# **MUSEC Briefings**

### **Irlen Tinted Lenses and Overlays**

#### Keith J. Hyatt

#### Statement of the Problem

Reading is one of the most important academic skills learned in school and one that many students struggle to master. While working with adults exhibiting reading problems in the 1980s, Helen Irlen claimed to have discovered a visual perceptual condition responsible for numerous reading problems. The condition, which is not recognized in the medical field, goes by several names: scotopic sensitivity syndrome, Irlen syndrome, and Meares-Irlen syndrome. Irlen claimed that individuals with the syndrome had difficulty processing full spectrum light which resulted in reading problems such as words drifting on the page or appearing blurred. She also hypothesized that the syndrome was responsible for difficulties with a wide range of important life activities including reading, math, handwriting, coordination, concentration, starting tasks, and sitting still. The Irlen Institute claims that 50% of children and adults with reading problems have Irlen Syndrome and that 12-14% of good readers and gifted students also have the syndrome.

#### **Proposed Solution/Intervention**

Individuals complete a rather subjective assessment which may include interviews and self-reports to determine whether they have Irlen Syndrome. Use of tinted lenses/overlays is credited with ameliorating perceptual processing problems and/or distortions making it easier to see text. The Irlen Institute cautions that only tinted overlays/lenses provided by them will be effective.

## The theoretical rationale – how does it work?

Irlen claims that the condition appears to be caused by a defect in a visual pathway that transmits information from the eye to the brain.

Macquarie University Special Education Centre Building X5A, Macquarie University NSW 2109 Ph: 9850 8691 Fax: 9850 8254

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The defect purportedly causes a problem with timing and filtering out specific wavelengths of light via tinted lenses/overlays helps the pathway function normally.

## What does the research say? What is the evidence for its efficacy?

There is no objective evidence that Irlen syndrome actually exists: several researchers have noted that the symptoms are consistent with known visual problems. There is no credible body of research supporting the use of tinted lenses/overlays – the studies tend to contain significant flaws and the findings are inconsistent.

#### Conclusions

In a joint statement, The American Academy of Ophthalmology, American Academy of Pediatrics, American Association for Pediatric Ophthalmology and Strabismus and American Association of Certified Orthoptists firmly repudiated the use of lenses, stating that there was no scientific evidence supporting their use. The expense of such treatment is unwarranted and may divert resources from evidence-based reading interventions.

#### The MUSEC Verdict:

#### Not Recommended

Key references may be found at: http://www.musec.mq.edu.au/co\_brief.aspx

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