detail work and mobility.



# Retinitis Pigmentosa (RP)

Retinitis Pigmentosa (RP) is a group of inherited eye conditions which generally arise during teenage to early adulthood. RP tends to result in a loss of peripheral vision, also referred to as 'tunnel vision', due to damage to the retina. The speed and severity of vision loss will depend on the condition

People with RP may also experience night blindness, difficulty adjusting to changes in lighting levels and glare sensitivity, and difficulty with colour vision. Peripheral vision loss may mean obstacles are difficult to detect unless directly in front of them, which may impact mobility, navigating stairs or uneven ground



### Glaucoma

Glaucoma is a condition that results in the loss of peripheral vision because of damage to the optic disc over time. Glaucoma results in the gradual loss of peripheral vision, leading to loss of central vision in the later stages. Monitoring eye pressure and fields testing is vital to reduce progression.

People with Glaucoma may have contrast sensitivity and reduced clarity of vision, or difficulty with mobility, navigating stairs or uneven ground, and in later stages, fine motor skills.



### **Macular Degeneration**

Macular Degeneration may occur at any age, however, the most well known type of Macular Degeneration is Age Related Macular Degeneration (AMD). AMD is the result of damage to the macular, though, in most cases, it will not lead to a total loss of vision.

AMD results in reduced central vision, characterised by a skewing of the visual field, progressing to a loss of central vision. AMD may also result in reduced contrast sensitivity, and often, a sensitivity to glare.

Stargardt Disease is another form of Macular Degeneration. Similar to AMD, Stargadts Disease impacts of central vision, however, it is most commonly diagnosed in children.



### Cataract

Cataracts are one of the most common forms of vision impairment in the world. A cataract will make the lens clouded or opaque, which impacts visual acuity. The impact of a cataract on a person's vision will depend on the size or location of the cataract on the lens.

Having cataracts may feel like looking through fog or a haze, and result in blurred vision and sensitivity to glare and bright lights. Cataracts may make it difficult to navigate fine details, read small print or recognise faces.



### Nystagmus

Nystagmus is a condition which causes uncontrollable rapid eye movements, which may result in double or shaky vision. Nystagmus is frequently also associated with other forms of vision impairment, including Albinism

Nystagmus may cause difficulties reading print, focusing on fine details, and issues with depth perception, balance, and coordination



# Hemianopia

Hemianopia describes a loss of segment of the visual field, because of damage or injury to the brain or optic nerve, e.g. trauma, brain tumour, or stroke. Often it may be the case that the eye is functioning correctly, but messages to the brain are interrupted

The loss of visual field will be dependent on the location of the damage to the brain. An individual may experience total loss of visual field, or segments of the visual fields (for example, upper or lower, binasal or homonymous). Depending on the field of vision loss, an individual with a hemianopia may experience difficulties with tasks such as reading, road crossings, or locating food on the plate



## Albinism

Albinism refers to a group of inherited disorders which result in a reduced or no production of melanin. Melanin is required for the development of the optic nerve, as well as colouring of our skin, hair, and eyes. A person with albinism may experience sensitivity to light and glare, decreased clarity of vision, and difficulty with depth perception.

Due to reduced melanin in the skin, individuals may also be susceptible to heat and sunburn. Albinism is also frequently co-diagnosed with nystagmus and refractive error.



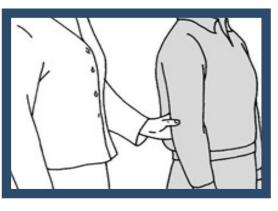
# **Sighted Guide**

Sighted guide is a way of safely and efficiently walking with, and guiding, a person who is blind or visually impaired. To effectively provide sighted guide follow the following recommendations:

Approach the person, introduce yourself and ask if they would like a guide (some may not). If they say yes, ask them which side they would like to be guided on. If they are a guide dog user, automatically approach from the opposite side to the dog.
 You should be half a pace ahead of the person you are guiding. Stay relaxed with your arm close to the side of your body
 Give brief but clear verbal instructions, mention appropriate hazards and say if there are steps or kerbs up or down.
 If you have to leave the person you're guiding at any time,

let them know and leave them in contact with a solid object (e.g. a wall)

### How To Approach





# **Colour Contrast**

Colour contrast is extremely important to consider when planning and running an inclusive PE/sport/activity session. The impact of colour contrast for students with a visual impairment is huge. It is recommended that you use the colour that will contrast/stand out the most against the background environment that it is in.

For example, if the gymnasium in which the PE/sport/activity session takes place were painted a cream colour, a PE teacher or coach wearing a pale bright colour such as yellow or white would not stand out from the cream background.

However, if the PE teacher or coach were to wear a dark blue or black t-shirt, they would stand out much more from the background making it easier for the visually impaired student to locate and focus on the teacher. Colour contrast should also be considered for walls, floors, balls, bibs, and cone colours



Ask the students which colour piece of equipment they would like to use during the session.

Please see the example of a **yellow and a white rugby ball on a white background.** It is clear to see that the yellow ball stands out more, and as such, we would recommend that it is used in this scenario.





We suggest a combination of teaching styles to support, engage, inspire, and teach the students. The key guidelines when delivering PE for a student with a visual impairment are as follows:

#### Learning Individual Students Needs

Attention should focus on abilities rather than limitations, when considering playing or coaching. Individual students have distinct skills and learning abilities. Understanding the students' learning style will help you to find the best methods to get the most out of the students.

For example, some students will learn by going through the drill or the skill being taught, and some students will learn if they are being told and shown the drills and skills. Learn your student's needs, ask them what needs they have to ensure their learning and inclusion in the class activity.

#### **First Contact With The Student**

It may be beneficial for you to speak to the student or their parent/guardian before the first session. This will help to ensure you have all the information you need to create a successful first session. Information you might discuss may include:

1. Whether or not they use any mobility aids, such as a long cane or a guide dog.

2. Any previous experience or knowledge of the PE module.

3. Level of vision and any factors that might support the individual in this space e.g. training inside/outside, colour contrast, light sensitivity, adapted equipment, extra support.

4. Any worries or concerns they might have

#### **Simple And Effective Communication**

Effective communication between the teacher and students is important both on and off the court. Clear and precise audio description of the drill plays a key role in running a successful session. When you need the attention of a visually impaired student use their name prior to giving instructions or feedback.

#### Ask Questions To Obtain Information That Will Help You To Offer The Best Experience.

1. Remember to always introduce yourself by name to a participant with a vision impairment, even if you have already met before.

2. Do not be afraid to ask about a new participant's level of vision. This will help to give you a better understanding of how you can support them.

3. Try to establish if there is a preferred situation or environment e.g. if someone has better vision in their left eye making a small change to where you stand to explain a task may make a huge difference.

4. Think about the acoustics of the area you are in and whether you can be clearly heard.

5. Remember that a participant with a vision impairment may not be able to see visual cues, e.g. a smile, and if so, ensure that you replace these cues with verbal feedback.
6. While it is important to use correct language, do not overthink every sentence you say. For example, saying the term 'See you later' will not be offensive to the vast majority of people with a vision impairment.

7. Clear communication is vital, so provide detailed, concise, and accurate explanations of drills, rules etc.

8. Verbalise all instructions because participants with a vision impairment may not always see hand movements, facial expressions, or gestures.

9. Use first names to ensure that the participant knows when you are talking to them.
 10. Speak directly to the participant, rather than an SNA or a guide.

#### Sample Questions To Ask:

- Do you feel comfortable?
- What suits your sight best?
- What colour equipment works best?

#### **Physical Environment**

Creating the right environment will help to ensure that the athlete with a vision impairment is set up to succeed from the beginning. Some areas to consider are:

- Lighting good lighting is essential for athletes with low vision.
   Too much or too little can both be problematic depending on the individual
- Noise as vision impaired and blind sports rely significantly on sound, try to minimise other noises where possible. This could include turning off any radios or music, scheduling the session when there will be less people, closing doors/windows to minimise outside noise and asking spectators to be quiet during the session.
- Obstacles/hazards make sure to remove any obstacles that students might trip over (e.g. bags, extra equipment, benches). If there are obstacles that can't be moved (e.g. walls, fixed seating, poles) make sure to verbally communicate where these are to the student before you start the session or better still, allow them to explore the area before you begin.

#### Physical Environment Ctd.

- Colour Contrast ensure there is a high colour contrast where possible.
   This could include using a different coloured ball while playing on a grass surface vs playing on an indoor surface.
- Colour Preference some vision impaired students may be able to see some colours better than others. Look to change the colour of the ball or add bright tape to the edge of goals or end of equipment (e.g. gym mats, hockey sticks).
- Consistency setting up the environment from week 1 in the same way each time will support familiarisation. If anything changes, let them know. Have designated areas for equipment such as gear, water bottles and benches.
- Visual Clutter minimising the amount of 'visual clutter' in the environment can help support students focus on the activity/task. In a PE context, this might include removing posters/information on the gym walls, storing unneeded equipment away from the activity area such as in a storage shed and using dividing curtains to split up the gym to only the space you need.

#### Laying The Foundation For The Class

A student with a visual impairment faces many challenges in a PE environment, however, many of these can be reduced or eliminated by laying the right foundation for the class. On week 1 of the school semester set class rules with all students in the class and bring these rules to each session throughout the semester, Class rules should include:

- No pushing or shoving.
- Show empathy to others.
- Treat others with respect at all times.

The class can then expand on rules they see fit for the semester.

#### **Active Demonstration**

Verbally communicating the teaching points is the key for a successful vision impaired PE session, it enables the visually impaired student to clearly understand the objective you are trying to teach. Along with active communication, demonstrating the teaching points will help the students understand it better. If you find the sessions are not working, do not hesitate to modify it to suit the students.

#### Phrases To Avoid:

- "It is over there"
- "By that cone"

#### **Adapted And Accessible Equipment**

A wide range of adapted equipment is available to help break down barriers to participation. While some equipment is specifically designed for someone with a vision impairment, other equipment is accessible simply by its design. Adapted equipment includes but is not limited to:

- Audible balls, which come in all shapes and sizes for different sports e.g. football, rugby, basketball, tennis, multi-use balls
- Tandem bikes
- Running tether (short rope used to guide someone while running)
- High visibility vest

#### **Tactile Modelling**

Tactile modelling is used to help an individual with a vision impairment feel what the action is or how to move their body. For example, they may feel how your arms move when you run or how you hold a tennis racket. It can help give an idea of the motion required to complete a certain action which can sometimes be difficult to describe verbally.

Before using tactile modelling, ensure both the person being the 'model' and the individual with the vision impairment are comfortable with this process and give consent. Do not pressure either individual to use this technique if not comfortable.

#### **Tactile Markers**

Tactile markers can be used to help individuals orientate themselves. In some sports such as goalball and blind tennis, the outlines of the court or key areas have thin rope taped down to the court. This enables players to feel the lines with their hands or feet and help orientate themselves within the court. Other ways of creating tactile markers include:

- Thin rope covered by duct tape (most common method)
- Hula hoops to help players locate certain positions on the court or playing field
- Spot markers to help players locate certain positions on the court or playing field

# Section 2: Adapting To The Pe Curriculum

When adapting the PE curriculum, remember that all games can be adapted to be more inclusive, in this section we will cover a framework to adapt any sport or activity to make it more inclusive and look at each element of the PE curriculum and their unique context with specific tips and adaptations that can be made. Remember that no two people are the same, and so each student with a visual impairment will be different too: e.g., levels of vision, personality, ability, interests, culture and fitness levels. It is important not to generalise all visual impairments but instead to understand what each individual person can see and try to maximise the use of the sight that they have.



# **Tree Model**



A good tool to adapt any sporting activity in order to make it more inclusive is the TREE Model (Black, 2004; Niland, et al. 2010).

## **Tree Model**





### **Teaching Styles**

Rules

Equipment

Environment



### **Teaching Styles**

Teaching Style or method is how we adapt our communication style with the participants. In order communicate effectively with visually impaired students, limit visual communication with the participant and instead be more descriptive with your verbal description in explaining activities and games.

For example, when setting up activity drills, speak clearly as to what station your student is going to participate at, let them know who is in their station with them and explain what the activity is going to look like.

"Hi John, we are going to work on our passing drills. You are in group 2 located to your left hand side. Sophie, Adam and Julie are in your group. I want you to stand at the orange cone facing Sophie and pass the ball to her, when she receives the ball, I want you to call her name and receive the ball back, stop it and pass back".

### Rules

You can change or modify the rules and regulations of games to make them more inclusive. For example, in vision impaired athletics, runners are allowed a guide with them in a race in order to navigate the running track or course. In visually impaired tennis, players who have less eyesight are allocated more bounces of the bell ball. In visually impaired golf, players are allocated a guide or caddy to help line up the direction of shots. You can modify the rules of the game in order to suit the specific needs of your student. When developing these rules, always consider what outcomes from the activity you are trying to achieve. What is the purpose of the activity and how can we modify the rules that they do not exclude anybody from achieving the outcome.

## Equipment

You can modify or change the equipment you use in order for your activities to be more accessible. It is good to have a variety of different equipment. It is good practice to ask the student what equipment works best for their needs and don't be afraid to experiment with different types of equipment.

#### You can change

- 1. Colour
- 2. Shape
- 3. Size
- 4. Distance
- 5. Noise of equipment
- 6. Speed

Examples of equipment that works well for students with a visual impairment include:

- 1. Bell balls (Football, rugby, tennis, basketball)
- 2. Colour contrasting balls (Dependent on colour of hall or environment surface)
- 3. Collapsible cones or disk cones
- 4. High colour contrasting bibs or clothing (For both students and teacher)
- 5. High-vis tape or clothing wrapped around goal posts.
- 6. The speed of flight for balls, birdies, etc.

### Environment

The environment in which the activity takes places can make a huge difference to a student with a visual impairment. You can change or adjust where the activity takes place and how it is structured. Some key environmental considerations to take into account are:

#### The Surface

Make sure the surface free of obstacles. Does the surface colour contrast from your equipment colour? Lighting Is the lighting natural or artificial? Too bright or too dark. Is there direct glare from the sunlight which can lead to discomfort and disorientation of a student with a visual impairment. Avoid dimly light environments and direct sunlight shining in the direction of a student with a visual impairment.

# **Environment Ctd.**

#### Noise

Limit noise levels in the environment

Students with a visual impairment rely more on verbal description and audible equipment to participate, limitation of noise will assist in their participation. Limit noise both in the foreground and background where possible.

#### Organisation

Make sure the environment is tidy and does not have unnecessary clutter. If equipment is not being used, put it away. Inform the students as to where in the room equipment is located.

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# The P.E Curriculum





### Primary Level P.E.

In Ireland, the Physical Education (PE) curriculum is for children from junior infants to sixth class. The curriculum contributes to children's overall development by helping them to lead full, active and healthy lives. The PE curriculum provides a balanced range of activities for children through the six strands:

The PE curriculum provides a balanced range of activities for children through the six strands:

- Athletics
- Dance
- Gymnastics
- Games
- Outdoor and adventure activities
- Aquatics.

#### Junior Cycle P.E.

The junior cycle PE curriculum (pre-2017 and today) includes a range of practical activities, each of which has particular characteristics and contributes to the attainment of the overall aim of physical education.

These areas of the curriculum are:

- Adventure activities
- Aquatics
- Athletics
- Dance
- Invasion games
- Net and fielding games
- Gymnastics
- Health-related activity

### Leaving Cert P.E.

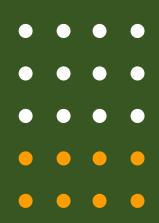
In Ireland, the Physical Education (PE) curriculum is for children from junior infants to sixth class. The curriculum contributes to children's overall development by helping them to lead full, active and healthy lives. The PE curriculum provides a balanced range of activities for children through the six strands:

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- Athletics
- Dance
- Gymnastics
- Games
- Outdoor and adventure activities
- Aquatics.

#### Physical Activity Areas.

- Personal Exercise and Fitness
- Athletics
- Artistic and Aesthetic Activities
- Adventure activities
- Games
- Aquatics



### **Adaptations To The P.E. Curriculum**

For the interest of creating practical adaptations of the PE curriculum, we are going to combine similar activities into the below table.

The practical adaptations to these 6 categories will help you ensure the inclusion of any student with a visual impairment in your physical education class.



# **Tree Model**



### Communication

- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Provide tactile guidance if appropriate to the student with a visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- Describe any potential hazards where possible.
- Remember that some students with a visual impairment may have never seen o ther people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

### Organisation

- Place the student with visual impairment in the centre of the group, allowing their peers to support and guide them.
- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- Ensure the activity area is well lit.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and facility.
- Ensure adequate space for performing activities.

### **Peer Support**

- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide.
- Utilise a peer buddy system if beneficial, pairing a student with a visual impairment with a student without visual impairment.

### Equipment

- For students with low to no vision, ask them if they would like to use adapted equipment such as running tethers.
- Ensure equipment is colour contrasted to the background environment, such as cones, flags, and markings.
- If equipment is not colour contrasted you can,
- Replace with a different colour.
- Paint the equipment.
- Use coloured tape (Short Term Solution).

### **Best Practice**

- Always ensure to ask the student or parents if the activity is safe for them, this information will be known by their ophthalmologist as some activities may risk damage or further vision loss. Activities such as weight lifting for people with glaucoma or contact sports for people with retinal detachment for example.
- Don't presume all students with a visual impairment can't see anything.
- Don't single out the student with a visual impairment.
- Encourage the student with a visual impairment to identify their own limits and challenge themselves to push further.



# Tips To Adapt To The Curriculum

# **1. Athletics**





**Teaching Styles** 

Rules

Equipment

Environment



- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Provide tactile guidance if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's/athlete's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide.
- This can be as a peer buddy system or a guide runner, running beside the student with a visual impairment as they approach the jump and instructing the student when to jump.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- Use a guide runner if appropriate (ask the student first)
- This can be used in tandem with a running tether where both people would hold on to each end of the tether and run at a similar pace. This works best if the guide is a similar hight or has a similar running pace.
- This may also be done with a runner wearing a high contrasting bib or t-shirt, shorts or runners, running a couple of paces in front of the student/athlete with a visual impairment to guide them in the direction to run and can identify and hazards before the student/athlete reaches them.
- If safe to do so, you can use noise or audio cues for students with low to no vision such as calling students/athletes name, clapping your hands, or counting to guide the student with a visual impairment in the direction of where to aim or when to jump (ask the student/athlete first which one they prefer).
- Make sure to stand at a clear and safe distance when the student is performing the throw or jump. Ask your student or athlete which audio cue works best for them and don't be afraid to experiment with what works best in different situations.
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

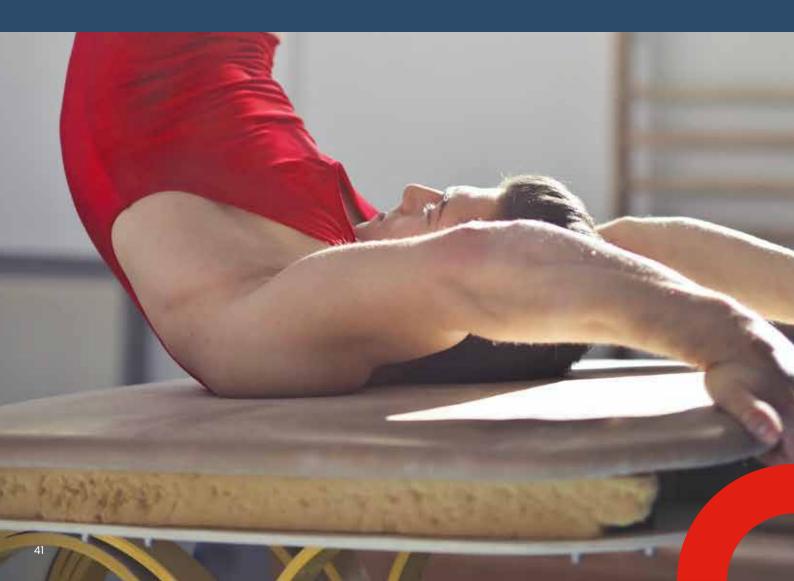
#### Equipment

- For students with low to no vision, ask them if they would like to use a dapted equipment such as running tethers.
- Ensure equipment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings.
- Ensure teachers and coaches where colour contrasting clothing
- If equipment is not colour contrasted you can,
  - Replace with a different colour.
  - Paint the equipment.
  - Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the equipment.
- If appropriate to your student's needs, use high contrast equipment and markers to show where the student is to aim with their jumps/throws.
- This can be done with hula hoops or cones.

- Think safety first.
- Describe any potential hazards where possible.
- Ensure the activity area is well lit.
- Ensure the student with a visual impairment has had the opportunity to o rientate/familiarise themselves with the activity area and facility.
- Ensure adequate space for performing activities,
- Running If needed, two lanes rather than one can be used if a student prefers to run on the white line below their feet.
- Jumping Always ensure that you have a clear and safe landing zone. This means surveying the area carefully and making sure that there are no obstacles or hazards in the students/athlete's path.
- Throwing Ensure that both staff and students stand at a safe distance away from a student/athlete performing a throw.
- Ensure environment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings leading to and on the running and jumping tracks.

#### 2. Artistic And Aesthetic Activities

Artistic and aesthetic dance will cover the area of, Gymnastics: artistic, rhythmic Dance: contemporary, folk, modern, ballet, jazz, tap, ethnic, traditional





- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Provide tactile guidance if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's/athlete's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- If safe to do so, you can use noise or audio cues for students with low to n
  o vision such as calling students/athletes name, clapping your hands, or
  counting to guide the student with a visual impairment in the direction of
  where to aim or when to jump (ask the student/athlete first which one
  they prefer).
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

### Equipment

- Ensure equipment and surfaces are colour contrasted to the background environment, such as cones, flags, and markings.
- If equipment is not colour contrasted you can,
- Replace with a different colour.
- Paint the equipment.
- Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the equipment.
- Add visual markings to gymnastic equipment, this can be done with a permanent solution of using paint or a temporary solution of adding high c ontrast tape (ensure tape does not come loose and become a hazard).
- You can use surface markings such as flat disk cones or tactile/high contrast tape for students with a visual impairment to identify the location for performances or stations during skill development sessions.

- Think safety first.
- Describe any potential hazards where possible.
- Ensure the activity area is well lit.
- While music is a key element to aid in rhythmic dance, be conscious of not blurring out the sound of instruction for the student with a visual impairment by keeping the volume at a low level when providing instruction.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and facility.
- Ensure adequate space for performing activities
- Ensure environment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings leading to and on the performing area.



# 3. Games

Games will cover the areas of: Invasion Games, Net and Wall Games, Striking and Field Games





- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Provide tactile guidance if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's/athlete's body to the position you are demonstrating, eg, moving the feet f or a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- If safe to do so, you can use noise or audio cues for students with low to no vision such as calling students/athletes name, clapping your hands, or counting to guide the student with a visual impairment in the direction of where to aim or run (ask the student/athlete first which one they prefer).
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

#### Equipment

- Use adapted equipment if necessary, such as,
  - Bell footballs
  - Bell basketballs
  - Bell Tennis balls (soft sponge exterior)
  - Bell Rugby Ball
  - Soft touch large hurling ball
  - Yellow GAA football
  - Alternative balls for volleyball such as large colourful beach balls (you can add rice into the ball for sound).
- Ensure equipment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings.
- If equipment is not colour contrasted you can,
  - Replace with a different colour.
  - Paint the equipment.
  - Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate /familiarise themselves with the equipment.
- Goal posts, nets and backboards can be painted or taped with high contrast tape to stand out and contrast from the background environment.

### Environment

- Think safety first.
- Describe any potential hazards where possible.

STATISTICS.

- Ensure the activity area is well lit.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and facility.
- Noise and audio cues can be used to locate goals, nets and aiming points for games, this can be done by calling the students name, tapping a goal post with a coin or clapping your hands being the aiming point.
- You can use surface markings such as flat disk cones or tactile/high contrast tape for students with a visual impairment to identify the location f or performances or stations during skill development sessions.



#### **4.Outdoor And Adventure Activities**

Outdoor and Adventure Activities will cover the elements of Orienteering, Canoeing/kayaking, Rock-climbing, Sailing, Rowing/sculling





- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Provide tactile guidance if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile g uidance). Tactile guidance is where you would physically and gently move the student's/ athlete's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide
- This can be done in the traditional way of have the student with a visual impairment hold onto a sighted peer or teaches elbow (See in Section 1: Sighted Guide).
- This may also be done with a peer or teacher wearing a high contrasting colour top, shorts
  or runners running a couple of paces in front of the student with a visual impairment to
  guide them in the direction to walk and can identify any hazards before the student
  reaches them.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic t asks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

#### **RULES**

- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- Use a guide runner if appropriate for activities such as orienteering (ask the student first)
- This can be used in tandem with a running tether where both people would hold on to each end of the tether and run at a similar pace. This works best if the guide is a similar hight or has a similar running pace.
- This may also be done with a runner wearing a high contrasting bib or t-shirt, shorts or runners, running a couple of paces in front of the student/athlete with a visual impairment to guide them in the direction to run and can identify and hazards before the student/athlete reaches them.
- If safe to do so, you can use noise or audio cues for students with low to no vision such as calling students/athletes name, clapping your hands, or counting to guide the student with a visual impairment in the direction of where to aim, steer or climb (ask the student/athlete first which one they prefer)
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Use peer support and allocate teams so a visual impaired student is on the same team as a sighted peer.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

#### EQUIPMENT

- For students with low to no vision, ask them if they would like to use adapted equipment such as running tethers.
- Ensure equipment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings.
- Prioritise safety by teaching essential emergency procedures and r esponses. Make sure vision impaired students know how to find and use safety equipment like life jackets, fire extinguishers, and distress signals.
- Provide large print maps for orienteering.



#### Equipment

- This can be done by providing a digital map that can be zoomed in to the required dept and detail.
- This can also be done by increasing the size of a map or,
   Using a map with a scale ratio of 1: 25,000 instead of a standard 1:50,000.
- Ensure teachers and coaches where colour contrasting clothing
- If equipment is not colour contrasted you can,
- Replace with a different colour.
- Paint the equipment.
- Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the equipment.

- Think safety first.
- Describe any potential hazards where possible.
- Ensure the activity area is well lit.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and facility.
- Ensure adequate space for performing activities,
- Running If needed, two lanes rather than one can be used if a student prefers to run on the white line below their feet.
- Jumping Always ensure that you have a clear and safe landing zone.
- This means surveying the area carefully and making sure that there are no obstacles or hazards in the students/athlete's path.
- Throwing Ensure that both staff and students stand at a safe distance away from a student/athlete performing a throw.
- Ensure environment and surfaces is colour contrasted to the background environment, such as cones, flags, and markings leading to and on the running and jumping tracks.



# **5. Aquatics**

Aquatics will cover the elements of: Swimming strokes, Lifesaving, Survival swimming, Water-polo, Synchronised swimming





- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Make sure all teaching points are verbally described to the swimmer.
- Provide tactile guidance if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's/athlete's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide.
- Recognise that each vision impaired swimmer will have unique needs, preferences, and learning styles. Adapt your teaching methods to accommodate their specific requirements and comfort levels. Be patient, flexible, and willing to adapt your approach based on their progress and feedback.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

- Think safety first.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- If the student with a visual impairment is swimming laps, ask them to count the number of strokes it takes to cover the length of the pool, this will help them know when to slow down when approaching the end of the lane.
- If safe to do so, you can use noise or audio cues for students with low to no vision such as calling students/athletes name, clapping your hands, or counting to guide the student with a visual impairment in the direction of where to aim or swim (ask the student/athlete first which one they prefer).
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

### Equipment

- Ensure equipment and surfaces is colour contrasted to the background environment.
- Ensure the swim teacher is wearing colour contract clothing to their surroundings.
- Place a large high contrasting coloured maker such as a towel or audible equipment such a speaker or radio at the end of the lane to help with turns and orientation.
- If equipment is not colour contrasted you can,
  - Replace with a different colour.
  - Paint the equipment.
  - Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the equipment.
- Competition for people who are blind use what's called a "tapper" or "bonker", this is a piece of equipment that looks like a long pole with a softer tip. The tapper taps the swimmer as they are approaching the end of the pool lane to indicate an upcoming turn.



- Think safety first.
- Describe any potential hazards where possible.
- Ensure the activity area is well lit.
- Where possible, use a pool with ropes as lane dividers as it will help the student with a visual impairment remain within their lane.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and swimming environment.
- If outdoor swimming, always ensure the student with a visual impairment is swimming in a team or as part of a group for safety reasons. Bungie tethers can be used for a sighted guide swimmer if needed or requested by the student with a visual impairment (Always ask the student first if they want to use equipment such as a bungie tether).



### **6.Health Related Activities**

Health related activities will cover, Activity and the body, Fitness, Training Lifelong activity, Aerobic, Continuous, Interval, Fartlek, aerobics/step aerobics spinning, indoor rowing, weights, core stability, circuits





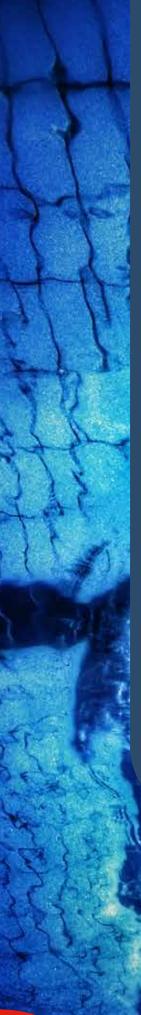
- Use verbal instruction and explanation, less demonstration.
- Ensure the student with a visual impairment is given verbal feedback during activities.
- Use verbal communication to describe the motor skill development.
- Provide tactile guidance to help demonstrate correct technique if appropriate to the student with visual impairment when performing activities (Always ask and respect if the student is comfortable with tactile guidance). Tactile guidance is where you would physically and gently move the student's/athlete's body to the position you are demonstrating, eg, moving the feet for a correct squat position.
- Introduce audio cues and verbal prompts to reinforce guidance and enable the student with a visual impairment to focus on the activity.
- If appropriate use peer support or additional teachers as a sighted guide if requested by the student, always ask the student first if they would like sighted guide. This can be as a peer buddy system.
- Remember that some students with a visual impairment may have never seen other people perform basic motor skills, so don't make assumptions that they know how basic tasks are performed. Break the skill down and verbally or with the aid of tactile guidance communicate how to perform the motor skill correctly.

- Think safety first.
- Always ensure to ask the student or parents if the activity is safe for them, this information will be known by their ophthalmologist as some activities may risk damage or further vision loss. Activities such as weightlifting for people with glaucoma or contact sports for people with retinal detachment for example.
- Involve the student with a visual impairment in all activities, in the warm-up exercises, stretches and main activity.
- If safe to do so, you can use noise or audio cues for students with low to no vision such as calling students/athletes name, clapping your hands, or counting to guide the student with a visual impairment in the direction of where to position themselves (ask the student/athlete first which one they prefer).
- Reduce external noise in the performing area to allow vision impaired student/athlete to hear instruction and audio guidance.
- Offer alternative activities if a traditional event is not suitable for the student with visual impairment.

### Equipment

- Ensure equipment and surfaces is colour contrasted to the background environment, such as cones, and ground markings.
- Add tactile markings to represent weights to equipment such as weight machines, dumbbells, and weight plates.
- Have an instructor or teacher introduce and explain each piece of equipment that will be used in the session.
- Ensure teachers and coaches where colour contrasting clothing
- If equipment is not colour contrasted you can,
  - Replace with a different colour.
  - Paint the equipment.
  - Use coloured tape (Short Term Solution).
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the equipment.





- Think safety first.
- Describe any potential hazards where possible.
- Ensure the activity area is well lit.
- Ensure the environment of the activity is tidy and clear of potential hazards.
- Ensure the student with a visual impairment has had the opportunity to orientate/familiarise themselves with the activity area and facility.
- Ensure environment and surfaces is colour contrasted to the background environment, such as cones, and ground markings leading to and on the performing area.

# References

- Central Statistics Office. (2017). Census 2016 Profile 9 Health, Disability and Carers. Retrieved from https://www.cso.ie/en/csolatestnews/ presspages/2017/census2016profile9-healthdisabilityandcarers/
- World Health Organization. (2021, March 25). Blindness and visual impairment. WHO. https://www.who.int/news-room/fact-sheets/detail/ blindness-and-visual-impairment
- Black, K. (2004). Disability Education Program. Australian Sports
- Department of Education and Science. (1999). The Physical
   Education (PE) Curriculum of Ireland. Dublin: Stationery Office.
- National Council for Curriculum and Assessment. (2003). The Junior Cycle Physical Education Curriculum. Retrieved from https:// curriculumonline.ie/getmedia/ca078585-b4e2-4146-9d22-9fada4bd2478/ JCSEC21\_Physical\_Edcuation\_syllabus.pdf

#### **Contact Us**

Should you have any questions please do not hesitate to contact the Vision Sports Ireland team for further information.

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