



Colour Blindness

Advice and information



Colour Blindness

Colour Blindness or Colour Vision Deficiency (CVD) affects about 400,000 children in schools across the UK and about 1 in 12 boys and 1 in 200 girls. There are different types of the condition and not everyone is red/green colour blind. Some children are blue/yellow colour blind and some see no colour at all. It is important to understand that: Colour blind children will not just confuse red and green, they will be unable to distinguish any colours which contain red or green, for example they will 'see' purple as blue because they cannot perceive the red element of the light spectrum which is added to blue to form the colour purple. Therefore, all reds, greens, oranges, browns, purples, blues and greys will be impossible to identify accurately. (Taken from: www.colourblindawareness.org)

A diagnosis of colour blindness is made through clinical testing, although there are children who go undiagnosed, but are still affected day to day. These children have often developed strategies to compensate for their condition, without being fully aware they have a problem with their colour vision.

It is important to incorporate strategies to support colour blindness into your planning, so the children can have equitable access to learning experiences and all aspects of school life.

Some useful strategies are listed below

EYFS and Key Stage 1:

- Provide sorting materials that have additional characteristics, for example, shape, texture, pattern, size.
- Name common objects and environments and identify their colours, for example, yellow banana, blue sky, green leaf.
- Ensure printed resources are of high contrast and do not have coloured writing on a coloured background wherever possible.

- Label equipment like pens, pencils and paints with their colour.
- Explicitly point out colours used in classroom resources and in board games etc, so the colour blind child can say whether or not they can distinguish between the differences.

Key Stage 2 and above:

- Use clearly contrasting materials and print in all presentations and displays. Avoid colour print on a coloured background. Use dark (black or blue) markers on whiteboards.
- In PE ensure that the child can identify coloured bibs and equipment, so they can recognise those who are also on their team and fully participate in the activity.
- Colour coding in activities such as map work in Geography or Graphs in Maths and Science, will be difficult. Provide alternative or additional methods of identifying differences, for example by using symbols on a bar chart (small circles, squares and triangles on the different bars).
- Changes of colour in different aspects of Science will be difficult and the child will need help with this. For example, the change of colour in a Bunsen Burner flame or when using PH testing strips.
- Students may not be able to tell when meat is raw or cooked in Food Technology lessons. They may also need help to know if food has 'gone off' and has changed colour because of this.
- There will be many textbooks and resources which a child with colour blindness cannot access. These resources will need to be adapted or modified, so the child can access them in a different way but will still be able to achieve the learning outcomes for the lessons.
- In Art, colour palettes will have little meaning for a child with colour blindness. It may be better to focus on different mediums to provide a breadth of learning possibilities.

If you suspect that a child has undiagnosed Colour Vision Deficiency, then it is important the parent arranges for them to be seen by an Optician, who can carry out formal testing.

Contact details

Vision Support Service

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 [**dorsetcouncil.gov.uk**](http://dorsetcouncil.gov.uk)

Hearing and Vision Support Services are provided on behalf of Dorset Council and Bournemouth, Christchurch and Poole Council (BCP)

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