

**INCLUDING STUDENTS
WITH VISUAL IMPAIRMENTS
IN PHYSICAL EDUCATION**

A BRIEF GUIDE FOR TEACHERS

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A BRIEF GUIDE FOR TEACHERS

Educators work hard to have classes where all students feel involved and valued, and where they are learning and having positive experiences. In physical education classes, it can feel challenging to create inclusive lessons for students with visual impairments (VI). How can you be sure that you are meeting their classroom needs?

Most physical education teachers have no previous experience in making accommodations or modifications for students with visual impairments (Perkins et al., 2013). Undergraduate education programs might only present one class on adapted physical education, consequently teachers may have less than two hours of learning on the topic. In general, they do not learn enough about including students with visual impairments in their physical education classes (Conroy, 2012; Lieberman et al., 2013).

This overview is designed to fill in some of the gaps when working with students with visual impairments. It presents tips, ideas, and best practices so you can continue to create classes that are engaging and valuable for all students in your class.



FIRST, SEE THE POTENTIAL

Before you begin to work with students, it's important to really appreciate the potential in front of you. The students that you include in your class today have the potential to be just as physically active as any fully sighted children, and they could even become high performance athletes in the future.

For example, there are many instances at the Paralympic Games where athletes with visual impairments have performed better than visual athletes in high performance sport. At the Rio 2016 Paralympics, four 1500m runners who were visually impaired beat the times of the visual runners from the Olympic Games 1500m event.

There are examples like this in many sports. People with visual impairments can have meaningful experiences in physical activity, and they can even build pathways into high performance sport. Often they start by developing a love of physical activity at school.

START BY ASKING QUESTIONS

When a student comes to you, they may present their visual impairment in different ways. The best classroom experience starts by having simple conversations. Include the student, the parents, and any support staff they may have, such as a learning assistant or teacher of visually impaired (TVI).

The best place to start is usually the parents. Make sure to connect with them before your class to get initial information about the student, including their medical background. Then ask the student if they have any previous experience in the activity, and what types of considerations or adaptations might help them. Often students will have other disabilities as well, and these should also be part of the conversation.

Always be respectful with your questions. For example, avoid asking questions in front of the whole class. Try to engage students one-on-one in personal conversation. As well, at the start of your class, address the entire group by saying, "We all have different abilities."



SOME QUESTIONS YOU CAN ASK STUDENTS WITH VISUAL IMPAIRMENTS:

What can you tell me about your visual impairment and your vision?

How long have you had your visual impairment? Was it present at birth, or did it develop later due to illness or accident? (This can influence how the student understands your teaching instructions.)

How comfortable are you in a large classroom or gymnasium?

What kinds of experiences have you had in physical education or physical activity? (Keep in mind that students with visual impairments can be just as physically adept as sighted children.)

Is there anything you would like to suggest about how we can help you in the class?

Are there any other bits of information you want to share?

Do you already have any adapted equipment that can be included in this class?



TEACHING STRATEGIES

There are a variety of teaching strategies that you can use to ensure students with visual impairments have success in your class.

1. PRE-DISCUSSION

Prior to leading the class or lesson unit, take a few minutes to discuss the goals and aims of the upcoming content. This helps the student, and their learning assistant if they have one, to know what to expect. Check in with the student afterwards to make sure he or she knows what the goal of the task is. Some students may need more direction than others.

2. VERBAL DIRECTIONS

Be as descriptive as possible. Give thought to what kinds of words, phrases, and cues will provide the student with the clearest understanding of the activity as they cannot rely as much on visual information. Use positive feedback and make sure that he or she is in a positive and encouraging environment.

3. VISUAL DEMONSTRATIONS

Depending on the level of visual impairment, some students may be able to learn from visual demonstrations. When demonstrating, check with the student and confirm what they can and cannot see or understand.

4. PHYSICAL GUIDANCE

A teacher, learning assistant, or classroom peer can use their hands to physically guide the student's body or limbs in practicing the movement skill or activity. Always ask the student first to make sure they are comfortable with this approach.

5. TACTILE MODELING

Tactile modeling is essentially the reverse process of physical guidance above. The student uses their hands to feel the teacher, learning assistant, or classroom peer perform the skill. This technique is sometimes called "brailing." As with the physical guidance method, always ask the student first if he or she would like to do this technique.



6. WHOLE-PART-WHOLE (WPW)

Many students can benefit from the whole-part-whole (WPW) teaching method. This involves first teaching the skill as a whole, then breaking the skill into its smaller composite movements, then performing the movements together as a complete sequence again.

7. PROVIDING FEEDBACK

As students practice a skill, watch to see if they are doing it properly, then provide feedback where needed. While it's important not to “over-coach” your students, you also want to help them to achieve success and avoid developing incorrect habits.

8. PARTNER ACTIVITIES

Partner activities allow students with visual impairments to get extra assistance in developing the skill. Wherever practical, add partner activities in your lesson planning.

REFLECT AFTER EACH CLASS:

Which strategies worked best for the student?

Which strategies worked best for the class as a whole?

Consider whether you need to make any changes to your teaching strategies next time.



EQUIPMENT AND RESOURCES

The equipment that you have available for students can have a big impact on their learning and enjoyment of activity. Here are tips for providing and selecting equipment for students with visual impairments.

1. USE ADAPTED EQUIPMENT

Ask the student if they already have any adapted equipment that can be included in the class. If they don't have any, you can investigate buying adapted equipment for your school through a variety of suppliers, or simply think creatively and adapt the equipment that you have (for example, using duct tape or other simple materials to make adaptations).

2. USE DIFFERENT COLOURS

Students with some degree of vision may respond differently to different colours. Vary your selection of equipment and resources according to colours and ask the student if some work better than others. For example, traditional brown basketballs might be difficult to see against brown gymnasium floors and walls, whereas basketballs with custom colours such as blue or yellow might be much easier to see.

3. USE DIFFERENT SIZES

Students may respond differently to different sizes of equipment. Vary your selection of equipment and resources according to size and ask the student if some work better than others.

4. USE DIFFERENT TEXTURES

Students may respond differently to different textures of equipment. Vary your selection of equipment and resources according to texture and ask the student if some textures feel better than others.

5. USE EQUIPMENT WITH SOUNDS

If possible, use equipment that produce sounds, such as balls with bells inside. If a student has a learning assistant, ask the assistant whether they have access to specialized items of equipment that produce sound.

6. USE SUPPORTS OR BALLS WITH CORDS

When practicing particular skills or playing different sports involving balls, consider whether it may be practical to use balls that are tethered to cords for fast and easy return to the student. Also consider ways to support the ball with cords or other materials and equipment to make it easier for the student to strike or handle the ball.

7. USE TETHERS FOR GUIDANCE

Students with visual impairments sometimes benefit from the use of tethers for guidance, such as tethers connecting the student to a guide partner while running. Tethers don't need to be complicated or expensive—you can improvise by using common equipment such as pinnies or scarves used in juggling and dance.

REFLECT AFTER EACH CLASS:

Which equipment worked best for the VI student?

Which equipment worked best for the class as a whole?

Consider whether you need to make any changes to your equipment selection next time.



WEBSITES AND SUPPLIERS WHERE YOU CAN BUY ADAPTED EQUIPMENT:

FLAGHOUSE

www.flaghouse.ca

FUTURE AIDS

www.braillebookstore.com

WINTERGREEN LEARNING MATERIALS

www.wintergreen.ca

AMERICAN PRINTING HOUSE FOR THE BLIND

www.aph.org



PHYSICAL ENVIRONMENT

The physical environment where you teach physical education can have a big impact on a student's learning and enjoyment of activity. Consider these tips in providing and adapting the environment for students with visual impairments.

1. ORIENTATION

Always start by helping your student to know the activity space prior to class and give them time to orient themselves. Have the student feel the layout of the room with their hands to get an idea of how big the room is and where they are in the space. If there are obstacles such as badminton nets, railings, or benches and bleachers, help your student to locate them. Help the student to reassess the layout and orientation of the activity space if your unit changes or if new equipment is set up. Always make sure that the environment is safe.

2. LIGHTING AND ILLUMINATION

Depending on the nature of a student's visual impairment, they may learn better with either increased or decreased lighting. Talk with the student to determine how much illumination they require or prefer.

3. TACTILE DEMARCATIONS

You can sometimes help students with visual impairments to navigate and move better around the instructional space by marking different areas with carpets and mats that have different surfaces or textures.

4. VISUAL DEMARCATIONS

For students who have some degree of vision, you may be able to use different coloured "poly spots" or coloured tape to mark different areas, obstacles, and targets on the floor or walls.



5. AUDITORY CUES

You can sometimes facilitate the student's ability to orient themselves in the instructional space by providing different sounds in strategic locations or areas.

6. TACTILE BOARDS

Prior to your class session, you can use tactile boards as maps to "show" the student the particulars of the activity area, so they are better able to navigate and position themselves during the class.

7. SPACE MODIFICATIONS

When doing activities that involve fixed distances between students, or between students and targets, consider modifying the distance for students with visual impairments (likely a shorter distance in most cases).

REFLECT AFTER EACH CLASS:

What parts of the gym were easier for the student to hear from?

Were there any echo spaces that the student found disorienting?

Was the student situated in the best part of the class space relative to you? Were you in the best place relative to the student?



LEARN MORE ABOUT TEACHING STUDENTS WITH VISUAL IMPAIRMENTS

The information in this simple guide is designed to provide you with a quick overview for working with students in your class. An online search will give you literally thousands of resources and websites where you can learn more about teaching students with visual impairments. Here are a few suggestions that you might find helpful:

[10 Tips for Teaching Blind or Visually Impaired Students](#)

[Adapted Physical Education for the Blind and Visually Impaired](#)

[Physical Education for Students with Visual Impairments](#)

[Teaching Students with Visual Impairments](#)



TEACHING NOTES

After each class, it is useful to record your impressions and reflections about the lesson. You can print this simple table to record your teaching notes. What strategies and equipment did you use? How did you manage the physical environment? What worked and what didn't work?

[DOWNLOAD PDF](#)

FILLABLE VERSION LAST PAGE

Unit / Lesson Plan

Strategies Used

Reflections: What worked? What didn't?

Pre-discussion

Verbal directions

Visual demonstrations

Physical guidance

Tactile modelling

Whole-Part-Whole

Providing feedback

Partner activities

Equipment and
Resources

Reflections: What worked? What didn't?

Adapted equipment

Different colours

Different sizes

Different textures

Equipment with sounds

Cords and supports

Guide tethers

Physical
Environment

Reflections: What worked? What didn't?

Orientation

Lighting and illumination

Tactile demarcations

Visual demarcations

Auditory cues

Tactile boards

Space modifications