Co-funded by the European Union

Project: Move As You Are - 101133647



# BOOKLET ON BEST PRACTICES TO INVOLVE CHILDREN WITH VISUAL IMPAIRMENTS INTO SPORT ACTIVITIES













This Booklet has been produced within the framework of the Erasmus Plus project **Move As You Are** which aims to support social inclusion and address the barriers faced by children with visual impairments (CWVI) through sports activities by providing guidelines and good practice to coaches and teachers.

#### **Partners**

Real Eyes Sport, Italy

Euphoria Net, Italy

APAlab of the National and Kapodistrian University of Athens, Greece

Municipio De Vila Nova De Famalicão, Portugal

#### Editor

Alessia Bevilacqua, Euphoria Net

#### Authors

Giulia Chiara Castiglioni and Andrea Farnese, Real Eyes Sport

Dimitra Koutsouki, Katerina Asonitou, and Ifiyenia Koskina, APAlab of the National and Kapodistrian University of Athens

João Ferreira, Municipio De Vila Nova De Famalicão

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Project: Move As You Are - 101133647





# **Tables of contents**

Chapter 1: Introduction	4
1.1 Visual Impairment	4
1.2 Types of Vision Loss	5
Chapter 2: The Theoretical Background	6
2.1 Adapted Physical Activity (APA)	6
2.2 Inclusive Sports and Play	6
2.3 The Meaning of Physical Literacy	9
2.3.1 The Elements of Physical Literacy	9
2.4 What are the Benefits of being Physically Active?	
Chapter 3: The Teaching Methodology	13
3.1 Teaching Methods/Techniques	
3.2 Whole-part-whole Instruction	
3.3 Task Analysis	14
3.4 Individualized Education Program (IEP)	16
3.5 Teaching Strategies	
Chapter 4: Guidelines	19
4.1 Adaptation	
4.2 Simple and Effective Communication	
4.3 Organization	
4.3.1 Creating the Right Physical Environment	
4.3.2 Adapted and Accessible Equipment	
4.3.3 Tactile Markers	21
Chapter 5: Practical Tips for PE Teachers or Coaches	22
5.1 Examples for Ideas	23
Chapter 6: Best Practices	24
Chapter 7: References and Resources	78





# **Chapter 1: Introduction**

# **1.1 Visual Impairment**

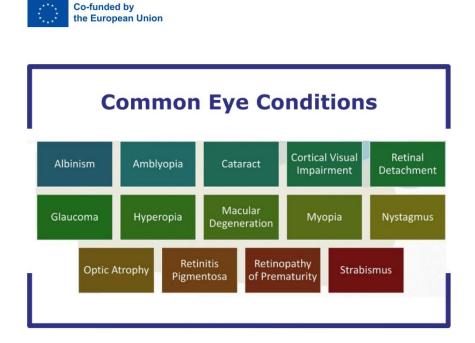
**Visual Impairment** is defined by the World Health Organization (WHO, 2023) as a decrease in or restriction of visual acuity and/or visual field. Globally, at least 2.2 billion people have near or distance vision impairment. In at least 1 billion, vision impairment could have been prevented or is yet to be addressed.

People with visual impairments include people with blindness and low vision. Legally, a blind person is said to be a person whose vision, even with a visual aid, such as glasses, is 20/200 or less in the best-seeing eye. Additionally, people with around 20.70 to 20/200 vision are called low vision (WHO, 2018). Estimations indicated that 217 million people worldwide have moderate to severe visual impairment, and about 36 million are blind (Oleszkiewicz, Pisanski, Sorokowska, 2017).

A decrease in visual acuity indicates a decrease in vision clarity, while a decrease in the field of vision characterizes the visual field they can view. Impaired eyesight might be the outcome of thousands of various disorders. It is crucial to remember that, even in cases when two individuals have the same diagnosis, their experiences with vision and responses to various situations and surroundings may vary.

# Visual Impairments

Refer to a substantial loss of vision, even if the individual uses corrective lenses. The nature and extent of visual impairment can vary greatly, so each student may need personalized adjustments to teaching methods and materials to learn effectively. **Figure 1**: Definition of Visual Impairment.



**Figure 2**: Common Eye Conditions.

MOVE 15

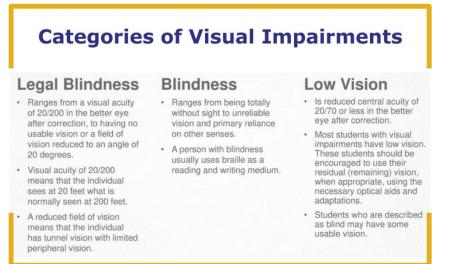
YOU ARE

Source: <u>By Nancy</u> Gray, Anita Wallace and Kim Black.

## **1.2 Types of Vision Loss**

Visual impairments, including blindness, mean an impairment in vision that, even with corrections, adversely affects a child's educational performance.

This term includes total blindness and partially sighted (Telzrow, 1999; IDEA, 1997).



**Figure 3**: Categories of Visual Impairments.

Source: <u>By Nancy</u> Gray, Anita Wallace and <u>Kim Black</u>.







# **Chapter 2: The Theoretical Background**

# 2.1 Adapted Physical Activity (APA)

According to the International Federation of Adapted Physical Activity (https://ifapa.net/definition/), adapted physical activity is defined as a crossdisciplinary body of practical and theoretical knowledge directed toward impairments, activity limitations, and participation restrictions in physical activity. APA includes, but is not limited to, physical education, sport, recreation, dance, creative arts, nutrition, medicine, and rehabilitation. It is an academic field of study supporting an attitude of acceptance of individual differences, advocates access to active lifestyles and sports, and promotes innovative and cooperative service delivery, support, and empowerment.

# 2.2 Inclusive Sports and Play

Inclusive sport and play means sport and physical activities in which people with and without disabilities take part together.

A good tool to adapt to any sporting activity is the **Tree Model** (Black, 2004; Niland, et al. 2010).



Figure 4: The Tree Model.

**Source**: <u>Active Disability</u> <u>Irland</u>.





#### The six main areas of the Physical Education (PE) curriculum offer

visually impaired youngsters with a balanced choice of activities:

- 1. Athletics
- 2. Dance
- 3. Gymnastics
- 4. Games (goalball, soccer)
- 5. Outdoor and adventure activities (bicycling)
- 6. Aquatics (swimming).

#### **IMPORTANT** in developmental ages: **GROSS MOTOR DEVELOPMENT**.







**Figure 5-7**: Adapted sports. In order: Thalita Vitoria Da Silva competed at the Paris 23 Para Athletics World Championships with her guide-runner; the Swedish goalball team at the 2004 Summer Paralympics; blind football players.

**Sources**: International Paralympic Committee; Wikipedia; Inside the Games.





In the <u>Gross Motor Development Curriculum for Children With Visual</u> <u>Impairments</u> by Lauren J. Lieberman, and Pamela S. Haibach, is it possible to find different sports activities for:

## > <u>Teaching Gross Motor/Locomotor Skills</u>

<u>Skill: Run</u> <u>Skill: Hop</u> <u>Skill: Horizontal jump</u> <u>Skill: Skip</u> <u>Skill: Gallop</u> <u>Skill: Slide</u> Skill: Leap

## > Teaching Perceptual Motor Skills

Skill: Balance

## > Teaching Object Control Skills

Skill: Two-hand strike/bat Skill: One-hand forehand strike Skill: Stationary dribble Skill: Catch Skill: Kick Skill: Overhand throw Skill: Underhand roll/throw

## > Teaching Physical Fitness Skills

Skill: Curl-ups Skill: Push-ups





## 2.3 The Meaning of Physical Literacy

Physical literacy is the "motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for engagement in physical activities for life" (International Physical Literacy Association, 2014).



Figure 8: Physical Literacy Definition.

Source: <u>Cap'n Pete's Power PE</u>.

## **2.3.1 The Elements of Physical Literacy**

#### **Motivation and Confidence (Affective)**

The terms "motivation and confidence" describe a person's excitement, fulfillment, and assurance in embracing physical exercise as a necessary component of life.

#### **Physical Competence (Physical)**

The ability to experience a variety of movement intensities and durations and the capacity to develop movement skills and patterns are factors that are referred to as "physical competence" in humans. Greater physical competence allows a person to participate in a wider range of physical activities and environments.



Co-funded by the European Union



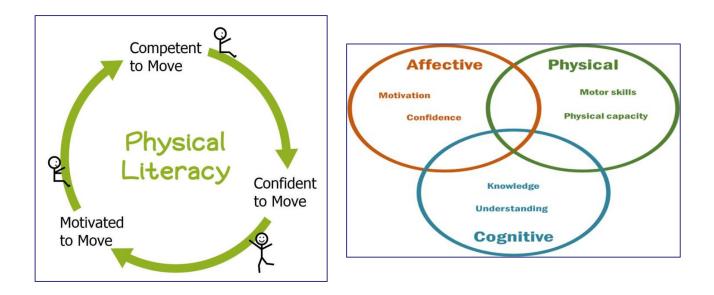
#### Knowledge and Understanding (Cognitive)

Understanding the health benefits of an active lifestyle, recognizing and articulating key characteristics that influence movement, and appreciating appropriate safety precautions related to physical activity in a range of contexts and physical environments are all examples of knowledge and understanding.

#### **Engagement in Physical Activities for Life (Behavioural)**

When an individual chooses to be physically active regularly, they assume personal responsibility for their physical literacy. This is known as engagement in lifelong physical activities. This means prioritizing and maintaining participation in a range of important activities stimulating for the person as a vital component of their daily routine.

(https://physicalliteracy.ca/)



**Figure 9-10**: The elements of Physical Literacy; Diagram showing the three domains of Physical Literacy and the cognitive, affective, and physical attributes that influence participation in physical activities throughout life.

Sources: Markham Pan Am Centre; Melby et al., 2022.

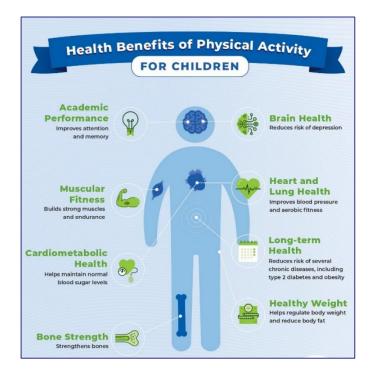




# 2.4 What are the Benefits of being Physically Active?

Systematic exercise and physical activity, among other things, improve cardiorespiratory function and bone mass, aid in weight management, relate to cognitive development, and reduce anxiety and depression. Encouraging people to exercise systematically also enhances their quality of life, which is linked to happiness, fulfillment, and a harmonious fulfillment of their own objectives and needs. It also expresses the individual's subjective experiences, perceptions, and needs rather than objective life situations.

Physical activity is good for children in many ways. Benefits include improved academic performance, brain health, muscular fitness, heart and lung health, cardiometabolic health, long-term health, bone strength, and measures of a healthy weight.



**Figure 11**: Health Benefits of Physical Activity for Children.

**Source**: <u>CDC – U.S. Centers for</u> <u>Disease Control and Prevention</u>.

For every youngster, physical activity is vital. Consulting with a physician before your child starts a regular exercise program is highly recommended. Seek the counsel of an expert who knows of physical activity and disabilities. Regarding acceptable physical activity levels and kinds for your child's skill level, they may provide you with further information

(https://www.cdc.gov/physical-activity-basics/health-benefits/children.html).





## **ESSENTIALS** for Including Physical Activity in a Child's Life:

- There are many ways to make physical activity part of a child's or adolescent's life.
- Children ages 6 to 17 need to be physically active for 60 minutes or more every day.
- There are three types of physical activity: aerobics, muscle-strengthening, and bone-strengthening.



Figure 12: Children in the gym with the instructor.





# **Chapter 3: The Teaching Methodology**

Teaching methods and strategies are how we adapt our communication style with the participants.

# 3.1 Teaching Methods/Techniques

- Verbalizing Instruction. For children with visual impairments, visual models are less effective. To accommodate all students, teachers should verbalize each movement as they visually show it.
- Tactile Modelling. Commonly referred to as hand-under-hand education, it involves performing an action and allowing students to feel what the teacher is doing and how to move their bodies.
- Physical guidance. This should be done at the same time as the teacher is verbalizing instructions. This enables the learner to experience the shape of a movement that the instructor is verbally explaining. Recommended for dynamic movement.
- Pre-teaching. The skill should be introduced to the child a week or two before it is taught in the physical education class.



**Figure 13**: A coach facilitates tactile inspection of a batting tee as part of pre-teaching.

**Source**: <u>Gross Motor Development</u> <u>Curriculum for Children With Visual</u> <u>Impairments</u>.





# 3.2 Whole-part-whole Instruction

Teaching the whole through the teaching techniques of **verbal instruction** and **task analysis** combined with tactile teaching. Tactile teaching includes:

- Tactile modeling
- Co-active movement
- Physical guidance.



**Figure 14**: A teacher demonstrates how to leap over a yoga mat to a child.

Source: Lieberman L. J., Haibach P. S., Gross Motor Development Curriculum for Children With Visual Impairments.

## 3.3 Task Analysis

Verbal language is not sufficient to teach children with no previous experience or with limited basic skills in complex physical movements, such as hopping, skipping, or throwing. Task analysis (also known as activity analysis) is the breakdown of all the steps necessary to perform a given task. (Lieberman & Houston-Wilson, 2009).

**Task analysis** is a powerful tool of instruction for those with visual impairments who need to learn basic physical skills. The use of task analysis allows a child to learn and master skills through a series of smaller steps until the entire skill is learned.







**Figure 15-18**: A task analysis to teach the underhand roll. In order: a teacher tactile models a lunge for a child; the child performs a lunge with his back knee touching a small, bendable cone; the child holds a ball with his arm extended backward until it touches the teacher's hand; the child performs an underhand roll independently.

**Source**: Lieberman L. J., Haibach P. S., Gross Motor Development Curriculum for Children With Visual Impairments.





Teaching the underhand roll may be a matter of using the appropriate cues: step (opposite foot), arm back, step, step (opposite foot), bend knees, roll, and follow through.

It is important to use these verbal cues together with the teaching techniques of tactile modeling and physical guidance.

You can use specific cues for each gross motor skill in the curriculum.

# 3.4 Individualized Education Program (IEP)

An Individualized Education Program is the key for infants and toddlers in special education.

A visually impaired student and his/her parents and teachers can work together on an Individualized Education Plan (IEP) team to determine specific goals the student should be working on.

An **IEP** is a legal document that outlines how a student is currently performing and where he/she should be in a year (long-term and short-term goals).

The main areas covered are:

- 1. the behavior (it describes what the child will be able to perform),
- the conditions (the conditions under which the specified behavior happens),
- 3. **the criterion** (provides the performance level necessary to achieve the goal).

The **IEP** aims for success in school, the community, and the workplace (Sapp & Hatlen, 2010), while also being **a tool for assessing** students, setting personal goals, and providing instruction.

## **BASIC DOMAINS:**

#### ASSESSMENT/EVALUATION/FEEDBACK/INCLUSION/ACCESSIBILITY,

independent living skills, orientation & mobility skills, leisure and entertainment skills, use of assistive technology, sensory efficiency skills.





Sensory efficiency skills refer to "how well an individual receives, transmits, and interprets information about people, objects, and events in the environment, using all sensory systems" (Smith, 2014, p. 117).

There were significant differences in the skills of touch, taste, and smell in favor of low vision students and in the skills of hearing in favor of blind students in the study "Evaluation of Sensory Skills among Students with Visual Impairment (Saleem & Al-Salahat, 2016).

In order to include all PREVIOUS elements in the PE, six steps are proposed (Lieberman et al., 2014):

- 1. **Cooperation with parents.** Parents can help their child practice the motor skills taught at school, within a familiar environment, and without anxiety.
- Pre-teaching. Children with VI need more instruction and time to practice learning new concepts and movements (Lieberman, Ponchillia, & Ponchillia, 2013).
- 3. **Strong knowledge background of the PE TEACHER** and possibly the parallel staff support.
- 4. Application of the method of peer assistant teachers.
- 5. **Participation in activities for practice and entertainment** after the end-of-the-day school program (McDonough, Sticken, & Haack, 2006).
- 6. **Inclusion of IEP elements for children with VI** in training programs of PE teachers and special education teachers who teach students with VI.

## **3.5 Teaching Strategies**

Tactile Boards. Tactile boards or maps provide the physical layout of a playing area using raised lines and figures. Students explore the board and navigate through the actual court with a teacher to gain an understanding of a playing area. Creating a sound source at a specific place can help students navigate and engage in tasks more effectively.





- The Use of Sound. If the sound comes before, after, or is integrated into the objective, teachers ought to let the pupils know. A few examples of sound sources: clapping, portable sound sources, wireless doorbells and adapted sound balls.
- Modifying Implements. These implements use equipment that is more noticeable. Provide pupils with more assistance locating tools by using brighter, larger, or neon-taped items. For kids who are completely blind, specially made balls with bells or sounds are more appropriate.
- Peer Tutors /Peer Support. If appropriate and requested by the student, use peer support or additional teachers as a sighted guide, always asking the student first if they would like a sighted guide.



**Figure 19**: A teacher gives verbal instruction to a child while an older peer demonstrates jumping rope.

**Source**: <u>Lieberman L. J., Haibach P. S., Gross Motor Development Curriculum</u> for Children With Visual Impairments.





# **Chapter 4: Guidelines**

The key Guidelines to apply in the research of the best practices on how to involve children with visual impairments in PE and sports (for teachers and coaches) are included in the following features.

## 4.1 Adaptation

When adapting the PE curriculum, remember that all games can be adapted to be more inclusive.

Remember that no two people are the same, and 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 generalize all visual impairments but instead to understand what each person can see and try to maximize the use of the sight that they have.

## **4.2 Simple and Effective Communication**

Simple and effective communication between the teacher and students is important:

- First contact with the student.
- Ask questions to obtain Information that will help you offer the best experience.
- Learning individual student's needs.
- Find out what their previous experiences are, so that you start at the appropriate level.





# 4.3 Organization

When applying co-educational programs for students with VI, the obstacles are the **lack of sufficient professional preparation** of teachers or coaches, planning, and the limited available equipment.

## 4.3.1 Creating the Right Physical Environment

This will help to ensure that the athlete with a vision impairment is set up to succeed from the beginning.

- The surface: make sure the surface is free of obstacles. Does the surface color contrast with your equipment color?
- Lighting, Color Contrast, Color Preference.
- Noise, Obstacles/hazards, Consistency, Visual Clutter.
- Think about safety first. Ensure the activity area is well lit. Appropriate dressing, socks, and shoes.
- Involve the student with a visual impairment in all activities, in the warmup exercises, stretches, and main activities.
- Braille/print labels can be placed on the lip of the drawers to help with organization.
- Plastic bags can store and separate gloves, scarves, handkerchiefs, etc.

#### 4.3.2 Adapted and Accessible Equipment

A wide range of adapted equipment is available to help break down barriers to participation. You can change the Color, Shape, Size, Distance, Noise of equipment, and Speed.

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

 Bell balls (Football, rugby, tennis, basketball); Color contrasting balls (Dependent on the color of the hall or environment surface); Collapsible cones or disk cones; High-color contrasting bibs or clothing (for both





students and teacher); High-vis tape or clothing wrapped around goal posts, etc.

- Tandem bikes.
- Running tether (short rope used to guide someone while running).
- High visibility vest.

#### 4.3.3 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 ropes taped down to the court.

This enables players to feel the lines with their hands or feet and help orientate themselves within the court.



**Figure 20**: Children play football using a sound ball, while instructors give vocal directions, banging on the goal with a stick to make the position understood.





# **Chapter 5: Practical Tips for PE Teachers or Coaches**

Here are some practical tips for PE teachers or coaches to involve students with disabilities in sports:

- 1. **Educate yourself:** take courses, attend seminars, or seek guidance from experts to gain knowledge and skills on teaching Goalball, for example.
- Create an inclusive environment: ensure that the environment is accessible and free from architectural barriers that may hinder the participation of students with disabilities. This includes providing adapted equipment and assistive devices as needed.
- 3. **Individualize adaptations:** develop adaptations to the game that meet the unique needs of each student with a disability. This may include modifying rules, equipment, or playing areas.
- 4. Foster social and emotional support: encourage social interaction and peer support among students, including those with and without disabilities. This can be achieved by having students work in pairs or small groups and promoting teamwork and collaboration.
- 5. **Organization of webinars for PE teachers and coaches.**
- 6. **Organization of webinars for counseling and informing parents.**
- Provide positive reinforcement: recognize and reward students' achievements, skills, and efforts to motivate them to continue participating in the activities and developing their skills and abilities.
- 8. **Collaborate with parents and other professionals:** work closely with parents, physical therapists, and other professionals to ensure that the needs of students with disabilities are met.
- 9. **Use appropriate language:** use person-first language to show respect and focus on the individual rather than their disability.
- 10. **Train peers and staff:** train peers and other staff members to support students with disabilities during practice and games (paraprofessionals,





paraeducators in PE, staff training video, peer tutors, strategies for inclusion, training CD, volunteers, parents, grandparents, college students).

- 11. **Involve students in planning:** involve students in the planning and evaluation process to ensure their needs and preferences are considered.
- 12. Seek feedback: gather feedback from students, parents, and other stakeholders to evaluate the program's effectiveness and make necessary adjustments.
- 13. **Monitor progress:** regularly monitor students' progress and adjust the program according to their needs.
- 14. **Provide safety considerations:** ensure safety during the practices and games and provide necessary safety equipment.
- 15. **Promote inclusion:** use Goalball, for example, as an opportunity to promote inclusion and break down barriers between students with and without disabilities.
- 16. Make your own Goalball with plastic bags: if there is not an actual Goalball, physical educators/teachers can take any ball available in schools and place it in plastic bags. This way, the ball will produce the necessary noise for students with visual impairments.

## **5.1 Examples for Ideas**

- Perkins School for the Blind, "Staff Training for Physical Education for Children With Visual Impairments", <u>https://youtu.be/77fyMsRWrYs</u>.
- APH-American Printing House for the Blind, "Gross Motor Skills", <u>https://www.youtube.com/watch?v=AaBZYEGINKs</u>.
- 4StuDi-Project, "4StuDi Project Video 2.2: Teachers' Social Support for Students with Visual Impairments (EN)", <u>https://www.youtube.com/watch?v=onGwk7i43D8&feature=youtu.be</u>.
- 4StuDi-Project, "4StuDi Project 4StuDi Project Video 1.2: Classmates' Social Support for Students with Visual Impairments (EN)", https://www.youtube.com/watch?v=6U7QKZTmztg&t=6s.





# **Chapter 6: Best Practices**

In this chapter, we have collected the best practices (games, motor fairy tales, adapted sports activities, etc.) identified and developed by the project partners: **Real Eyes Sport** from Italy, **Adapted Physical Activity/ Developmental And Physical Disabilities Lab** (APAlab) of the National and Kapodistrian University of Athens from Greece, and **Municipio De Vila Nova De Famalicão** from Portugal, with the support of **Euphoria Net** from Italy.

In identifying the best practices, we focused on the possibility of their **replication** and **five principles**: skills learning, inclusion, motor development, lifelong learning exercises, and fun.

The primary objective of these best practices is to enhance the following fundamental movement patterns: strength, endurance, speed, agility, flexibility, balance, rhythm, mobility, and spatial orientation.

Despite not having easy access to activities, children and young adults with vision impairments require the same kinds of activities as their sighted counterparts.

# Game as an Inclusive Tool and Learning Opportunity for Visually Impaired Children

By its very nature, games encompass a continuous variability of situations within which it is unthinkable to define or codify stable and/or stereotyped solutions, requiring the individual to continuously modulate behaviors. The adaptation process is made possible through the development and refinement of problem-solving skills, a necessary competence applicable not only in sports but in any life area.

Therefore, games prove to be an effective tool for stimulating learning processes, noting that it is used by many animal species (humans included) to develop the skills needed to face life situations (consider, for instance, how many animal pups learn to fight and hunt by playing with their peers).





Indeed, games allow the development of children's **physical literacy**:

- Physical Benefits: improved mobility, kinesthetic ability, directionality, balance, arm strength, movement and body weight transfer, changes of direction, motor control, coordination, flexibility, reflex responses, stretching, strategy.
- **Cognitive Benefits**: improved attention, perception, auditory discrimination, motor-language coordination.
- Psychological Benefits: beneficial for mental health, wellness, pleasure, flexibility and relaxation of the muscles, recreation, regulation of emotions, fun, enjoyment, developing patience, control emotions, and learning to solve arguments calmly, discussion points.
- Social Benefits: increased cooperation, fun, playtime, socialization, recreation, getting along with others, competition, teamwork, collaboration, and inclusion.

Game is also recognized as an exemplary inclusive tool. Indeed, once the rules of the game are established, although they may be modified or adapted, they remain the same for all participants, allowing each player to implement the necessary strategies to achieve the objectives of the game, drawing from a subjective, personal, and unique experiential-motor background.

A child with visual impairment (or any other type of disability) has the opportunity to be included in the group through the game, without having to carry out individualized activities, which not only lack inclusive processes but sometimes even marginalise. At the same time, the rest of the group/class playing with a child with a disability will use new strategies to achieve the game's goal, enhancing problem-solving skills and developing new technical/tactical adaptations.





# > The Motor Fairy Tale: a Useful Educational Tool in Inclusive Processes for Children

Designing activities for young children must necessarily emphasize their need for fun, using imagination as an ideal prerogative to achieve this. From 4 to 7 years old, children are immersed in a fantasy world where animism is staged in everyday life, impersonating cartoon or animated film characters, together with their peers.

For this purpose, the **motor fairy tale** (Seclì P., Farnese A., 2021) becomes a suitable and accessible tool for this age group. This educational-experiential workshop intertwines the **narration of a story**, a traditional fairy tale, an animated film or similar, **with motor activities** and proposals carried out in the gym, which specifically roughly follow the story's plot.

Using storytelling in a sports context, such as the gym, makes it possible to involve even the most reluctant children in motor experience, stimulating interest in movement and educating them in healthy and correct lifestyles. This consideration also applies to children with visual impairments, as it is not taken for granted that they are predisposed or interested in approaching sport.

Often, sports experience is a source of physical trauma, stress, and frustration, especially when practised by children with a disability. Therefore, modulating appealing proposals suitable for children with disabilities make it possible to motivate even the most reluctant individuals to learn, decreasing the likelihood that they will abandon sport.

In an ever-changing social context, where children sometimes prefer technological games to avoid fatigue and social interactions, the motor fairy tale becomes a motivating and stimulating opportunity, a necessary vehicle for developing basic learning related to body schema, basic motor patterns, and all those skills and competencies useful and applicable even in competitive sports.





# Fairy Tale-Game Adapted to Visual Impairment

NAME OF MOTOR FAIRY TALE	The story is taken from the animated film <b>Finding Nemo</b>
Setting	Ocean: coral reef.
Characters	Marlin (Nemo's father), Coral (Nemo's mother), Nemo (clownfish), Dory (blue tang fish), Gill (leader of the fish in the tank where Nemo is taken), Bruce (great white shark), Anchor (hammerhead shark), Chum (mako shark), Nigel (Australian pelican), Crush (sea turtle), dentist and dentist's daughter, school of tuna.
Learning Objectives	<ul> <li>Development and stabilization of postural patterns.</li> <li>Development of basic motor patterns.</li> <li>Reinforcement of sensory perception.</li> <li>Reinforcement of self-efficacy and self-esteem.</li> <li>Implementation of general coordination.</li> <li>Development of tactile sense related to occupying and defending space.</li> </ul>
Possible Transversal/ Interdisciplinary Objectives	<ul> <li>Teaching children the value of diversity, inspired by Nemo's experience, a clownfish who, despite an atrophic fin, manages to do things that are unimaginable for other fish.</li> <li>Introduction of guiding methods in the space for the visually impaired child.</li> </ul>
Recommended Classes	Last year of kindergarten and the first two years of primary school.
Equipment/ Materials	Hoops, sounding balls, ropes, delimiters or cones, pinnies, bells, balance beam, obstacles, wall bar.





Space Used	Gym or courtyard.
Duration	1 hour and 30 minutes.
Description	<ul> <li>The story begins with Marlin and Coral laying eggs in an anemone, but a barracuda arrives and eats Coral and all the eggs except one, which ends up at the bottom of the coral reef, getting bruised.</li> <li>In this part of the story, the game involves the children running inside the gym, chased by one of their peers (the barracuda) who can move in the space by clapping their</li> </ul>
	hands or holding a bell so that the visually impaired child can notice their presence. The visually impaired child is guided by a peer. The touched children must stand still with their legs apart, and to be freed, a peer must pass under their legs. Continuously change roles so that everyone can be the barracuda and chase others.
	Time passes, and Nemo grows to the point where his father has to send him to school. Marlin is very concerned because Nemo is a fish with an atrophic fin (which has not developed properly) and insists that Nemo follow all the rules and prohibitions. However, this does not happen, and when Nemo and his friends reach the edge of the coral reef, he decides to venture into the open sea and is caught by people on a boat.
	- The game of the fisherman is introduced. Children line up on one side of the gym, except for one who will stand on the opposite side, taking the role of the fisherman. Children playing Nemo must run to the





opposite side of the gym, avoiding being touched by the fisherman. Those caught must join hands with the fisherman, increasing the size of the fishing net. The fishermen must hold a bell in their hands to make the visually impaired child perceive their position in the space, who will be guided by a peer. The game ends when all the children are caught by the fisherman's net. Having seen that Nemo has been caught, Marlin ventures out into the open sea and meets Dory, a fish who constantly loses her memory but can read. Dory reads an address on a mask lost by one of the people on the boat and realizes that Nemo has been taken to Sydney. She then decides to help Marlin search for his son. Moving away from the coral reef, the two protagonists encounter three sharks (Bruce, Anchor, and Chum) who say they have taken an oath and become vegetarians. However, Dory hits a rock and bleeds. Hearing the call of blood, the sharks pounce on the two fish who are forced to flee quickly.

- The game of tails. Divide the children into pairs and give each pair a bib, which should hang with one flap outside the shorts. Tape a bell to the bib of the partner paired with the visually impaired child. At the start, each child must try to take the partner's tail; once caught, the roles are reversed. Also in this game, the visually impaired child is guided by a peer.

After escaping from the sharks, Dory and Marlin find themselves having to cross an expanse of jellyfish, so they decide to jump on their heads to avoid being stung and losing consciousness.





- Set up a motor course in the gym using hoops to jump through, delimiters not to touch, obstacles to pass under, a balance beam to walk on, etc. Where possible, the visually impaired child should cross the course alone, always under the supervision of the instructor or a peer.

Having passed the jellyfish, Marlin and Dory realize they need to take the Atlantic current to get straight to Sydney, but as it is a strong current, they need to ride on Crush and other turtles' bellies.

- The turtle game. Divide the children into pairs. One member gets down on all fours (crawling position) while the partner stands at their side aiming to turn them over. To turn the partner over and place them on their back, children can push or pull placing only their hands on the hips. When the partner is turned over, roles are reversed. It is advisable to explain the rules at the beginning of the game, reminding them that it is a fighting game and that, to avoid anyone getting hurt, hands should never be placed on the neck or used to lever the shoulders and/or arms but only at the hip level. Continuously ask children to change pairs, so that everyone can experience the game with different partners.

Finally, Dory and Marlin arrive in Sydney and meet Nigel, who tells them that Nemo has been taken to an aquarium in a dentist's house. In the aquarium, Nemo becomes friends with Gill and the other fish, and together they plan to escape by trying to dirty the water by putting a pebble in the filter. To do this, Nemo, the smallest fish, gets into the tube leading to the water filter and puts the pebble in to block it. The water gets dirty and, to change





it, the dentist puts Nemo next to the sink. With a flick, Nemo manages to jump into the drain leading to the open sea, regaining freedom.

- Have the children stand on a single line, placing a rope on the ground in front of them. On the opposite side of the gym, place another line using a rope. Children are divided into two groups: one group must jump feet together over the first rope, sprint to the opposite side, jump over the second rope, and return to the starting position; while the others must run, touch the opposite wall, and return to the starting position. The first group represents the fish friends, and the second is the dentist. Visually impaired children are guided by a peer.

Nemo manages to reach the ocean and sees a group of tuna trapped in a net while trying to get home. He decides to help them by guiding them to push all together toward the bottom of the sea. In this way, the net breaks, and the tuna escape, thanking Nemo.

Have all the children lie on their backs, side by side. Ask them to hold hands to form a net. At the teacher's signal, the teacher will try to detach one child from the net by pulling them by the feet and dragging them away.
Whoever is detached from the net will help the teacher unhook the others, always dragging them by their feet. It is necessary to explain the rules in advance to avoid anyone getting hurt (children can only be detached by their feet, no hands on the neck, face, etc.).

Nemo reunites with his dad and Dory, and together they return home in their anemone.





	To also a the stand of markers 199 at the 199 at the
	- To close the story, a motor skills path can be included
	to represent Nemo, Dory, and Marlin's journey home, or
	you can end the story without including any motor part
	(depending on the timing and at the teacher's discretion).
	The story can be expanded by including other parts of the
	narrative that have not been considered to avoid making
	the storytelling too heavy or the lesson too long. It
	should be noted that the story can be completed in a
	single teaching unit to be carried out during physical
Observations	education hours in the gym, or it can become a series of
	lessons that follow the logical thread of the story chosen
	by the teacher. The choice depends on the didactic-
	methodological needs of the PE teacher and/or the coach,
	depending on the context in which the story-play
	workshop takes place.
	To simplify situations and learning, it is advisable to limit
	and/or reduce environmental stimuli that could in some
	way disturb and interrupt the lesson. In this regard, it is
	necessary to assess the level of attention and perception
Variations	of the visually impaired child. If you notice that the child
	is experiencing difficulties, the number of players can be
	reduced, organizing the activity in small groups or, if
	necessary, playing the games in pairs. Organizing the
	activity so that the visually impaired child only has one
	stimulus to follow or run away from allows them to focus
	their attention better, thus also facilitating the learning
	process of the game.
Adaptations for	Adaptations used for the visually impaired within motor
Disability	proposals include:





- Using the guidance of a sighted companion during movements to complete various motor paths or during structured games by the teacher.
- Using rattles or bells, hand clapping, sound balls, etc., to allow the visually impaired child to perceive the origin of stimuli during the game phases.
- Significantly reducing the number of participants in the game by forming small groups or carrying out activities in pairs, to minimize the demand for attention from the visually impaired child, thus facilitating the focus on stimuli that are easier to perceive and follow.



**Figure 21**: A rattle ball can be used during games to signal the position of other participants in the field.





#### **Games and Educational Progressions**

We have considered providing the reader with some examples of educational progressions (ordered in sequence from the simplest to the most complex), which use the game as a learning tool and allow the child with visual impairment to develop a relationship with the surrounding space as well as enhance their motor skills. These games are suitable for simultaneously involving children with and without visual impairments.

TITLE OF BEST PRACTICE	FROZEN WITCH	
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and game rules. Know how to run in various directions using changes in direction.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Use contact as a tool to create a shared game; establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move with the help of a guide in the space by analyzing the auditory stimuli present within the game.</li> </ul>	
Activity Description	Select a child and assign them the role of the witch. Give them a sound ball or ask them, at the start of the game, to move around clapping their hands so that visually impaired playmates can perceive the sound stimulus. Define a space suitable for the number of participants and the group's abilities.	





	Assign each visually impaired child a guide who will
	prevent them from bumping into objects or peers during
	the game.
	At the teacher's signal, the "witch" must run and try to
	touch the other children.
	Anyone touched must stand still with legs apart, waiting
	to be freed by a peer.
	To free them, another child must pass under the legs of
	the captured peer.
Materials/ Equipment	Sound ball, rattle or bell, boundary markers or cones.
Teaching	Inductive method.
Strategies	
Techniques and	Stimulate free discovery, game strategies, and problem-
Indications	solving.
	The visually impaired child will guide the peer away from
A duranta ana	the danger signal emphasized by the witch's clapping,
Advantages	while the peer will avoid making them bump into
	equipment, objects, or other children.
Variations	Perform the same activity allowing the visually impaired
	child to move in the surrounding space using a cane (with
	the guide accompanying them at a minimal distance to
	intervene at any moment).
	Each child must say their name aloud during movements
	so that visually impaired participants can perceive the
	position of all participants during the dynamic phases of
	the game.





TITLE OF BEST	PAC-MAN
PRACTICE	PACTHAN
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and game rules. Know how to run in various directions using changes in direction. Be able to move along the lines of the gym.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Use contact as a tool to create a shared game; establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move with the help of a guide in the space by analyzing the auditory stimuli present within the game.</li> </ul>
Activity Description	Select one or more children to play the role of ghosts. The rest of the group must escape from the ghosts. At the teacher's signal, the ghosts chase the other children, trying to touch them. Anyone touched must stand still and wait to be freed by a peer (just being touched by a peer who is not a ghost). All participants must move and escape by stepping on the lines present in the gym. The visually impaired child will be accompanied by a guide, while the children playing the ghosts will move around clapping their hands or shaking a sound ball, rattle, or bell.
Materials/ Equipment	Sound ball, rattle or bell.





Teaching Strategies	Inductive method.
Techniques and Indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	The visually impaired child will guide the peer away from the danger signal emphasized by the ghost's clapping, while the peer will avoid making them bump into equipment, objects, or other children.
Variations	Perform the same activity allowing the visually impaired child to move in the surrounding space using a cane (with the guide accompanying them at a minimal distance to intervene at any moment). Each child must say their name aloud during movements so that visually impaired participants can perceive the position of all participants during the dynamic phases of the game.



**Figure 22**: A blind kid can be guided in the game by a peer/tutor.





TITLE OF BEST PRACTICE	SPIDER GAME
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and game rules. Know how to run in various directions using changes in direction.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Use contact as a tool to create a shared game; establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move with the help of a guide in the space by analyzing the auditory stimuli present within the game.</li> </ul>
Activity Description	Select a child and assign them the role of the spider. The rest of the group will play the "flies" that must escape from the spider. The child touched by the spider must remain still until the end of the game round, becoming a web. Webs can touch the flies that pass near them while trying to escape from the spider. Webs cannot move their feet from the ground but can extend their arms into the surrounding space. The spider must run while clapping their hands or holding a sound ball. The visually impaired children will be accompanied by a guide during the game, who will prevent them from bumping into objects or peers.
Materials/ Equipment	Sound ball, rattle or bell.





Teaching Strategies	Inductive method.
Techniques and Indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	The visually impaired child will guide the peer away from the danger signal emphasized by the spider's clapping, while the peer will avoid making them bump into equipment, objects, or other children.
Variations	Perform the same activity allowing the visually impaired child to move in the surrounding space using a cane (with the guide accompanying them at a minimal distance to intervene at any moment). Each child must say their name aloud during movements so that visually impaired participants can perceive the position of all participants during the dynamic phases of the game.



Figure 23: A tutor claps her hands to make a child understand the position of a ball. Clapping hands can be used to signal a participant's position during a game.





TITLE OF BEST	CELL GAME
PRACTICE	
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and game rules. Know how to run in various directions using changes in direction.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Use contact as a tool to create a shared game; establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move with the help of a guide in the space by analyzing the auditory stimuli present within the game.</li> </ul>
Activity Description	Select a child and assign them the role of the cell. At the teacher's signal, the cell should run and try to touch another child. When this happens, the two children hold hands and continue running to touch another peer. When the cells become 4 (i.e., four children are touched), they split (meiosis), remaining 2 pairs. The game resumes, and each pair must move around trying to touch other children and, once they reach 4, split up again. The game ends when all the children have been touched. All cells win if, at the end of the game, there are all pairs left (and thus there are no groups of three); otherwise, the last child captured wins. Visually impaired children move with a guide in the space who will prevent them from bumping into objects or other peers.





Materials/ Equipment	No materials or equipment needed.
Teaching Strategies	Inductive method.
Techniques and Indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	The visually impaired child will guide the peer away from the danger signal emphasized by the cells' clapping, while the peer will avoid making them bump into equipment, objects, or other children.
Variations	Each child must say their name aloud during movements so that visually impaired participants can perceive the position of all participants during the dynamic phases of the game.



Figure 24: The Cell Game. A tutor holds hands with two children.





## **Games without Educational Progressions**

These games are useful for learning autonomy and developing cross-functional motor skills and competencies.

TITLE OF BEST PRACTICE	JUMP ROPE (individual, in pairs, in groups)
Goal/Objective	<ul> <li>Motor Objectives: Development of spatio-temporal coordination, inter-segmental coordination, and the motor pattern of jumping.</li> <li>Cognitive Objectives: Activation of meta-cognition related to problem-solving.</li> <li>Socio-relational Objectives: Develop collaboration among participants.</li> <li>Autonomy: Know how to move in relation to a moving object, stimulating auditory sensory perception.</li> </ul>
Activity Description	Give each child a jump rope. Teach the technique of jumping rope, starting from the initial perception and contact with the equipment and then explaining the movement dynamics. Use a rope for jumping in pairs (the length should be proportional to the goal, otherwise, if a longer rope isn't available, tie two ropes together). The children will hold one end of the rope each and stand side by side, shoulder to shoulder. Both must coordinate and collaborate to turn the rope and jump simultaneously. Give a longer rope to two children (or tie two ropes together if necessary). Attach a bell to the center of the ropes with tape. The rest of the class or group will line up in front of the rope.





	The children must take turns passing under the rope without being touched (the rope must always be turned
	to complete its arc near the heels of the children passing
	under it, to avoid hitting their faces if they fail to pass).
	Variants: pass in pairs; each child must pass with each
	turn of the rope, etc.
Materials/ Equipment	Ropes, bells or rattles, tape.
Teaching Strategies	Inductive method.
Techniques and	Stimulate free discovery, problem-solving, cooperative
Indications	learning, and peer education.
	The visually impaired child will learn to move in space by
Advantages	listening to the present dangers and avoiding being hit by
	moving objects.
	Perform the same activity allowing the visually impaired
Variations	child to move in the surrounding space using a cane or
	guiding a blindfolded sighted peer.



Figure 25: The Jump Rope Game.

A group of children are passing under the rope while playing the Jump Rope Game.





TITLE OF BEST	ROPE CLOCK GAME
PRACTICE	ROPE CLOCK GAME
Goal/Objective	<ul> <li>Motor Objectives: Development of spatio-temporal coordination, and the motor pattern of jumping.</li> <li>Cognitive Objectives: Activation of meta-cognition related to problem-solving; development of motor anticipation.</li> <li>Autonomy: Know how to move in relation to a moving object, stimulating auditory sensory perception.</li> </ul>
Activity Description	Ask the children to form a circle, spaced apart from each other. The trainer will stand in the center of the circle with a rope in hand (a bell can be attached to the end of the rope with tape or left without any sound instrument, depending on the trainer's choice and the abilities of the visually impaired children present). The game starts with the trainer swinging the rope at floor level. Each participant must calculate the space and time needed to jump over the rope and avoid being touched. The visually impaired child can be helped by a peer who tells them when to jump with their voice; or can listen to the approaching bell; or, in the case of highly motorically developed students, can hear when two or three peers positioned in the circle before them jump and decide when to jump.
Materials/ Equipment	Ropes, bells or rattles, tape.





Teaching Strategies	Inductive method.
Techniques and Indications	Stimulate free discovery and problem-solving.
Advantages	The visually impaired child will learn to move in space by listening to the present dangers and avoiding being hit by moving objects.
Variations	A peer can hold the hand of visually impaired children and help them carry out the activity.



**Figure 26:** A hoop can serve as a connection between a child and a peer/tutor.





TITLE OF BEST PRACTICE	ASSAULT ON THE LIFEBOATS
<b>Goal/Objective</b>	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and the game rules. Know how to run in various directions using changes in direction. Stimulate different running gaits (forward, backward, lateral translations, etc.).</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move with the help of a guide using a hoop to lead the visually impaired child through space; analyze the auditory stimuli present within the game.</li> </ul>
Activity Description	The trainer selects one or more children depending on the number of participants in the game and gives each of them a sound ball. The rest of the players are divided into pairs, and each pair is given a hoop to hold parallel to the ground during the game. At the trainer's signal, the children with sound balls must run to try to sink the lifeboats by throwing the ball into the hoop. Those who get sunk must place the hoop on the ground and attach themselves to the hoop of the other game peers (so during the game, some hoops will no longer be held by only two children but by three or four children). The game ends when all lifeboats have been sunk.





Materials/ Equipment	Hoops, sound balls.
Teaching strategies	Inductive method.
Techniques and indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	The hoop provides a safe and comfortable guide, allowing the visually impaired child to move with a different guide than usual.
Variations	The game enables improved foot positioning and ground contact, stabilizing gaits, and ensuring the safety of visually impaired participants during everyday movements.



**Figure 27:** Assault on the lifeboats. A tutor and a child are holding a hoop, and another tutor is trying to throw the ball into the hoop.





TITLE OF BEST	CROCODILE GAME
PRACTICE	
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and the game rules. Know how to crawl in various directions in space.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; understand the division of the group/class into different roles.</li> <li>Socio-relational Objectives: Use contact (including with the ground) as a tool to create a shared game; establish a collaborative atmosphere among peers.</li> <li>Autonomy: Move through space while in contact with the ground, analyzing the auditory stimuli present within the game.</li> </ul>
Activity Description	The trainer selects one or more children and assigns them the role of crocodiles. The crocodiles will move by crawling within the previously delimited space (the space should be appropriate for the number of participants involved in the game). The rest of the group/class will move on all fours. On signal, the crocodiles must try to touch the others. Whoever is touched becomes a crocodile and helps catch the rest of the group. The game ends when all the children have been caught by the crocodiles.
Materials/ Equipment	Boundary markers or cones.
Teaching Strategies	Inductive method.





Techniques and Indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	The visually impaired child, being already in contact with the ground, will be less afraid of falling and getting hurt.
Variations	The game allows for improved inter-segmental coordination (arms-legs) in safety, creating a prerequisite necessary to improve walking and running later on. To facilitate the visually impaired child during the game, each child must say their name during the game phase, allowing the visually impaired child to locate peers' position.



**Figure 28:** A tutor and children are moving through space in contact with the ground.





TITLE OF BEST	SURVIVOR GAME
PRACTICE	
Goal/Objective	<ul> <li>Motor Objectives: Move in relation to perceived motor stimuli and the game rules. Know how to run frontally in space using changes in direction to dodge balls.</li> <li>Cognitive Objectives: Understand the rules and objectives of the game; stimulate problem-solving related to body positioning in space in relation to unpredictable auditory stimuli.</li> <li>Socio-relational Objectives: Use the game as an exemplary inclusive tool.</li> <li>Autonomy: Move with the help of a guide in space, analyzing the auditory stimuli during the game. Know how to move in a space where auditory stimuli can hit the visually impaired child (a typical situation is a street where cars approach or move away from the subject).</li> </ul>
Activity Description	Set up a corridor through which children must pass (the visually impaired child can pass independently with their cane or a guide). Place a child outside the corridor with a sound ball in hand. At the instructor's signal, children start one at a time or all together, trying to cross the corridor without being hit by the child outside the field. The child must roll the sound ball on the ground to hit someone. Those who have been hit must join the peer outside the field and roll the sound ball.





	A variation is to place the children throwing the ball on both opposite sides of the corridor so that passing children must pay attention to the stimuli from both sides (a situation similar to a two-way traffic street).
Materials/ Equipment	Sound balls, cones, or boundary markers.
Teaching Strategies	Inductive method.
Techniques and Indications	Stimulate free discovery, game strategies, and problem- solving.
Advantages	Develop useful skills applicable in other areas of life, such as those encountered on any busy street or where there may be an overlap of auditory stimuli.
Variations	Continuously changing guiding methods (with the cane, with a peer, etc.) allows the visually impaired child to integrate different stimuli, providing a more developed capacity for adapting to variable situations.



**Figure 29:** The Survivor Game.

Some kids are running with their guides during the survivor game.





TITLE OF BEST PRACTICE	THE "PARACHUTE GAME"
Goal/Objective	Enhance self-esteem, improve health and physical fitness, agility, flexibility, motor coordination, muscular strength and cardiovascular endurance, and team building.
Activity Description	All the children hold the parachute together. Shake the parachute while holding a ball on it (a medium or a big one). Place a football ball (with a color that contrasts well with the parachute) or a sound ball near the edge. Someone starts rolling the ball. Try to change direction or speed up. Ask each child if the "sea" is calm or stormy. Students raise and lower the parachute on command – for example, "Up 1-2-3, down 1-2-3". The goal is to try to keep the ball in the centre by moving the parachute up and down. "Cat and mouse" involves the children standing around and shaking the parachute while the "cat" is on it, the "mouse" below it, and the cat tries to catch the mouse. With the parachute in their hands, children roll onto their backs and stomachs while lying on one side of it. On the signal, raise the parachute and two kids will hang underneath the parachute (in the middle of the circle) shouting their names. Repeat it with another pair of kids. Students hold the parachute backward and perform foot and arm exercises. With their hands down, children carefully hold the parachute and put it down. They take a few steps to the right and then to the left. They bend down and grab the parachute again.





	For song-based exercises, highlight the necessity of grasping the parachute's edge for the whole song. You may add coordination patterns after they have a firm understanding of this (i.e. as the kids stand equally around the parachute, have them grasp it with their left hand exclusively. After that, they can turn to the right, and so on).
Materials/ Equipment	Parachute, CD player, sound bells (medium or big – not too heavy) – sound balls or the use of sound are best for completely blind children.
Teaching Strategies	<ul> <li>Verbalizing instruction/Tactile Modelling</li> <li>The use of sound</li> <li>Peer tutors.</li> </ul>
Techniques and Indications	Encourage the children to control their bodies according to the sound and in different ways.
Advantages	Despite not having easy access to activities, children and young adults with vision impairments require the same kinds of activities as their sighted counterparts.
Resources	<ul> <li><u>Gross Motor Development Curriculum for Children With</u></li> <li><u>Visual Impairments</u></li> <li><u>Physical Education For Students With Visual</u></li> <li><u>Impairments</u></li> </ul>



**Figure 30:** The Parachute Game.

The children are in a circle holding a parachute.

Source: Canva Database.





TITLE OF BEST PRACTICE	THE "TRAIN" GAME
Goal/Objective	Enhance self-esteem, improve collaboration, motor and coordination skills, and develop agility, speed, and quick thinking.
Activity Description	Divide the children into groups. Each group forms a column such as a train. When the first whistle sounds, all the group members follow the first person in line who leads the train. The last person in the column will become the first on the next whistle, and so on. Alternatively, the first child holds a balloon. They give it back to each other until the end of the row, sometimes with their hands up and sometimes under their legs. Then, the last child comes forward holding the balloon.
Materials/ Equipment	Whistle, colored handkerchief, balloon. Use more visible equipment for children with visual impairments. Tape brightly colored neon tape or high- contrast colors on the floor to mark boundaries or highlight paths or body movements.
Teaching Strategies	<ul> <li>Adapted Teaching Strategies: verbal descriptions and demonstrations of the game.</li> <li>Verbalizing Instruction/ Tactile Modeling or Physical Guidance.</li> <li>Use of sound.</li> </ul>
Techniques and Indications	<ul> <li>Create an inclusive environment.</li> <li>Emphasize the importance of strategy beyond speed.</li> <li>Assistive Technology: screen readers and magnifiers help students with VI better understand the game experience.</li> </ul>





Advantages	Confidence and self-esteem building; improvement of
	motor and coordination skills; recreation; development of
	agility, speed, and quick thinking.
Resources	- Physical Education For Students With Visual
	Impairments
	- Gross Motor Development Curriculum for Children With
	Visual Impairments



Figure 31: The Train Game.

Some children blindfolded in a row, with their hands on the shoulders of the partner in front of them, play the Train Game.

Source: <u>GIOCHI DIMENTICATI</u>.





TITLE OF BEST PRACTICE	THE SHARK GAME & THE FOX GAME
Goal/Objective	<ul> <li>Improve agility and speed of children.</li> <li>Promotion of teamwork and strategy.</li> <li>Encourage fun, which is always the most fundamental goal.</li> </ul>
Activity Description	<ul> <li>Two engaging and fun games focused on developing a cluster of skills of the children like agility, speed and quick thinking.</li> <li>1. Warm-Up: Light running, "Simon says" and jumping jacks.</li> <li>The Shark Game</li> <li>2. A tag game where children are split between "sharks" and "fish". The sharks are the ones who try to catch the "fish" within the designated area. If the "fish" are caught, they swap roles. "Fish" has some sort of equipment that produces sounds, so the sharks know where they are.</li> <li>The Fox Game</li> <li>3. "Foxes" try to steal "eggs" (cones) from the "chicken coop" without being caught by the "roosters". Again, the foxes got themselves some equipment with bells, so the roosters know where they are.</li> <li>4. Closure and relax: Little chat with the children and feedback.</li> </ul>
Materials/ Equipment	Cones to mark areas; vests or ribbons to distinguish teams; balls or ribbons with bells.
Teaching Strategies	<ul> <li>Clear, but short, explanations of the rules.</li> <li>Demonstration.</li> <li>Encouragement at all times of teamwork.</li> </ul>





Techniques and Indications	<ul> <li>Emphasise the importance of strategy beyond speed.</li> <li>Encourage communication among team members, talk is a vital part of the game.</li> <li>Adjust rules if necessary to guarantee the fun and safety of all.</li> </ul>
Advantages	Improvement in speed and agility; development of teamwork skills; increase in daily physical activity.
Resources	<ul> <li><u>Active for Life – Kids' Activities &amp; Games</u></li> <li><u>Sport Aberdeen – Warm-Up Games</u></li> <li><u>Playworks – Hungary Fox</u></li> </ul>



Figure 32: A child is running with his guides.



\_\_\_\_



TITLE OF BEST PRACTICE	ADAPTED PHYSICAL ACTIVITY STATIONS
Goal/Objective	<ul> <li>Fitness: muscular strength, endurance, balance, muscle coordination, trunk strengthening, motor coordination.</li> <li>Ball Games: balance, muscle coordination, trunk strengthening, motor coordination, proprioceptive improvement, catching and throwing, team building skills.</li> <li>Fast walking/Running: balance, muscle coordination, trunk strengthening, motor coordination, proprioceptive improvement, team building skills, aerobic capacity improvement, cardiorespiratory endurance.</li> </ul>
Activity Description	<ul> <li>Fitness (1<sup>st</sup> station)</li> <li>Lifting light weights and repetitions of 4-10.</li> <li>Body exercises such as: <ul> <li>Curl-ups 10 or 5 depending on age.</li> <li>Push-ups.</li> <li>Squats: A squat is a strength exercise in which the student lowers the hips from a standing position and then stands up again.</li> <li>Walking/Standing lunges.</li> <li>Exercises with resistance/elastic bands.</li> <li>Stretching.</li> </ul> </li> </ul>
	<b>Ball Games (2<sup>nd</sup> station)</b> In the "Name's Game", children stand in front of each other, say a friend's name, and then throw the ball to them. It is also possible to play standing in a circle. Change the ball directions, passing it from one classmate to another on the right side of the circle or horizontally after the whistle of the student holding the ball or the command "next". Students should try not to drop the





	ball. Use a medicine ball or a basketball to increase strength.
	<b>Fast walking/Running (3<sup>rd</sup> station)</b> The practitioner is guided by their seeing guide, who directs them through a rope, with the grip of the rope, elbow, or shoulder, alternating between 3 different periods of fast walking, running, and fast walking again. Duration: 10X10X10X15 (total time: 45 minutes).
	<ul> <li>In general:</li> <li>Warm-up: prepare students to exercise.</li> <li>Sport, game, physical activity: carry out one/more than one exercise.</li> <li>Defatigue: resting the body.</li> <li>Skill building and evaluation: discussing the exercise and psychological skills learning.</li> </ul>
Materials/ Equipment	Light weights, individual exercise mats, CD player, basketball with bell, blindfolds for sighted people, sound box, guide runner, guide wire, tactile track, and different color markings on the surface.
Teaching Strategies	<ul> <li>Verbalizing instruction/Tactile Modelling for fitness and physical exercises.</li> <li>Practical demonstrations: the teacher gives verbal instruction while a peer explains to the visually impaired student how to carry out the exercise through tactile modeling.</li> <li>Pre-teach the physical activity area and activities before class begins.</li> <li>Encourage cooperation in pairs or small groups.</li> <li>Feedback, constant feedback.</li> </ul>





Techniques and Indications	<ul> <li>Encourage the children to relax and control their body and breathing in different physical activities.</li> <li>Guide running techniques.</li> </ul>
Advantages	Students easily learn the use of some words that may be more understandable, such as "Your turn", "Sit", "Pull", "Stand up", or "Walk back, front, sideways".
Resources	<ul> <li>Strategies and Resources for Including Children with</li> <li>Visual Impairments into Physical Education and Sports</li> <li>Physical Education For Students With Visual</li> <li>Impairments</li> <li>Gross Motor Development Curriculum for Children With</li> <li>Visual Impairments</li> </ul>



**Figure 33**: A child does an adapted exercise on the floor guided by two instructors.





TITLE OF BEST PRACTICE	HULA HOOP-RELATED ACTIVITIES
Goal/Objective	Cross the midline, strengthen the upper and lower body by utilizing the hoop for hand and foot positioning, and enhance vestibular and proprioceptive systems while exercising body, spatial orientation, temporal awareness, balance, flexibility, accuracy, auditory perception, and throwing.
Activity Description	<ul> <li>The activity involves pupils standing in a circle, each with their own hoop.</li> <li>Numerous modifications can be made to this game: <ul> <li>Ask the children to stand inside the circle by placing it on the ground.</li> <li>Try to make the hoop move up and down the body. The hula hoop moves across the body from top to bottom and vice versa from bottom to top.</li> <li>Once students have one foot outside the hoop and the other inside, instruct them to sprint as fast as possible around it, keeping one foot in and one foot out.</li> <li>Next, change direction and position.</li> <li>From outside the circle, have them jump in and out.</li> <li>Ask them to walk around the entire circle with their hands in the circle and feet out, maintaining the plank position.</li> <li>Ask them to turn around and perform the crab walk.</li> </ul> </li> <li>Directions: Arrange the hoops in a circle, evenly spaced.</li> <li>Ask the children to choose a hoop to stand in, one for each child.</li> <li>The children walk around the circle when the music starts, stepping into the hoops.</li> </ul>





They "freeze like an ice cream cone" and then "melt" until their bellies touch the ground when the music stops. When the music starts, they get up and walk around the circle again.

Additionally, they can place as many balls as there are braille number signs inside the circle (cognitive-motor activity with mathematical elements).

Alternate: Change the duration of both the song and their on-ground time. For older children, make the changes faster at first, then switch between fast and slow.

Kids pass through the hoops backward or sideways. Kids can walk through the hoops in a "crab" walk or "bear" crawl.

A child slides inside a hoop held by two children sitting opposite each other at a 3-meter distance. One is inside 5 gym hoops. A third child takes out a gymnastic hoop each time and places it on the opposite child.

For greater safety against accidents, cover the hoops or balance ropes with carpet, so that children do not slip on the ground.

**Target shooting**: Use a visible target and a bell facing the target. Also use ball-shaped objects, such as a sponge cube, a styrofoam bag, a tennis ball, etc. Let the child throw the tennis ball into the hoop, passing it through the opening and trying to hit the bell suspended from a ribbon inside the hoop.

**Practicing motor tasks that require spatial orientation**: Running from line to line, between objects, and between hoops.





	All activities are adapted for people with visual
	impairment, carried out in a confined and safe place,
	using visible objects, and clearly explaining the game
	rules.
	Hula Hoops with elastic band.
Matariala (	Music, such as the song "I Like to Move It", is a good
Materials/	choice.
Equipment	Cones, gymnastic ribbons, styrofoam bag, small balls,
	boundary colored tape.
The set is a	Verbalizing instruction/ Whole-part-whole.
Teaching	• The use of sound.
Strategies	Peer tutors.
	• Emphasize the importance of accuracy and strategy.
	<ul> <li>Adapt the game as needed for inclusion.</li> </ul>
Techniques and	<ul> <li>Use bright tape or high-contrast colors on the floor to</li> </ul>
Indications	mark boundaries.
	Ensure success.
	Improving orientation and mobility; increasing cognitive
Advantages	function; inclusion and social development; building trust.
	- Strategies and Resources for Including Children with
	Visual Impairments into Physical Education and Sports
Resources	- Building Background Knowledge: Pre-teaching Physical
	Education Concepts to Students with Visual Impairments
	- Gross Motor Development Curriculum for Children With
	Visual Impairments



\_\_\_\_



TITLE OF BEST PRACTICE	RHYTHMIC EXERCISES AND DANCE
Goal/Objective	Sensory activities that use sounds, like musical games, can enhance auditory skills, promote self-expression and listening skills; flexibility, fun, inclusivity, tactile skills, body awareness, self-image, literacy, and rhythmic skills development, motor coordination, balance; increase cognitive function, and improve overall quality of life.
Activity Description	<ul> <li>Play a song and get the children moving to its rhythm.</li> <li>Play "musical chairs" or "freeze dance" with classmates or friends. Explain to them to freeze when the music stops. During the game, the instructor explains how important it is to respect turns and show consideration for others.</li> <li>Demonstrate activities using the hand-under-hand technique. Use your body to demonstrate to the pupils how to carry out certain tasks or allow them to experience your movements.</li> <li>The instructor hits the tambourine in various rhythms and the children perform the steps according to the instructor's instructions (e.g., start by standing on one leg, then move to the other, walk, stop, and so on).</li> <li>Have children play and sing songs such as "Heads, Shoulders, Knees and Toes".</li> <li>This helps children identify different parts of the body.</li> <li>Body awareness is vital for the development of self-image and identity.</li> <li>Yoga exercises/poses for beginners are great forms of exercise to build muscle, improve balance and flexibility, and relax your body (more info</li> </ul>





	https://www.tummee.com/yoga-sequences/yoga-
	sequence-for-blind-visually-impaired).
	For relaxing music or no music/cool down exercises:
	https://www.youtube.com/watch?v=WTo7W8hzLfo
	Balloons, hula hoops, individual exercise mats, cones,
Materials/ Equipment	colored handkerchiefs, plastic chairs, music player,
	rhythmic or soft music (alternated).
	Verbalizing Instruction/Tactile Modeling or Physical
Teaching	Guidance.
Strategies	• The use of sound.
	Peer tutors.
	• For people with low vision or blindness, chair yoga can
	provide a reference point and avoid reliance on a
Techniques and	person's core strength or stability. Chair yoga typically
Techniques and Indications	involves gentle stretches and movements, including
Indications	those targeting the neck, shoulders, back, hips, and
	legs.
	Feel the distance.
	Promote body and spatial awareness with physical
	activities such as yoga or stretching; stimulate movement
Advantages	and develop physical coordination control abilities;
Auvantages	inclusion and social development; develop communication
	and expression skills; help children work together;
	increase creativity; help emotional and physical health.
	- Creative Dance for Teaching Motor Skills for the
Resources	Blind Students
	- Dance with the senses. A dance class with visual
	impaired and sighted children in a conservatory: one-
	<u>year experience</u>





TITLE OF BEST PRACTICE	CREATIVE AND EXPRESSIVE DANCE
Goal/Objective	<ul> <li>Develop motor and coordination skills.</li> <li>Personal expression is promoted while dancing.</li> <li>Enhance confidence and self-esteem.</li> </ul>
Activity Description	<ol> <li>The dance session is focused on creative expression and the development of motor skills.</li> <li>Warm-Up: Gentle movements and stretching.</li> <li>Guided Dance: Listen to simple melodies of popular music.</li> <li>Creative Improvisation: Children dance freely to different styles of music.</li> <li>Group Activity: Create a small group choreography.</li> <li>Closure and Feedback: Talk about the experience and deliver positive feedback.</li> </ol>
Materials/ Equipment	Cones Sound system; various music styles; scarves or dance accessories.
Teaching Strategies	<ul> <li>Practical demonstrations.</li> <li>Encourage improvisation and personal expression.</li> <li>Use guided and free activities.</li> </ul>
Techniques and Indications	<ul> <li>Encourage a great number of expressive movements.</li> <li>Create a safe and non-judgmental environment.</li> <li>Adapt music and movements to the children's abilities.</li> </ul>
Advantages	Improvement in coordination and motor skills; encouragement of personal expression and creativity development of teamwork skills; enhancing confidence and self-esteem.





Resources	- IADMS - Dance for Health
	- Teaching Students with Visual Impairments - Dance
	<u>Adaptations</u>
	- How Dancing Helps Your Mental Health



Figure 34: A child performs some movements with his instructor.





TITLE OF BEST PRACTICE	INCLUSIVE BLIND VOLLEYBALL
Goal/Objective	Acquire volleyball basic skills and techniques, enhance self-esteem, improve health, encourage communication and teamwork skills, and promote inclusion.
Activity Description	<ul> <li>Unlike standing volleyball, this game is played with the participants seated on the floor and the net lowered.</li> <li>A shorter net height, yet one that is still tall enough for no player to reach above it.</li> <li>Make teams larger.</li> <li>Raise the maximum quantity of hits permitted.</li> <li>Modifications to serving line and court dimensions.</li> <li>Modify the size, weight, or softness of the ball.</li> <li>Seated players or standing.</li> <li>For inclusion, sighted children can play together, blindfolded so they cannot see or have the role of guideassistant. Inclusive volleyball is played between two teams, each consisting of 4 players, 3 on the court, and one substitute.</li> <li>Some additional adaptations:</li> <li>Allow the students to catch the bell ball and return it with a throw.</li> <li>Point is scored when: <ul> <li>The ball rolls out of bounds before it is trapped.</li> <li>The ball goes into the net.</li> <li>Use an audible volleyball; a bigger and brightly colored ball also could be helpful.</li> <li>Have peers tell students which direction to face and pass or serve the ball.</li> </ul> </li> </ul>





	4. Place a noise device in the location of the net.
	5. Mark the floor with poly dots or other colored material
	pieces to help the student find the floor position.
	6. Place colored markers, streamers, or other device on
	the net.
	7. Have teammates wear brightly colored bibs.
	8. Also allow the sighted student to be present during the
	game.
	Specialized equipment to make the game totally
	accessible to all pupils.
	Blindfolds and protective clothing to ensure safety during
Motoviale (	the game; balls with bells; the net or elastic band is
Materials/	placed 90cm to 1.05m high, depending on the ball (15cm
Equipment	between the diameter of the ball and the bottom of the
	net). The net or elastic band is attached to posts located
	9 m apart. The ball used is a Swiss ball with a diameter of
	between 75 cm and 90 cm.
	Modifications for children's instruction. The
	Individualized Education Program can help with
	requests for building or purchasing equipment (IEP). If
	a student needs specialized equipment to advance in
	physical education, that information should be noted
	and recorded on the Individualized Education Plan
Teaching	(IEP) form.
Strategies	<ul> <li>Task analysis (step-by-step instruction).</li> </ul>
	Pre-Teaching.
	Pair practice.
	<ul> <li>Verbalizing Instruction/Tactile Modeling or Physical</li> </ul>
	Guidance
	Modified Rules.
	<ul> <li>Feedback, constant feedback.</li> </ul>





	Self-reflection: Teachers can reflect on their teaching
	practices and the effectiveness of their accommodations
	and modifications for students with visual disabilities.
	They can also seek feedback from students, parents, and
Techniques and Indications	other stakeholders to evaluate the impact of the game on
Indications	students.
	Peer Support: social and emotional support from non-
	disabled students by offering to guide them around the
	court or assist them during the game.
	Easily improve the volleyball basic skills and techniques;
	increase confidence in their abilities; develop social and
Advantages	teamwork skills; encourage communication among team
Auvantages	members; promote inclusion; promote physical activity
	and fun; acquire a sporting culture; share rules, assume
	roles and responsibilities; learn to maintain good health.
Resources	- Video: Visually Impaired Volleyball
	- IDI4Sport Project, Inclusion And Disabilities In And
	Through Sport
	- Gross Motor Development Curriculum for Children With
	Visual Impairments



**Figure 35**: Children play Sitting Volleyball.

Source: Canadian Paralympic Committee, in <u>Sitting volleyball an</u> inclusive twist on a classic sport.





TITLE OF BEST PRACTICE	FLOATATION GAMES IN SWIMMING
Goal/Objective	<ul><li>Develop basic flotation skills.</li><li>Improve confidence and safety in the water.</li><li>Promote fun and cooperation among children.</li></ul>
Activity Description	<ul> <li>Floatation games help children become familiar with the water and develop floatation skills.</li> <li>1. Warm-Up: Breathing exercises and immersion exercises (using "Simon says" as a very engaging starting game.</li> <li>2. Free Floatation Game: Children practice floating with kickboards or noodles.</li> <li>3. Ring Race: Divide children into teams and organize a race to collect balls with bells (they may use a floating device).</li> <li>4. Relaxation and feedback of the former lesson: Group floating, discussions about the experience, and feedback.</li> </ul>
Materials/ Equipment	Kickboard; noodles; rings; balls with bells.
Teaching Strategies	<ul> <li>Practical demonstrations.</li> <li>Encourage cooperation in pairs or small groups.</li> <li>Feedback, constant feedback.</li> </ul>
Techniques and Indications	<ul> <li>Encourage the children to relax and control their breathing, while in a float position.</li> <li>Use kickboards or noodles for initial back/front support.</li> <li>Gradually, reduce the use of equipment as children get confidence in their own skills.</li> </ul>





	Easily improving the floatation technique; increasing
Advantages	confidence in the swimming pool; developing some soft
	skills such as social and teamwork skills.
Resources	- British Blind Sport - Swimming
	- International Blind Sports Federation – Swimming
	- Blind Sports & Recreation Victoria – Blind Swimming
	- U.S. Association of Blind Athletes – Swimming



Figure 36: Children practice floating with a kickboard.

Source: Canva Database.



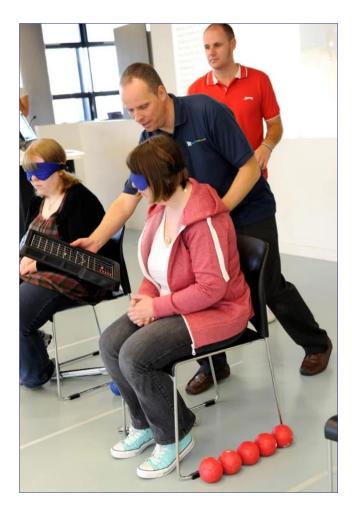


TITLE OF BEST PRACTICE	INCLUSIVE BOCCIA GAME
Goal/Objective	<ul> <li>Develop fine motor coordination.</li> <li>Promote inclusion and social interaction.</li> <li>Discover the rules and strategy of Boccia.</li> </ul>
Activity Description	<ul> <li>Practical Boccia session to introduce the rules and strategies of the game, promoting inclusion and motor skills.</li> <li>Players interpret the position of the balls on the court by reading a tactile grid, or through other adapted playing Methods.</li> <li>1. Warm-Up: Explanation of the rules and warm-up exercises.</li> <li>2. Demonstration: Practical demonstration of the game.</li> <li>3. Guided Practice: Children practice throwing the balls.</li> <li>4. Boccia Game: Divide children into teams and play a complete game.</li> <li>5. Discussion and feedback: Feedback on the game and discussions about strategies.</li> </ul>
Materials/ Equipment Teaching Strategies	<ul> <li>Boccia ball set; tape to mark the court; score markers; tactile grid. Audible balls could be used to help the player hear the location of the ball that has been thrown.</li> <li>Clear demonstrations and explanations.</li> <li>Pair and team games to promote interaction.</li> <li>Continuous assessments and adjustments as needed.</li> </ul>
Techniques and Indications	<ul> <li>Teach proper throwing techniques.</li> <li>Emphasise the importance of accuracy and strategy.</li> <li>Adapt the game as needed for inclusion: a coach or assistant can give clear verbal instructions to describe</li> </ul>





	distances and locations or can clap or tap the floor
	whilst standing directly behind the jack ball.
Advantages	Improvement of fine motor coordination; inclusion and
	social development; learning a new sport.
Resources	- <u>Boccia UK</u>
	- British Blind Sport - Visually Impaired Boccia
	- <u>Boccia England – Visually Impaired Boccia</u>
	- International Paralympic Committee – Boccia



**Figure 37**: An instructor makes the player understand the position of the balls using a tactile grid.

**Source**: <u>Boccia England – Visually</u> <u>Impaired Boccia</u>.





TITLE OF BEST PRACTICE	TENNIS FOR CHILDREN WITH VISUAL IMPAIRMENT
Goal/Objective	<ul> <li>Develop basic tennis skills with adaptation for children with visual impairment.</li> <li>Improve motor coordination with tactile and auditory feedback.</li> <li>Promote physical activity and fun, being always mindful of the visual impairment, every game must have a perfect adaptation to the children.</li> </ul>
Activity Description	An adapted practice of tennis, progressive exercises, focused on developing skills and techniques of the children. 1. Warm-Up: Dynamic warm-ups like skipping or jumping jacks or any other physical warm-up, always giving verbal instructions to guide the children. 2. Technique demonstration: the individual demonstration provides hands-on guidance to show skills, the more basic ones like hitting or returning, where they can feel the tactile markers on the floor. Allow children to feel the correct positions and motions. Auditory and tactile feedback: use balls with bells and encourage children to listen to the ball's sound to track its movement. 3. Individual Practice using a wall: children should practice hitting the ball against the wall. The ball's sound upon the impact will help them orient themselves, and the tactile markers/instructors. Partner drills: with a sighted partner, or teacher, practice hitting the back and forth, using verbal cues and sound feedback to coordinate the actions.





	4. Tennis short games in delimited courts: use easier
	rules where the ball can bounce multiple times to give
	children more time to react. Incorporate auditory to guide
	their movements on the court.
	Orientation aids: use sound beacons at court corners or
	tactile floor markings to help children understand the
	court's layout.
	5. Closure and feedback: provide individual feedback
	using descriptive language and tactile demonstrations of
	the court's layout.
	Rackets with tactile markers on the handle for grip
Materials/ Equipment	guidance; tennis balls with bells inside to provide sound
	cues to the children; sound devices or similar that work
	as key locations on the courts to help with the orientation
	(net, corners, lines, etc); cones to mark areas and that
	children can touch; court (maybe half of the court, or less
	to be easier for children) with all fundamental gear.
	• Step-by-step instruction, and clear and descriptive
	verbal cues.
	<ul> <li>Tactile demonstrations, with guidance from the</li> </ul>
	teacher, where children can feel the correct posture,
	grip and swing (remember always to ask which is their
	preferred hand to play with).
Teaching	<ul> <li>Individual practice – one wall, a basket full of tennis</li> </ul>
Strategies	balls with bells, and tactile markers and such – the
	child only has to hit on the ball, regardless of where it
	lands or what to do next.
	• Pair practice, with sighted peers or teachers to provide
	additional feedback.
	<ul> <li>Use auditory signals to indicate when to start and stop</li> </ul>
	activities or when a ball is coming.





Techniques and Indications	<ul> <li>Teach the correct holding of the grip on the racket by</li> </ul>
	using tactile markers on the handle (you can put
	different grips on the handle, just so the texture feels
	different).
	<ul> <li>Focus on foot movement and posture: the person in</li> </ul>
	charge must use tactile feedback (guiding hands-on
	posture) and instructions, always saying where the
	children must be to understand positioning.
	<ul> <li>Start with simple drills, and sound cues and progress</li> </ul>
	slowly, let the children take some time with the same
	exercises, emphasizing repetition and familiarization.
Advantages	Improvement in coordination and motor skills with the
	help of tactile and auditory cues; encouragement of
	regular sports practices in an inclusive and supportive
	environment; enhanced awareness and orientation skills
	using sound and touch.
Resources	- USTA Guidelines for Adaptive Tennis Programs
	- ITF Tennis for the Blind and Visually Impaired
	- International Blind Tennis
	- <u>Visually Impaired Tennis</u>



**Figure 38**: An instructor uses tactile feedback and guides hands-on posture.

Source: LTA Tennis for Britain.





## **Chapter 7: References and Resources**

British Blind Sports & Boccia England, Visually Impaired Boccia. A Guide for Supporting Visually Impaired Adults and Children in Boccia, https://www.bocciaengland.org.uk/Handlers/Download.ashx?IDMF=a0125769d40d-4d6a-b8e6-32c63c635fbc

Bruyneel, A. V., & Nightingale, L. (2024). *Dance with the senses. A dance class with visual impaired and sighted children in a conservatory: one-year experience*. Arts & Health, 1–9. https://doi.org/10.1080/17533015.2024.2342990

Carl J, Bryant AS, Edwards LC, et al. *Physical literacy in Europe: The current state of implementation in research, practice, and policy*. J Exerc Sci Fit. 2023 Jan;21(1):165-176. doi: 10.1016/j.jesf.2022.12.003. Epub 2022 Dec 30. PMID: 36688001; PMCID: PMC9827378

Dalika, A. Ulfa, and Tati Narawati. (2019). *Creative Dance for Teaching Motor Skills for the Blind Students*. In Advances in Social Science, Education and Humanities Research, volume 419, <u>https://www.atlantis-</u> press.com/article/125937387.pdf

Elizabeth Foster ABD, CAPE and Dr. Lauren Lieberman. (2015). *Strategies and Resources for Including Children with Visual Impairments into Physical Education and Sports*,

https://aahperd.confex.com/aahperd/2015/webprogram/Handout/Paper20728/ SHAPEAmerica2015Handout.pdf

Field B. (2024). How Dancing Helps Your Mental Health. In Very Well Mind, https://www.verywellmind.com/how-dancing-helps-your-mental-health-5206963

IADMS – International Association for Dance Medicine & Science, *Dance for Health*, <u>https://iadms.org/education-resources/dance-for-health/</u>





IDI4Sport, Inclusion And Disabilities In And Through Sport, https://www.france-education-international.fr/document/idi4sport-grecepratique-1

Jamison, J. (2005). USTA Guidelines for Adaptive Tennis Programs. https://assets.usta.com/assets/643/USTA Import/NewEngland/dps/doc 13 11 362.pdf

Justin A. Haegele, *Physical Education for Students with Visual Impairments, Old Dominion University*,

https://www.pecentral.org/presentations/VisualImpairmentPresentation.pdf

Lauren J. Lieberman, and Pamela S. Haibach. (2016). *Gross Motor Development Curriculum for Children With Visual Impairments*, American Printing House for the Blind, Inc. Louisville, KY,

https://sites.aph.org/files/manuals/GMDC/

Lauren Lieberman, Monica Lepore, Maria Lepore-Stevens, and Lindsay Ball, *Physical Education for Children with Visual Impairment or Blindness*, in "Shape America",

https://www.shapeamerica.org/MemberPortal/publications/journals/joperd/JOP ERD\_articles/2019/january-2019-free-access-article.aspx

Lieberman L. J. Ponchillia P., & Ponchillia S. (2013). *Physical education and sport for individuals who are visually impaired or deafblind: Foundations of instruction*. New York: AFB Press.

Lieberman L. J., & Houston-Wilson C. (2009). *Strategies for inclusion* (2nd ed.). Champaign, IL: Human Kinetics.

Lieberman, L. J., Haegele, J. A., Columna, L., & Conroy, P. (2014). *How students with visual impairments can learn components of the expanded core curriculum through physical education*. Journal of Visual Impairment & Blindness, 108(3), 239–248.

https://www.researchgate.net/publication/273568822 How Students with Vis





ual Impairments Can Learn Components of the Expanded Core Curriculum <u>Through Physical Education</u>

McDonough, H., Sticken, E., & Haack, S. (2006). *The Expanded Core Curriculum for Students Who Are Visually Impaired*. Journal of Visual Impairment & Blindness; New York Vol. 100, Iss. 10, (2006): 596-598.

Melby PS, Nielsen G, Brønd JC, Tremblay MS, Bentsen P, Elsborg P. (2022). Associations between children's physical literacy and well-being: is physical activity a mediator?. BMC Public Health. 22:1–13. doi: 10.1186/s12889-022-13517-x.

Niland, et al. (2010), *Visually Impaired Physical Education Guide*, Vision Sports Ireland, <u>https://visionsports.ie/wp-content/uploads/2023/10/Visually-</u> <u>Impaired-Physical-Education-Guide-compressed-1.pdf</u>

Oleszkiewicz A, Pisanski K, Sorokowska A. (2017). *Does blindness influence trust? A comparative study on social trust among blind and sighted adults*. Personal Individ Differ. 111:238-41. [DOI:10.1016/j.paid.2017.02.031]

Paula Conroy. (2016). *Building Background Knowledge: Pre-teaching Physical Education Concepts to Students with Visual Impairments*. In Journal of Blindness Innovation and Research, Vol 6, No 2.

https://nfb.org/images/nfb/publications/jbir/jbir16/jbir060201.html

Saleem SS, Al-Salahat MM. *Evaluation of sensory skills among students with visual impairment*. World J Educ. 2016;6(3):66-9. [DOI:10.5430/wje.v6n3p66]

Sapp, W., & Hatlen, P. (2010). *The expanded core curriculum: Where we have been, where we are going, and how we can get there*. Journal of Visual Impairment &Blindness, 104(6), 338 – 348.

Seclì P., Farnese A. (2021). *Giocofiaba. L'esperienza Giocampus per l'inclusione, l'alimentazione e l'ambiente*. Calzetti e Mariucci Editori.





Smith, M. (2014). Sensory Efficiency. In Allman, C. B., Lewis, S., & Spungin, S. J. (eds.). *ECC Essentials: Teaching the Expanded Core Curriculum to Students with Visual Impairments* (pp. 117-186). New York, NY: AFB Press.

Telzrow, C. F. (1999). *IDEA amendments of 1997: Promise or pitfall for special education reform?*. Journal of School Psychology, 37(1), 7–28. https://doi.org/10.1016/S0022-4405(98)00023-5

Willings, C. *Teaching Students with Visual Impairments – Dance Adaptations*, <u>https://www.teachingvisuallyimpaired.com/dance.html</u>

World Health Organization. (2023). *Blindness and vision impairment*, <u>https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment</u>

Active For Life, *Kids' Activities & Games*, <u>https://activeforlife.com/activities-games/</u>

Blind Sports & Recreation Victoria, *Blind Swimming*, <u>https://www.blindsports.org.au/app/resource/5znngJDz91mhXhIw.pdf</u>

Boccia England, *Visually Impaired Boccia*, https://www.bocciaengland.org.uk/vi-boccia

Boccia UK, <a href="https://boccia.uk.com/">https://boccia.uk.com/</a>

British Blind Sport, Swimming, https://britishblindsport.org.uk/az/swimming

International Blind Sports Federation, *Swimming*, <u>https://ibsasport.org/growing-blind-sports/helping-other-sports-grow/swimming/</u>

International Blind Tennis, <a href="https://www.internationalblindtennis.org/">https://www.internationalblindtennis.org/</a>

International Paralympic Committee, Boccia,

https://www.paralympic.org/boccia





International Physical Literacy Association. (2014). Available from: <a href="https://physicalliteracy.ca/physical-literacy/">https://physicalliteracy.ca/physical-literacy/</a>

LTA Tennis for Britain, *Visually Impaired Tennis*, https://www.lta.org.uk/play/inclusion-disability/visually-impaired-tennis/

Playworks, Hungary Fox, https://www.playworks.org/game-library/hungry-fox/

Sport Aberdeen, *Warm-Up Games*, <u>https://www.sportaberdeen.co.uk/wp-</u> content/uploads/2020/11/P1-3-Warm-Up-Games.pdf

The Inclusion Club, *Disability Sport: TREE Framework Introduction*, <u>https://www.youtube.com/watch?v=ej\_FcmjCr2g</u>

TSVI – Teaching Students with Visual Impairments, https://www.teachingvisuallyimpaired.com/vi-sports-associations.html

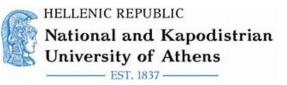
U.S. Association of Blind Athletes, *Swimming*, <u>https://www.usaba.org/clubs-</u> <u>sports/swimming/</u>













## Project: Move As You Are - 101133647

This **Booklet** is published under the **Creative Commons Attribution NonCommercial-ShareAlike 4.0 International License** (CC BY-NC-SA 4.0.) (https://creativecommons.org/licenses/by-nc-sa/4.0/)



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

