Join Us: Irlen Awareness Week (October)

While the disorder is more common than autism, heart disease, and asthma, it often goes undiagnosed, or gets misdiagnosed as other disorders such as dyslexia, behavioral or psychiatric problems, and ADHD. Failure to treat Irlen Syndrome leads to academic and workplace failure, ongoing physical and emotional symptoms, and increased likelihood to enter the criminal justice system. The syndrome is easy to identify and treat, and treatment through the use of non-invasive Spectral Filters worn as glasses leads to immediate and dramatic improvements.

Join Us To Raise Awareness: The 3rd Week in October
Web: http://irlen.com/isaw
Facebook: Irlen Awareness Week
Twitter: @seeirlen #isaw
3 Key Takeaways

01 IDENTIFY THE PROBLEM
Be able to identify the signs and symptoms of Irlen Syndrome

02 UNDERSTAND THE IMPACT
Understand how the syndrome manifests itself in different populations and the mind-body-learning connection

03 FAMILIARITY WITH THE SOLUTION
Learn about the Irlen Method and other modifications and accommodations you can use to help your students
What is a Perceptual Processing Difficulty

- A hindered ability to make sense of information taken in through the eyes
- Different from problems involving sight or sharpness of vision
- Affect how visual information is interpreted, or processed by the brain
Irlen Discovery

- Research based
- US Federal research grant
- Single study research design with 1,500 adults
- Conducted between 1980-1983 by Helen Irlen
- Helen Irlen presented at American Psychological Association Conference (APA) 1983
Main Facts

- Over 10,000 educators trained
- Over 100,000 wear Irlen Spectral Filters
- Millions use Irlen colored overlays
- Recognized as a standard low tech assistive technology for testing
- Recognized by Recordings for the Blind, Voc Rehabs, Dept. of Rehabs, SAT, ACT, LSAT
Global Impact

171 Irlen Centers in 47 countries
A Visual-Perceptual Disorder

Problem with the brain, not the eye

1. Visual Cortex
2. Transient, or magnocellular deficit
THE PROBLEM

What is Irlen Syndrome?
Hereditary

Problem with the brain, not the eye

- Genetic predisposition, runs in families
- Affects males and females equally
- Can also be acquired via injury, illness, medical procedures
A Spectrum Disorder

Falls on a continuum

The Irlen Continuum

SLIGHT
Symptoms Begin
40-60 minutes

MODERATE
Symptoms Begin
20-40 minutes

SEVERE
Symptoms Begin
0-20 minutes
A Variety of Symptoms

- Light Sensitivity
- Inefficient Reading
- Slow Reading Rate
- Attention Deficit
- Strain or Fatigue
- Poor Depth Perception
Areas Impacted

Areas of Significant Improvement For 689 Clients
With Irlen Spectral Filters

- Music 78%
- Fatigue 75%
- Spelling 67%
- Math 77%
- Driving 87%
- Copying 81% & Handwriting 67%
- Language 70% & Essay Writing 74%
- Listening 73%
- Headaches & Migraines 84%
- Depths Perception 82%
- Attention & Concentration 81%
- Sports 79%
- Computer Use 83%
- Light Sensitivity 89%
Triggered by Environment

- Lighting
- Glare
- Bright Colors
- High Contrast
- Patterns and Stripes
- Details
- Print Size, Style, and Format
- Demands For Sustained Attention
Lighting

Bright and Fluorescent Lighting
Glare
Bright Colors
High Contrast
Patterns and Stripes
Details
Amount of Print On Page
Print Size, Style and Format

Font and layout can make a difference

Font and layout can make a difference

Font and layout can make a difference

Font and layout can make a difference

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Font and layout can make a difference

Font and layout can make a difference
Sustained Attention and Continued Performance
Activities as Stressors

- Looking, Listening
- Reading, Math
- Writing, Copying
- Scantron Answer Sheets
- Computer, TV, Movies
- Other Visually-Intensive Activities
Impacts the Entire Body

Abnormal brain function
Eye strain
Shallow, labored, quickened, breathing
Small and gross motor integration
Fatigue

Systemic Impact
- Autonomic NS Imbalance
- Immune system suppressed
- Endocrine system imbalance

Systemic Impact
- Emotional, behavioral, psychological implications
- ADD/HD
- Depth perception & sensory integration
- Sleeping difficulties
- Visual fragmentation

Headaches
Tense neck, back, shoulders
Nausea
Irlen Syndrome is not...
Not Identified By Current Tests

- Educational
- Medical
- Ophthalmological
Not a Method of Instruction

READING INSTRUCTION
Who has Irlen Syndrome?
Identifying the Population

- Learning disabilities, reading problems: 46%
- Head injury, concussion, or whip lash: 35%
- AD/HD, Dyslexia, behavior problems: 33%
- Autism: 30%
- General population, gifted, good readers: 14%
Different Manifestations

**Gifted**
- Longer to complete work
- Strain, fatigue, headaches
- Avoids reading for pleasure
- Does poorly on timed tests
- Unable to keep up

**Average Student**
- “Could do better if tried harder"
- ADHD
- Behavior problem
- Grades do not reflect effort
- Strain, fatigue, headaches

**Emotional Problems**
- Anxiety
- Behavior disorder

**Learning Problems**
- Inefficient reading
- Strain, fatigue, headaches
- Good verbal skills
Other Populations

**Medical**
- Headaches/Migraines
- Dizziness, Stomachaches
- AD/HD
- Autism/Asperger
- Light-Induced Epilepsy
- Depression, Anxiety, OCD
- TBI, Concussion, Whip Lash
- Stroke Victims

**Visual & Co-morbidity**
- Diseases/Impairments
- Astigmatism
- Low Vision

**Diseases & Co-morbidity**
- Auto Immune
- CFS
- Diabetes
- Multiple Sclerosis
- Cerebral Palsy
- Spina Bifida
- Parkinson’s Disease
- Fibromyalgia
- Viral Illnesses
- Hydrocephalus
- Myasthenia Gravis
How Irlen Can Affect Perception
Environmental Distortions
Print Distortions
Rivers
Observations:

Arthur is a friendly, talkative boy who speaks in a rather loud voice. He impression the examiner as a nervous, high-strung youngster. He was restless, frequently tapping his fingers on the table and often out of his seat, yet he continued to work steadily by the task. Arthur seemed to be under a great strain in all the test items, but he worked steadily and had difficulty maintaining his attention for any length of time. Some impulsivity and distractibility were noted. Arthur appeared to resist academic tasks, resorting to inappropriate behaviors which included diverting conversation, making noises, and pressing the examiner, which produced lively unfavorable conditions. Arthur exhibited considerable anxiety avoiding a job rather than accepting the responsibility for it. He was quite aware concerning his performance, and frequently requested reassurances as to the accuracy of his work. It was a stimulus to him to do well, and he became frustrated and nervous when he was threatened with failure. Arthur did not give up that challenged, but he sometimes needed to be encouraged or reminded that task accuracy by himself would not be effective in this situation.

Conclusions:

The current psychometric data suggests that Arthur is functioning in the high average to very superior range of intelligence. Considerable scatter was noted on the various scores of the WISC. Arthur had the greatest difficulty with those tasks requiring concentration and immediate auditory rote memory and arithmetic reasoning ability. His strengths were concentrated in the non-verbal skills. He demonstrated a remarkable aptitude to the analysis and formation of abstract concepts and in the awareness of cause and effect and time sequence. Arthur reached the scaled score ceiling in both of these areas. The examiner feels that the results of the verbal portion of the WISC may represent a clinical evaluation of Arthur's potential in these skills. The weaknesses of his performance seems to reflect, in part, his irregular school attendance and slow academic progress, and some perceptual liabilities. Performance deficiencies on the auditory association and memory association and auditory sequential memory subtests of the WISC were noted, and these weaknesses were also indicated by Arthur's performance on the WISC. He has difficulty maintaining his attention, and he seems to have a disability involving the auditory perceptual abilities; the extent of this auditory problem is obscured due to the degree of anxiety present and the limited exposure to the development of listening skills acquired in the regular classroom setting. Evidence of a delayed visual-motor perceptual development was also noted and the primary difficulty appeared to be one of poor fine motor control; Arthur has trouble with handwriting and copying to his nurses' corrective forms, suggesting some confusion and a need for individualized instruction in these.
BY ANDREW J. SOTIJO
AND RICHARD I. WYATT

A study of normal adults, Monte
Bachhauer and his associates
covered an association between low
MAO and a variety of distinctive per-
sonality traits, including proneness
to drink and experiment
with drugs, an active, varied sex
life, and a preference for activi-
ties on an unstructured, casual level.

Was MAO present in the brain of
infants in the same relative amounts?

BY ILEN INSTITUTE 2016
Halo

We all see things the same way.

We see words in groups or phrases.
The print is more dominant than the background. The print shows two
movements. If the printed letters are
evenly black, black print on
white paper gives the best contrast
for everyone. White background
looks white.

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Seesaws
Floating
When Sampler CPU 1 boots up "Code Meter" automatically loads. This is a Wibu application (free online from Wibu.com) that is essential to recognize the DVZ because it's in the Windows Taskbar (in the system tray). This may be immediately visible if the DVZ-RT program is actually installed on all computers, but if not, it will be gray, but it will work. If the code meter task tray is not present on one of the computers, you will need to load the Wibu key (if present on all of the computers, that they are all networked, the key is not installed, the icon will not load or the Wibu key is not connected). If the icon is present on one of the computers, right-click it and be Dismount if all loaded correctly, then right-click the code meter task tray again and select "Mount" then that's located on the sample drive and mount it. (If you have to choose the image, and you will come up. The first item will select this (this mounts the library). If you select the image, you will see the Wibu key over the image. If there is a checkmark, the key is not installed, the icon will function correctly. Note: All this will occur automatically in the final release and even in beta you shouldn’t have to do the mounting, if the boot process works correctly.)
When Sampler CPU 1 boots up “Code Meter” automatically loads. This is a Wibu application (free online from Wibu.com). This is essential to recognize the DVZ-RT Space/Library authorization USB key (dongle). This may be immediately visible because it’s in the Windows Task Tray. This runtime program is actually installed on all the DVZ-RT computers (Control and Samplers).

If the Code Meter task Tray icon is green, this means the authorization key is present on the computer being viewed. On those computers where the key is not installed, the icon will be gray, but it will work because the program accesses the valid key over the network.

Also, on all Samplers, you will see an AI Crypt VST Host (Helix) icon. That also loads automatically upon boot up. This AI Crypt info pertains only to beta turn-key systems, and will change later.

If the icon is not present, launch it from the desktop icon, or look in the Start Menu - Programs/Audio Impressions/AI Strings and launch AI Crypt. If it isn’t there, it failed to load or the Wibu key is not connected so please make sure it’s present on one of the computers, that they’re all networked correctly together, etc.

If it’s loaded, right-click on the icon and a context menu will come up. The first item will be Dismount if all loaded correctly. Don’t select this. If the first item is “Mount” then select this (this mounts the library). If you Mount, you have to choose the image, and that’s located on the sample drive and named “aisi” (Audio Impressions Symphonic Image). You select it and mount it to x (using the dropdown menu). No letter other than x will function correctly. Note: All this will occur automatically in the final release and even in beta you shouldn’t have to do the mounting if the boot process works correctly.
THE SOLUTION
The Irlen Method
The Irlen Method

STEP 01 Identify Students with Risk Factors
STEP 02 Screening & Overlays
STEP 03 Testing & Irlen Spectral Filters
STEP 04 Additional Accommodations & Modifications
The Result: A Calmer Brain

Without Irlen Lenses

With Irlen Lenses

SPECT Scans Courtesy of Daniel Amen, M.D., Amen Clinic
What Can You Do?
Identify Irlen First

- Identify & Correct Irlen
- Correct Intervention
- Avoid Misdiagnosis
# Irlen Students With Risk Factors

Irlen Reading Strategies Questionnaire

<table>
<thead>
<tr>
<th>READING DIFFICULTIES</th>
<th>DISCOMFORT</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Skip words or lines</em></td>
<td><em>Eyes: hurt, ache, burn</em></td>
</tr>
<tr>
<td><em>Lose place</em></td>
<td><em>Eyes: dry, sandy, scratchy, itchy, heavy</em></td>
</tr>
<tr>
<td><em>Repeat lines</em></td>
<td><em>Sleepy</em></td>
</tr>
<tr>
<td><em>Misread words</em></td>
<td><em>Headache, dizzy, nauseous</em></td>
</tr>
<tr>
<td><em>Reading slow or choppy</em></td>
<td><em>More difficult to read with bright or fluorescent lights</em></td>
</tr>
<tr>
<td><em>Reading deteriorates</em></td>
<td></td>
</tr>
<tr>
<td><em>Rereads for comprehension</em></td>
<td></td>
</tr>
</tbody>
</table>
Become an Irlen Screener

Trained to:

- Identify
- Severity
- Language
- Educate
- Counseling
- Determine overlay color(s)
Overlay Tips

- Self selection doesn’t work
- Colors can be worse than white
- Colors can be better than white
- One color or colors that make the most difference
## Classroom/At Home Modifications

### CONTRAST
- No bright or fluorescent colors
- No stripes, plaids, or polka dots
- No large or glittery jewelry or buttons

### LIGHTING
- Reduce lighting
- Incandescent or indirect natural lighting
- Gels over fluorescent
- Visor or brimmed hat
Classroom Modifications

**WHITEBOARDS**

- Gray or brown
- Colored marker/chalk (red and yellow are hard to see)
- Write in columns

**PAPER**

- Recycled, off-white, non-glare
- Different colors for different people

**COMPUTER/OVERHEAD PROJECTOR**

- Use colored overlays
Reading Modifications

- Irlen Spectral Filters
- Colored overlays
- Magnifying bar
- Visor/brimmed hat
- Bookstand
- Markers
  (above, below, to the side of the line)
- Avoid fluorescent lighting
- Dim lighting
- Incandescent lighting
Testing Modifications

- Tests duplicated on colored paper
- Colored plastic overlays
- Scantron answer sheets
- Use a ruler
- Natural lighting
For More Information

- Email: irleninstitute@irlen.com
- *Reading by the Colors* by Helen Irlen
- *The Irlen Revolution* by Helen Irlen

You Tube Videos:

- Irlen Syndrome:
  A Teen’s Summary
  http://www.youtube.com/watch?v=9N5qbMFtKQ4
- ABC World News with Peter Jennings
  http://www.youtube.com/watch?v=91WOnEepH0A

www.irlen.com
www.irlensyndrome.org