

# DUDLEY DYSLEXIA ASSOCIATION

Helpline 01384 291001

[www.dudleydyslexia.co.uk](http://www.dudleydyslexia.co.uk) (31)

## Eyes and Dyslexia.

Everyone should have regular eye-checks. This is specially important for any child or adult who has difficulties with reading or spelling and who may be dyslexic. Eye problems do not cause literacy problems, but can be a contributory factor. When assessing, an Educational Psychologist or Specialist Dyslexia Teacher is likely to ask if the learner has any eye problems. School eye-checks may only consist of distance vision, not reading vision. School eye checks are being cut.

### 1. High Street Eye-care services and Eye Clinics in hospitals.

Dispensing opticians supply and fit glasses and sometimes contact lenses. There is no regulating body and no longer a requirement for registration. There are 4,300 in UK. Optometrists used to be called ophthalmic opticians. 8,400 in UK. Registered optometrists have qualifications recognised by the College of Optometry. They diagnose eye diseases, diagnose and treat binocular vision anomalies and dispense spectacles and contact lenses. About 100 optometrists specialise in eye conditions relating to dyslexia. They use equipment called an Intuitive Colorimeter. Their services are not yet available under the National Health Service, even for children.

Behavioural optometrist practice varies considerably in the UK. It may include exercises to train saccadic eye movements and mild lenses called 'learning lenses'. 37 are accredited.

An eye health problem would be referred to the Eye Clinic in a hospital. 1,500 ophthalmologists are medical specialists who identify and treat eye diseases. 1,000 orthoptists work with ophthalmologists, mainly on binocular instability. This may include blurred vision, double vision, shimmering and eye-strain which causes headaches. All these experts will consider:

**Convergence:** when both eyes need to look at the same point on the page and continue to do so as the eyes move along the written word.

**Accommodation:** both eyes must be able to effortlessly adjust to change in the printed word at various distances and to different print sizes, e.g. copying from the board.

**Tracking:** moving along the line, grasping the information, scanning words one by one, and moving from one line to another easily.

**2. Light sensitivity** Some people are light or colour sensitive. They do not know this, because no one knows how or what someone else sees. Bright sunlight or florescent lights may bother some people. Black print on shiny white paper may be uncomfortable for the eyes. Whiteboards may be too shiny. This is called Maeres-Irlen Syndrome. Pattern glare may also be a problem.

It may be helpful to have:

coloured paper for writing,

coloured overlays (like transparent plastic folders, but specially designed and prescribed) for reading,

tinted lenses in glasses for both reading and writing.

The colours and brightness on computer screens can be adjusted to suit individuals.

**3. Effects on literacy.** If any of the following symptoms continue after the age of seven years, a test for binocular instability or light sensitivity would be a good idea:

Reversals of single letters, letters within words, words within sentences, when reading or writing.

Reversals of single numbers, and number order.

Omission or insertion of words.

Losing the place when reading, especially moving from one line to the next.

Using a finger or marker to locate the target words when reading.

**4. Effects of tinted strips, overlays and lenses.**

For some children and adults, tinted strips, coloured overlays and lenses make a remarkable difference for close work. They have said that the print stays still and does not dance about. (They did not know that it stays still for other people!) Some say that it is not as dazzling as white paper or that the spaces between words are clearer, so they can concentrate on the words. When their eyes are comfortable, they may be able to read or write for longer periods.

It is suggested that dyslexic children and adults try coloured plastic sheets as overlays for reading. If they make any difference, it would be worth investigating further to find the best colour for each individual. The preferred colour for tinted strips or overlays may be different from that for glasses as the latter affect everything one sees, not just reading material. If corrective glasses are not needed, plain glass lenses can be tinted.

**5. Research.** The Medical Research Council patented the Intuitive Colorimeter and MRC license Cerium Visual Technologies to manufacture and market the instrument.

Good research includes double-masked trials, when both tester and testee do not know whether the overlays or tinted lenses being used are the ones chosen or prescribed. Wilkins' Rate of Reading Test is often used. 15 high frequency words are presented repeatedly in random order. As the words are easy, reading skill is not a variable.

**6. Useful contacts.** British Association of Behavioural Optometrists (BABO)

Ask for your nearest accredited behavioural optometrist or see list online.

Tel: 029 2022 8144 Email: [admin@babo.co.uk](mailto:admin@babo.co.uk) Web: [www.babo.co.uk](http://www.babo.co.uk)

Cantor & Nissel

ChromaGen Haplosopic lenses are a type of colour based system for spectacles or contact lenses.

Tel: 01280 702 002 Email: [info@cantor-nissel.co.uk](mailto:info@cantor-nissel.co.uk) Web: [www.cantor-nissel.co.uk](http://www.cantor-nissel.co.uk)

Cerium Visual Technologies

for coloured overlays and a list of optometrists in UK who have a Wilkins Intuitive Colorimeter and can prescribe Precision Tinted lenses. Tel: 01580 765 211 Fax: 01580 765 573

Email: [admin@ceriumvistech.co.uk](mailto:admin@ceriumvistech.co.uk) Web: [www.ceriumvistech.co.uk](http://www.ceriumvistech.co.uk)

Crossbow Education

Crossbow Education produce a pack of 6 inexpensive "Eye Level Reading Rulers", which are blue, yellow or pink tinted strips. They are particularly helpful for focusing and tracking as well as combatting white glare. Tel: 01785 660 902 Fax: 01785 660 902

Email: [info@crossboweducation.com](mailto:info@crossboweducation.com) Web: [www.crossboweducation.com](http://www.crossboweducation.com)

The Institute of Optometry I.O.O. Marketing Ltd supplies the Wilkins Intuitive Overlays, The Wilkins Rate of Reading Tests and other items for eyecare professionals.

Tel: 020 7407 4183 Fax: 020 7403 8007 Email: [admin@ioo.org.uk](mailto:admin@ioo.org.uk) Web: [www.ioo.org.uk](http://www.ioo.org.uk)

**The Irlen Centre. Tinted lenses. Tel: 020 7609 7435 Email: [dimont.irlen@virgin.net](mailto:dimont.irlen@virgin.net) Web: [www.irlenuk.com](http://www.irlenuk.com)**

**Research information. Organisations above and Colour and Visual Sensitivity Information Group. c/o Visual Perception Unit, University of Essex, Tel: 01206 872 381**

**Web: [www.essex.ac.uk/psychology/overlays](http://www.essex.ac.uk/psychology/overlays)**