

Children with Cerebral Visual Impairment

School Strategies for Older child (9-12 years)

The following strategies are suggestions to try out for some of the identified problem areas for your child at school.

It is important to remember that what works for one child may not work for others and that if a strategy works well initially it may not last and may require to be adapted or changed in the future.

It is important to prioritise a few problem areas and implement one or two strategies. Trying to tackle all areas of difficulty and implement all solutions at one time can result in overload and ultimately will not be beneficial.

The following information outlines some of the key areas of difficulty identified from the clinical structured history taking questionnaire and some of the strategies that may be effective for each problem. The numbers are taken from those used in the inventory.

Impaired visual field or visual perception affecting vision affecting movement:

Difficulties in this area can be due to impairment in the visual field especially lower visual field or left/right visual fields. They can also be due to difficulty with depth perception (3D vision) resulting in problems seeing and adjusting to uneven surfaces, changes in the floor surfaces, edges of pavements or kerbs, or the ability to see objects on the floor surface if it is patterned or cluttered. The child therefore does not adjust their movements accordingly and is increasingly likely to hesitate, stumble, trip or fall.

1. Trip over bags and obstacles on the floor

Strategies to try

- Keep floor surfaces clear
- Plain floor surfaces i.e. plain carpets, laminate floors to highlight contrast.
- Develop good storage systems and routines to avoid clutter and obstacles on the floor.
- Try encouraging a policy of slow, look, check, go when moving around a room.

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2. Has difficulty walking down stairs

Strategies to try

- Use additional tactile referencing and physical support, i.e. hand rails at the correct height, adult to hold.
- Highlight the edges of stairs with bright colours or dots in the middle of stair.
- Colour change at the top and bottom of stairs to emphasis start and finish.
- Use bright lighting or spot lighting on stairs, especially top, bottom and landing.
- Allow the person to be first or last when using stairs, especially if there is a crowd of people i.e. at school
- Buddy child with a peer for support especially at school.
- Encourage use of lifts/moving stairs if available.
- Give permission to leave early or later especially from class to avoid the rush and crowds of other people.
- Try to ensure classes are on ground floor level where possible.

5. Looks down or trips when crossing floor boundaries e.g. where lino meets carpet

Strategies to try

- Try plain carpets and floor surfaces, but contrast colour/highlight where there is a boundary i.e. where it changes from carpet to lino.
- Have good lighting at the boundary areas.

8. Has difficulty finding the beginning of a line when reading

Strategies to try

- Finger pointing.
- Using a text window cut out of a piece of card.
- Enlarging the font size.
- Reducing the amount of text on the page.
- Enlarging text books on the photocopier and blocking out extra bits of work or illustrations.
- Using a magnifying glass or magnifying acetates.
- Establish the font size and word per page and line that is easiest for the child work with (not the smallest they can read) and ensure that work is provided in this size.
- Make an individualised workbook with the beginning of each line highlighted in colour or in bold.
- Holding a ruler vertically down the page to show where the start position is.
- Try an elevated book stand for reading
- Practice reading items of interest i.e. use children's newspaper 'First News'.
- Large print books.

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9. Has difficulty finding the next word when reading

Strategies to try

- Finger pointing
- Using a larger font size to establish which font style and size are best.
- Double spacing between the words and the lines
- Vertical reading.
- Braille.
- A tilted work station.
- Mask off additional text.
- Reduce the amount of visual information presented.
- Cover text that has been read with card or the back of hand.
- Leave larger spaces between the words
- Break text into small bits
- Use a computer programme presenting one word at a time (e.g. Ace reader).
- Large print books.

11. Bumps into door frames or partly open doors

Strategies to try

- Highlight door frames in a contrasting colour
- Use contrasts in colour and brightness of walls and floors to emphasise where they start and finish.

12. Misses pictures or words on one side of a page

Strategies to try

- Finger pointing
- Using a text window cut out of a piece of card.
- Give additional verbal reminders to scan
- Printing text vertically
- Displacing text to preferred area of visual field
- Using a vertical book stand
- Using a sloping work station
- Making an individualised book by scanning and enlarging text, and or using photographs of familiar people or objects to reinforce the text.

Difficulties showing evidence of impaired perception of movement

These difficulties indicate that there is a problem with the information being received and processed when the eyes move or when objects in the environment move. The individual may misjudge their own movements through space but may also demonstrate fear or panic if they are surprised by moving objects approaching them unexpectedly (i.e. children in playground, dog in the park, car) as they will not have tracked or seen the object move.

14. Has difficulty seeing things that are moving quickly such as other children.

Strategies to try

- Give additional verbal information “your friend Jenny is at the gate in a pink jacket”
- Ensure friends and teachers introduce themselves if approaching in a busy areas where there is a lot of movement
- Ensure additional assistance both verbal and physical is offered to help find friends/ family in busy places i.e. playground.
- Encourage child to rely on voice recognition to locate friends and family.

16. Avoids watching fast moving TV

Strategies to try

- Sit close to the TV to minimise other visual distractions.
- Minimise the visual distractions around the TV i.e. pictures.
- Ensure class teacher is aware that many curriculum TV programmes may be unsuitable due to the speed and content. The time spent on TV by other children may be best utilised by child for another task.
- Avoid using TV/DVD as a teaching tool.

17. Chooses to watch slow moving TV

Strategies to try

- Sit close to the TV to minimise other visual distractions.
- Minimise the visual distractions around the TV i.e. pictures.
- Ensure class teacher is aware that many curriculum TV programmes may be unsuitable due to the speed and content. The time spent on TV by other children may be best utilised by child for another task.
- Avoid using TV/DVD as a teaching tool.

18. Has difficulty catching a ball

Strategies to try

- Practice catching skills using a balloon which will move more slowly.

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- Try using large brightly coloured balls or balls with sound or light effects.

Difficulty interpreting a complex visual scene and making sense of the information when too much visual information is present

This can be due to the overwhelming visual impact of too much information being presented at one time. Difficulty searching for and locating specific items, people, or places can also depend on the amount of visual information, the additional movement visible and the orientation and view of the object.

Poor visual memory and the ability to retain information presented visually may also impact on performance.

Orientation of self around the environment is also a challenge, especially if there is a lot of visual information to interpret and to process.

20. Has difficulty finding a close friend or relative who is standing in a group. i.e. Mum at school gate, friend in the playground.

Strategies to try

- Give additional verbal cues e.g. Mum calls out name to allow voice recognition to assist with visual scanning.
- Have a pre-determined meeting place so that the child knows where to look for person.
- Ensure highly visible, easily identifiable clothing is worn i.e. a pink jumper, a luminous jacket. This item must be worn so that it is visible from all angles i.e. a jumper, not a badge. The child must be informed about the item.
- Encourage the use of voice recognition skills.
- Encourage child to use a mobile phone to call/text the person.
- Encourage the child to stay still and call for the person.

21. Has difficulty finding an item they want if there is too much visual information, i.e. items in a tray, cupboard

Strategies to try

- Set up an area for placement of important items i.e. bedside table with storage box or tray.
- Reduce the amount of visual information available i.e. the number of items on a tray.

23. Gets lost in places which are well known and which are new.

Strategies to try

- Highlight desk in class with marker tape.

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- Encourage the use of land markers – pictures, photographs on the wall, counting doors with a memory map.
- Use mnemonic memory strategies to help route finding by recounting land marks.
- Try using floor markers to help route finding around the class/school. i.e footprints, circles on the floor.

25. Has difficulty selecting a chosen item from a tray, bag or shelf

Strategies to try

- Minimise the number of items in tray, bag, shelves and cupboard.
- Minimise number of items on desk, in pencil case, in school bag.
- Use transparent containers, pencil case, school bag.
- Encourage return of items to a set position.
- Organise storage system with clearly labelled drawers and boxes using pictures, photos, colours
- Reduce the amount of items to choose from.
- Involve individual in reorganising and minimising storage systems.

26. Difficulty recognising/ finding a person, object if viewed from an unusual angle or if the item is partially hidden. i.e. side or profile view of friend, shoe under the bed with only a toe showing.

Strategies to try

- Ensure items are clearly visible and not overlapping.
- Have an organised workspace and mark out lines on the desk with coloured tape for book, pencil etc. Keep items required on desk to a minimum.
- Use a schoolbag with individual pockets.
- Use a flat pencil case with a clearly allocated space for each item.
- Try a transparent pencil case.

28. Sits closer to the television than about 30 cm (NB this is not harmful)

Strategies to try

- Avoid visual clutter between seats and TV and beside or above TV
- Try smaller TV if a large screen offers too much demand for visual scanning.

29. Find copying words or drawings time consuming and difficult

Strategies to try

- Minimise copying demands by providing information on a printed sheet.
- Email or scan information to a laptop rather than copy it.
- Ensure written material is clearly visible appropriate for acuity and contrast.
- Find out what colour of ink is most visible – try a white board

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- Reduce visual clutter on the board leaving only relevant text.
- Remove distracting visual information from above or beside the board. i.e. pictures, mobiles.
- Positioning should be directly facing the board and at the best distance for the individual to minimise visual clutter, reduce head movements and give appropriate visual magnification.
- Maximise lighting at board area (without glare).
- Present large well spaced script on board.
- Use mobile phone to photograph instructions and messages from the board rather than write them down i.e. homework instructions.
- Make use of auditory memory skills – use verbal rather than written instruction
- Do not expect the child to write and speak or write and listen at the same time.
- Use a scribe for lengthy passages of copying.

Impairment of visually guided movement of the body and further evidence of visual field impairment:

Difficulties may be affected by the extent of the visual field and the child may need to adjust head position. Difficulties may also be related to perception of depth.

31. Finds uneven ground difficult to walk on

Strategies to try

- Give additional physical support i.e. rails/banisters as required.
- Minimise height variations on floor surfaces
- In playareas use Astroturf, coloured matting and vary colours for different areas. Use flush rubber flag stones to emphasise different areas of the ground.

36. Finds inside floor boundaries difficult to cross

Strategies to try

- Clearly mark floor boundaries and height changes in surfaces.
- Use contrasting colours after different surfaces.
- Ensure good lighting in areas with floor boundaries
- Use plain colours of floor covering.

36b. Finds well known boundaries difficult to cross

Strategies to try

- Clearly mark floor boundaries and height changes in surfaces.

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- Ensure good lighting in areas with floor boundaries
- Use plain coloured floor covering.

Impairment of visually guided movement of the upper limb resulting in poor judgement of grasp, hand position, finger width, positioning and timing:

This results in difficulty with manual dexterity tasks and an increased likelihood of items being knocked or spilt

37. Reaches incorrectly for object - reaching beyond or round it

Strategies to try

- Try using items that are contrasting in colour with the table unit.

38. When picking up an object will grasp incorrectly or miss or knock over the object.

Strategies to try

- Using items which have a high colour contrast
- Using weighted items
- Blu-tak on bottom of items.

Difficulties demonstrating impaired visual attention and fatigue:

This is likely to result in difficulties with tasks requiring sustained visual attention and concentration such as schoolwork.

39. Finds it difficult to keep to task for more than 5 minutes.

Strategies to try

- Minimise visual distractions around the work area.
- Consider the need to minimise other distractions around the work area i.e. sound, movement.
- Encourage short periods of focused attention.
- Time concentration span and work with the minimum concentration time to build it up.
- Try using a sound or visual timer to set limits.

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- Vary tasks and demands i.e. seated, standing, moving, listening, talking, looking
- Give additional verbal reminders and encouragement “you are doing well just one more minute”
- Give non-verbal reminders to get back on task i.e. tap on shoulder.
- Allow frequent movement breaks - to hand out pencils, take a message.
- Position near to front of the class facing the board and teacher to reduce visual distractions and looking over heads. Do not position right at the front of the class as child will be tempted to turn around.
- Try a chair with arms to assist sitting balance if required.
- Try a separate desk for child at the end of the group to give increased personal space but not exclusion.
- Try a fidget object to help with attention when using listening skills i.e. rubber, giant paper clip, pencil.

40. Finds it difficult to get back on task when distracted

Strategies to try

- Give additional verbal reminders. i.e. “it is time to get back to work, are you finished yet?”
- Minimise distractions around the work area.
- Present work tasks in short blocks breaking down activities.
- Present tasks one at a time.
- Give additional movement breaks to alter positioning.
- Try a screened work area.
- Try a quiet work station.

42. Misses objects that should be obvious because they are different from the background and seem to ‘pop out’ e.g. a bright ball in the grass.

Strategies to try

- Reduce the amount of items presented.
- Space out items.
- Maximise contrast and visibility to increase pop out effect.

Difficulties demonstrating evidence of behavioural difficulties associated with crowded environments i.e. dinner halls, cinema:

This may be due to too much visual and or auditory stimulation that can be overwhelming and stressful.

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43. Demonstrates difficult behaviour in cluttered rooms

Strategies to try

- Minimise clutter, especially visual clutter i.e. pictures on the wall, mobiles in class.
- Provide a quiet area with less clutter and visual stimulation in class.
- Be pre-warned to expect difficult behaviour and take appropriate measures
- Try using clearly labelled storage to reduce the amount of visual clutter around.
- Try smaller areas with less noise and visual information i.e. smaller shops

45. Behaviour is difficult in a over-stimulating or busy environment i.e. assembly, dinner hall, playground

Strategies to try

- Try a tactile object to provide alternative sensory input i.e. fidget object, toy, rubber, giant paper clip
- Try scents on a hanky to provide additional sensory input.
- Encourage help and assistance; give child a task to do at assembly.
- Allow the child to rest their head on their arms for time out or if appropriate to move to a quiet area.
- Allow regular movement breaks
- Have a colour-coded system of communication i.e. green - go, amber - tiring, red – need a break.

46. Reacts angrily when other children are restless and distracting.

Strategies to try

- Position in a chair with additional personal space.
- Try an individual work station.
- Try a screened-off work area.
- Try head phones or ear plugs to reduce the noise level and auditory distractions.

Difficulty with the ability to recognise what is seen:

The child might find it difficult to recognise people, shapes, left/right shoe, this may be worse if the items are in a busy environment or are viewed from a different angle or are partly hidden.

50. Has difficulty understanding the meaning of facial expressions

Strategies to try

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- Ensure people interacting with the person are aware of this and give additional verbal cues.
- Establish if the person can recognise facial expression at all, and if so, what is the optimal distance
- Encourage individual to focus on tone of voice and words being used.
- Give practice and training to recognise facial expressions.
- Give a verbal explanation to accompany the facial expression using tone of voice and words. Encourage everyone interacting with child to also do this.
- Use of voice and language with exaggerated quality of expressed emotions to assist child with understanding.

51. Has difficulty naming common colours

Strategies to try

- Establish if this is due to colour blindness
- Discover if it is due to word recognition
- Try applying the concept of conceptual linkage i.e. rose red, apple green, sky blue.

52. Has difficulty naming basic shapes such as squares, triangles, letters, circles, left shoe/right shoe.

Strategies to try

- Use a tactile approach touching and exploring objects with hands
- Minimise the amount of visual information presented at one time
- Play computer games to reinforce recognition skills.

53. Has difficulty recognising familiar objects such as the classroom door.

Strategies to try

- Get a unique identifiable visible marker to help recognition i.e. poster on the door.

54. Difficulty recognising objects on a similar background i.e. red pencil on red paper.

Strategies

- Use contrasting, plain colours and backgrounds

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Difficulty visually accessing the computer.

Strategies

- Highlight key board with luminous alphabet stickers
- Try using a matt screen
- Increase font size thus reducing the amount of information present.
- Try using specific fonts that are easier to follow i.e. Tahoma, Trebuchet
- Select the best font size, spacing and colour contrast for the individual and ensure this is set up each time the computer is turned on.
- Minimise the amount of visual information on the screen.
- Try using voice-activated software
- Try using a larger keyboard with enlarged keys
- Try different programmes to reduce the dexterity skills required i.e. Clicker 5 allows user to click on the word rather than type it out.

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