
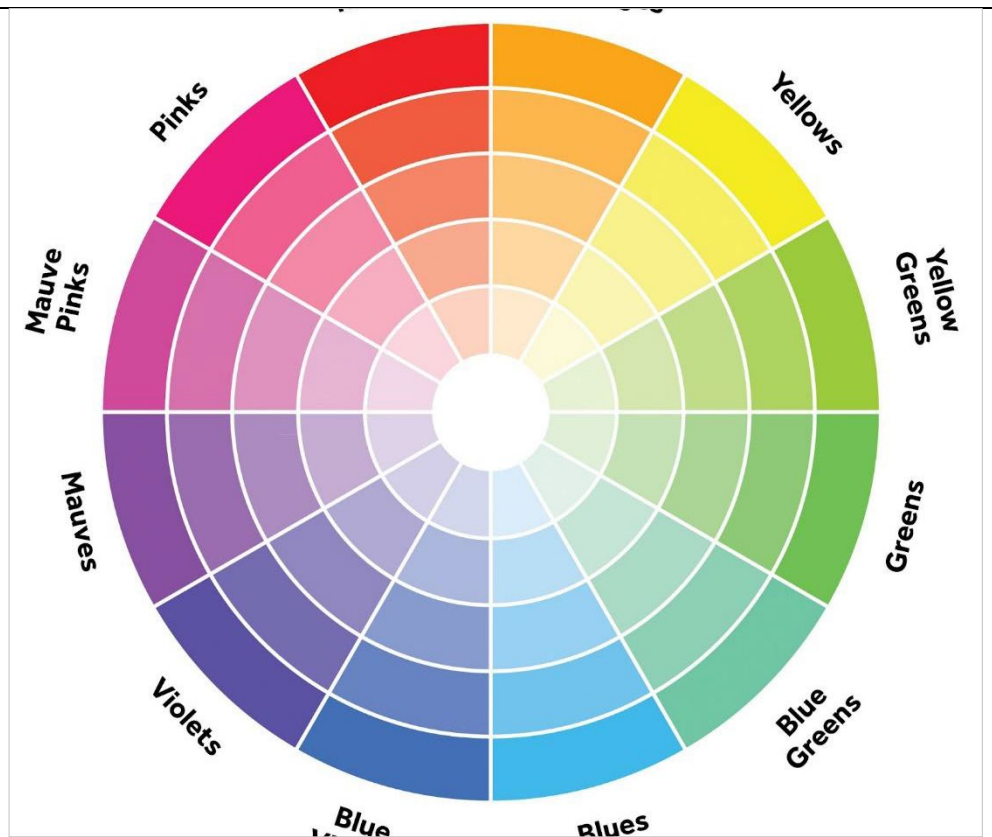




## Activity – MOOC1 Benefits of sport: Abilities and preferences

Objective of the activity	Assess the environment where the v.i. child studies/trains
Any materials necessary	Environmental checklist
Participants / stakeholders	headmaster, low vision specialist, supporting the child, the child itself
Detailed description	<p>Step 1: Consider the colours used in the environment, where the child/children study and train.</p> <p>In order to achieve maximum contrast make sure that the colours used are relatively opposite to each other on the colour-wheel:</p>  <p>And intense enough (using pale versions of opposing colours will do little benefit to your sight impaired students):</p>



But by all means observe the following rule: search for combinations of colours, which have a contrast of a minimum of 70, where this contrast is measured with the following formula:

$$\text{Contrast} = ( B1 - B2 ) \times 100 / B1$$

Where B1 is the light reflectance value (LRV) of the lighter zone and B2 is the LRV of the darker zone.

On the two ends of the scale stand LRV = 0, which is virtually black (the available black paints have an LRV of around 20) and LRV = 100 – white (the available whitish paints have an LRV of around 80).

**N.B.** It is important to note that not all combinations of opposing colours give a good contrast, so use the contrast formula when in doubt.

There are some considerations to try and observe if possible, when taking care of contrast. It is important to have good contrast between:

- Door handles and the doors themselves
- Doorcases – walls



- Support handles, railings – walls and floor
- Walls – floor
- Furniture – walls/floor, depending where/how it is positioned

Step 2: Think about the signage the place around the area. Dubious signs must be avoided:



*(bad example)*

Always think about the size, the contrast and also how easy it is for the sign to be understood.

Place the signs in those places where they would be seen the easiest, i.e. eye level.

The nice and all-valid rule for signs and texts in general is: **big, bold** and **bright!**



*(good example)*

Step 3: Evaluate the light in the area.

Consider that people with different sight impairment conditions need different lighting in order to perform at their best.

Be aware that some of your group members may need more light – while others, e.g. with albinism or photophobia – would need less light.



Therefore, if you have a chance to arrange the positioning of the people participating in the PE class, ask them what would be **the** best place for them and try to oblige. Install lights, which can be controlled at least to some extent and again ask your participants what would be the best light for them.

#### Step 4: Check out mirrors and reflections

Be aware that light reflections cause huge discomfort to people with certain sight conditions. Try to use surfaces that are rather matted or at least not too glossy.

Mirrors can be extremely perplexing, causing people with impaired vision to have a wrong idea of what lies ahead. Mirrors should be avoided or the v.i. participants should at least be duly informed upon their first use of the setting about where and what are mirrors. If mirrors are added in the room/gym make sure to let the sight impaired person become aware of that immediately after the change has been made.

#### Step 5: Floor coverings (textures)

Make sure to use different types of floor coverings in order to support your students/sportsmen with impaired vision. The different types of flooring and tactile elements on the flooring help people with v.i. to find their way.

#### Step 6: Sounds (noise, signals and cues)

Be ready for the school year with sound balls and other sound cues equipment, based on the preferences you have already discussed with the student/s and on the school budget of course.

Decide on the signals and cues to be used during the games and stick to those throughout the school year in order for the sight impaired player to get used to those quickly and perform confidently at his/her best. Noise can be really distracting for anyone, but for people with v.i. it is particularly bothering, as they rely on using their hearing optimally in order to perform at their best. Try to minimize excessive or unnecessary noise, in order to give them a best chance to hear the signals from their team buddies and the cues coming from the adapted sports equipment.

#### Step 7: Sort your clutter

Clutter is what we call a great variety of objects, which are not positioned in appropriate order and can make it hard for someone with v.i. to orientate him/herself.

Remove unnecessary items from the floor in order to make movement freer and when you position the objects in containers or arrange the sports hall in a certain way, try to keep that order the same throughout.



	This will be of great aid to v.i. student/s using the hall and the equipment.
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## **Environmental Checklist**

Room:

Time of day:

### 1. Colour and Contrast

1.1 Good examples

1.2 Bad examples

1.3 Suggestions for improvement

### 2. Signs / posters

2.1 Good examples

2.2 Bad examples

2.3 Suggestions for improvement

### 3. Lighting and glare

3.1 Good examples

3.2 Bad examples

3.3 Suggestions for improvement

### 4. Texture

4.1 Good examples

4.2 Bad examples

4.3 Suggestions for improvement

### 5. Sounds (noise, signals and cues)

5.1 Good examples

5.2 Bad examples

5.3 Suggestions for improvement

### 6. Clutter

6.1 Good examples

6.2 Bad examples

6.3 Suggestions for improvement