

The Hirstwood



Training

Working with visual loss in the multi sensory
room.

Course Tutor

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Working With **Visual** loss in the Multi Sensory Room.

Mark Gray and Richard Hirstwood.

Much of the equipment in the MSR is visual, so this offers the student plenty of 'visual practice' or 'stimulation'. If you are working with early visual skills, at any age you may find wheels with colour contrast more effective than those with little visual interest. Sometimes complex patterns may offer more interest to the viewer. Movement may also be important to get the students attention.

Projected effect wheels offer a tracking movement (left to right in the front gate) and (right to left in the rear gate), however you may also find effects cassettes of interest. The 'jazzing' patterns of cassette 13 and 22 can be excellent for visual stimulation. Fibre optics and bubble tubes can give that extra tactile prompt to encourage visual skills.

The **Key** Areas of Identification

1. You may encounter unusual head positions. Students with a visual impairment may have to move their head, to visually access the equipment.
2. You may encounter unusual head movements. A student may be trying to access equipment, by scanning an object.
3. Look at the proximity of a student from visual object.
4. Watch a student's body language, it will be important.

Cataracts:

Bright light may be very uncomfortable to somebody with cataracts. A person with this eye condition may screw up their eyes in light, which is tolerable by the sighted population. They may show a resistance to moving forward in a corridor, which presents bright daylight or bright sunshine. Outside or bright doorways could also be a problem. Being outside in daylight may also be cause discomfort to a person with cataracts. If a person with cataracts does not like bright rooms, a white room will offer too much glare and the further the problem of bright reflections. No contrasts in colour could cause discomfort, as it will be very difficult to gain a view of the area a person is working. If you are using back projection then don't use net's use a white sheet, this will reduce the direct bright light from a projector. A dark room or dark area may be more comfortable. Try UV light and fibre optics but remember a person may wish to hold things close to their eyes to see the colour changes and contrasts. These effects would not normally cause too much discomfort.

Loss of Macular Vision (Central)

A person with macular loss will function well in most environments dark and light. A visual effect such as a projected image will not be seen directly in front of them. A person with the loss of central vision may slowly move their head when viewing multi sensory effects and other visual images to access the effect within their field of vision. It may appear that a person is not looking directly at an effect so is not seeing it! But the unusual head position may be the way to access the image. On walking in to a sensory room a person may stop frequently to scan using their peripheral vision

Tunnel Vision (Loss of peripheral Vision)

A person with peripheral loss will move their head from side to side to scan an area when walking, they may also scan to see objects and effects. They will only see visual effects presented from a distance. Sitting a person right next to a 5ft image from a projector will fill and obscure all the useful vision. If you stand close to communicate then very little of you will be seen.

Light Perception

A person with light perception will function as though totally blind in most rooms. They may however be able to see (and move) towards bright lights with good visual contrasts. They may not function as well in a white room as lights are difficult to pick up without contrasts. Often bubble tubes are the most effective effects when used in the Multi Sensory Room. Contrasts will be very important in the MSR or a person with light perception.

Cortical Blindness

With cortical blindness, visual stimulation at an early stage in a child's development may have some effect on improving the vision.

Visual stimulation can be carried out using things like bright and fluorescent objects with Ultra Violet Light. Although most types of visual stimulation could have some effects, the techniques for improving cortical blindness to the best of our knowledge are not proven. A number 13 cassette projected by a solar 250 was used in conjunction with cortical blindness in the early 80's.

Visual stimulation in adults is not believed to have any effect on cortical blindness. If a person has been labelled as cortically blind but appears to follow colour changes and contrasts, it is very possible they have always had some form of light perception.

Diabetic Retinopathy and Retinitis Pigmentosa

(Retinal damage caused by high blood pressure)

A person who has either of these visual problems will have varied reactions to multi sensory rooms.

The vision is best described as spotted, this will block the vision in varying degrees, dependent on how severe the visual problem. People may prefer a light environment rather than dark or black room.

This is due to the lack of useful light they are able to take in, due to patchy vision associated with their condition. In the MSR a light of some intensity must be on for a person to be motivated to move towards the visual effect. Experiment with projector effects with wheels of different contrasts and size. Note a person's preference to both contrast and colour. Try working with back projection and at different distances to vary the size of the image.

Hemanopia (the loss of the left or right field of vision in one or both eyes)

A person may show a profound head position (although it may be fixed if caused by a stroke). They will show a relation to a visual image on the active side rather than the side, which may be blind. Very often Hemanopia is found in people with left or right-sided haemoplegia (a fixed physical disability on the right or left side). Positioning will need to be considered carefully so as to provide the appropriate postural support without blocking the visual field. A person will function equally well in either white or dark rooms.

The Visual Skills we use

Awareness

(Does the student respond in any way to visual stimulus)?

Fixation

(A more sustained and constant response to a visual stimulus)

Tracking

(The ability to follow moving objects, both horizontal and vertical)

Convergence

(The ability to maintain focus on an object as it approaches or moves away)

Accommodation

(Focus on objects at varying distances)

Eye contact

(Sustained periods of looking at people and objects)

Hand eye co-ordination

To look at an object and to reach with the hand)

Scanning

(The ability to search for an object)

We could study

- The extent of visual curiosity? Does the student use touch, taste, hearing, or smell in preference to the vision.
- The extent of visual interest in people? Does the student follow people with their eyes?
- What will a student look at?
Does size, colour, shape, pattern or purpose make a difference?
- The distance at which visual attention is readily given?
- Preferred angle for viewing objects?
- Preferred eye?
- The extent, which vision is used to locate?
(Distance and direction may be important)
- The speed at which a student notices visual objects?
(Front, left or right)
- Can the student shift the gaze from one object to another? (Scanning)

General Points To remember

When assessing vision, remember to screen out other possible clues like sound from the projector or the noise of the air pump in a bubble tube. When using a sideglow fibre optic is it the tactile element, which is the attraction rather than the visual image? Always remember if you suspect somebody has a visual problem, refer the person for a specialist assessment.

For more detailed information refer to 'The Practical Guide to Multi Sensory Rooms (Hirstwood and Gray 1997) and your local RNIB or VI teacher.

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