



IRLEN SYNDROME

Irlen

Screeners Training



Irlen Screeners

Trained to:

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



Screeners Certificate Authorizations

- The bearer of this Certificate is qualified to offer information to individuals and groups on Irlen® Syndrome and Irlen Spectral Filters®.
- The bearer of this Certificate may perform Irlen® screening and client advisement.
- The bearer of this Certificate is authorized to provide Irlen® overlays and other Irlen® consumable products.

Screeners Certificate Restrictions

- This Certificate is invalid after the expiration date, as indicated on the reverse side, unless renewed by obtaining Irlen® Recertification Credits (IRC).
- The bearer of this Certificate is NOT AUTHORIZED to train others to screen or use Irlen® materials.
- Only with PRIOR APPROVAL shall the bearer of this Certificate make presentations on the Irlen® Technology at national conferences or workshops or make national media appearances.
- When using Irlen® for materials, brochures, business cards, stationary, etc., the ® must be attached to “Irlen” whenever it is used in order to protect ownership.
- You may only use “Irlen” as part of your dba (doing business as) business name for a business that is only providing Irlen® services. It cannot be used as part of the name of a legal entity such as a corporation. Permission must be requested and received in writing to use “Irlen®” as part of a registered name.
- The bearer of this Certificate, when placing Irlen information on the Internet, will abide by the Irlen Institute’s Website/Internet Rules and Regulations.
- Any printed material or information regarding Irlen Syndrome printed or placed on the internet/website shall retain the Irlen® copyright.
- The bearer of this Certificate shall not make available to the general public the specific diagnostic tool and technique used in the Irlen® process.
- Failure to abide by the rules and regulations of Irlen Institute is cause for revocation of this Certificate.

Screeners Recertification

Irlen Screeners are responsible for tracking the earning of Irlen Recertification Credits and submission to the Irlen Institute International HQ or Regional Director at the time of recertification. *Conclusion of 5 year period*

In order to be recertified you must complete steps 1-4 and choose either A or B from step 5:

1. Obtain and be using the current IRPS Screening Manual (11th Edition, Winter 2010; ©1987-**2017**) and IRPS Test Records (**1988-2021**). Using the changes for scoring presented at the International Conference in the UK 2019. The PPT with the changes can be obtained from the Irlen Institute.
2. Join the Irlen Screener Network on Facebook <https://www.facebook.com/groups/294858331091270/>.
3. Sign-up for the Irlen NewsAlert on the Irlen Website <https://irlen.com/>.
4. Submit \$20.00 for the recertification processing fee.
5. Choose one of the following:
 - (A) Re-attend an Irlen Screener Training Course. *This is the preferred method as you will receive the most up-to-date information during this course.*
 - (B) Using the above editions of the IRPS Manual and Test Record, screen one child with parent and send in a copy of the completed IRPS Test Record, Self-Test for Irlen Syndrome, Short Intake, and Checksheet Report for that client to the Irlen Institute. AND View two of the Professional Development Opportunities below and submit a 1-page summary of what you have learned

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

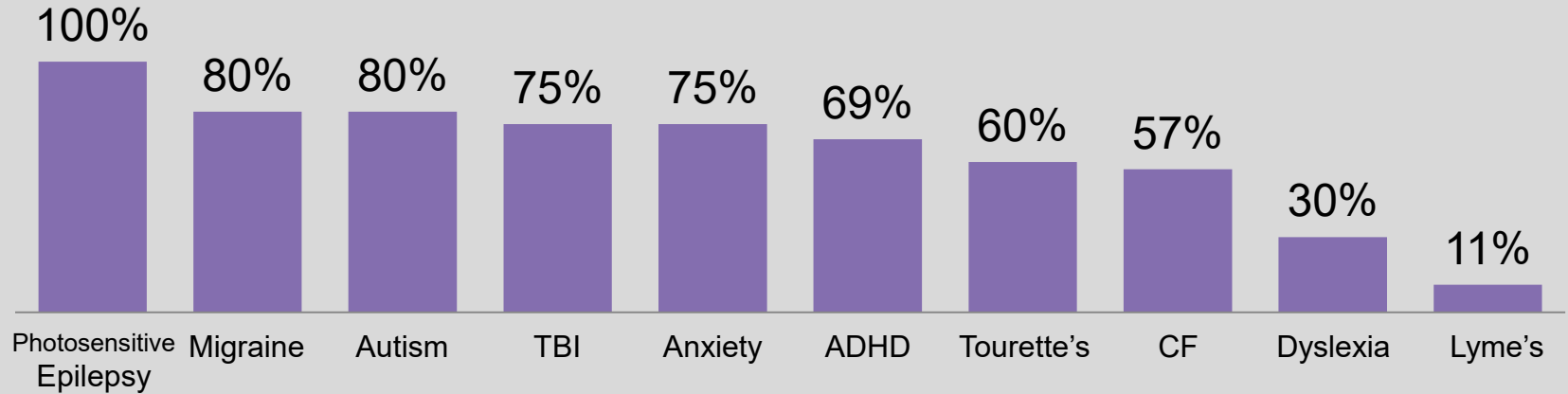
03

FAMILIARITY WITH THE SOLUTION

Learn about the Irlen Method and other modifications and accommodations you can use to help

Prevalence of Light Sensitivity

Light Sensitivity



What is a Perceptual Processing Difficulty

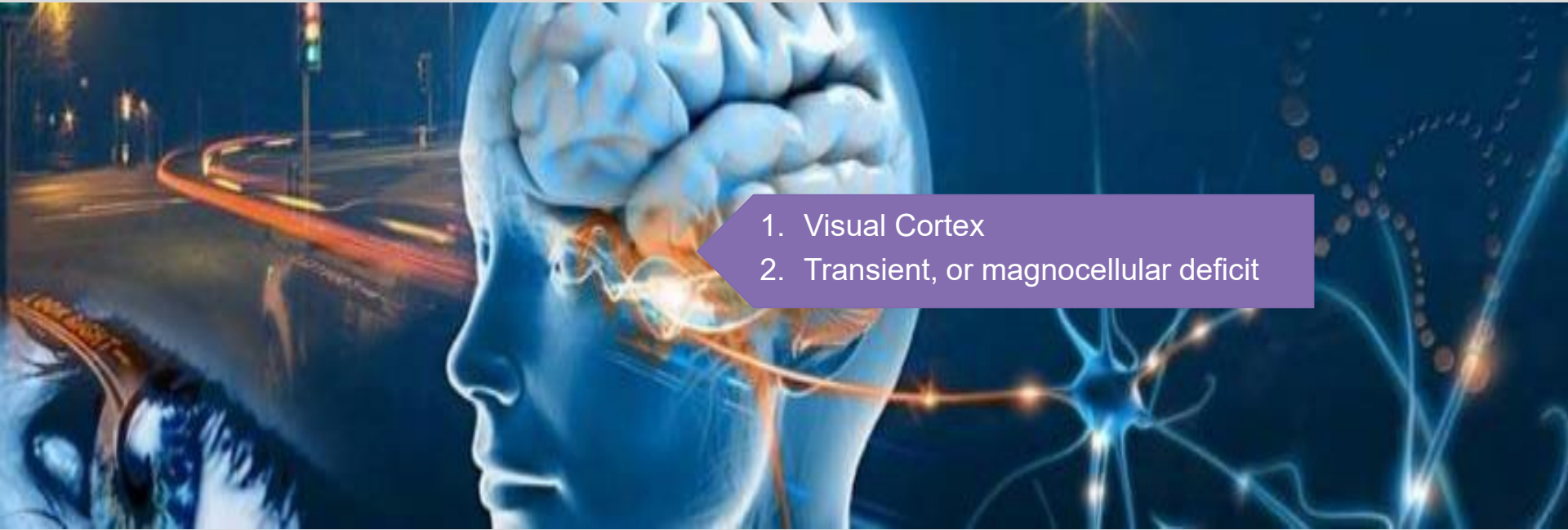
- A hindered ability to make sense of information taken in through the eyes
- Different from problems involving sight or sharpness of vision
- Affect how visual information is interpreted, or processed by the brain

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

A Visual-Perceptual Disorder

Problem with the brain, not the eye



1. Visual Cortex
2. Transient, or magnocellular deficit

A young boy with short brown hair and glasses is sitting in a wooden chair, reading a book. He is wearing a white t-shirt. The background shows wooden shelves with various items, including a red box with a picture of people. A large dark blue circle is overlaid on the left side of the image, containing the text 'THE PROBLEM' and 'What is Irlen Syndrome?'.

THE PROBLEM

.....
What is Irlen Syndrome?

Hereditary

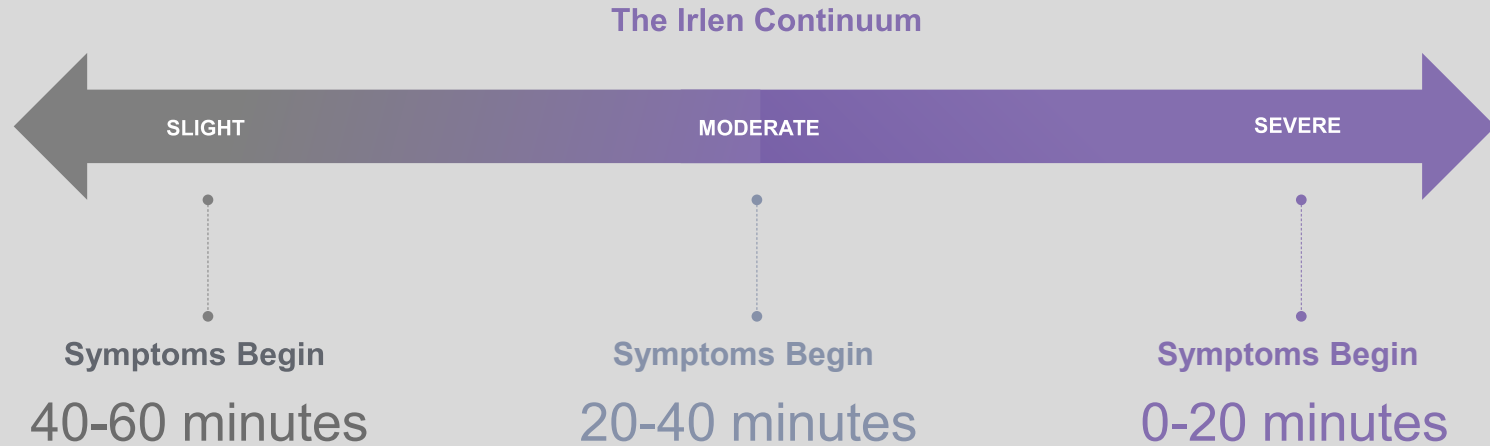
Problem with the brain, not the eye

- 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



A Variety of Symptoms

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



Areas Impacted



© Perceptual Development Corp. 2012

Triggered by Environment

- Lighting
- Glare
- Bright colors
- High contrast
- Strips and patterns
- Details
- Amount of print on page
- Print size, style, font
- Demands for sustained attention



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,
quickenened, breathing

Small and gross
motor integration

Fatigue

Headaches

Tense neck,
back, shoulders

Nausea



Systemic Impact

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

Systemic Impact

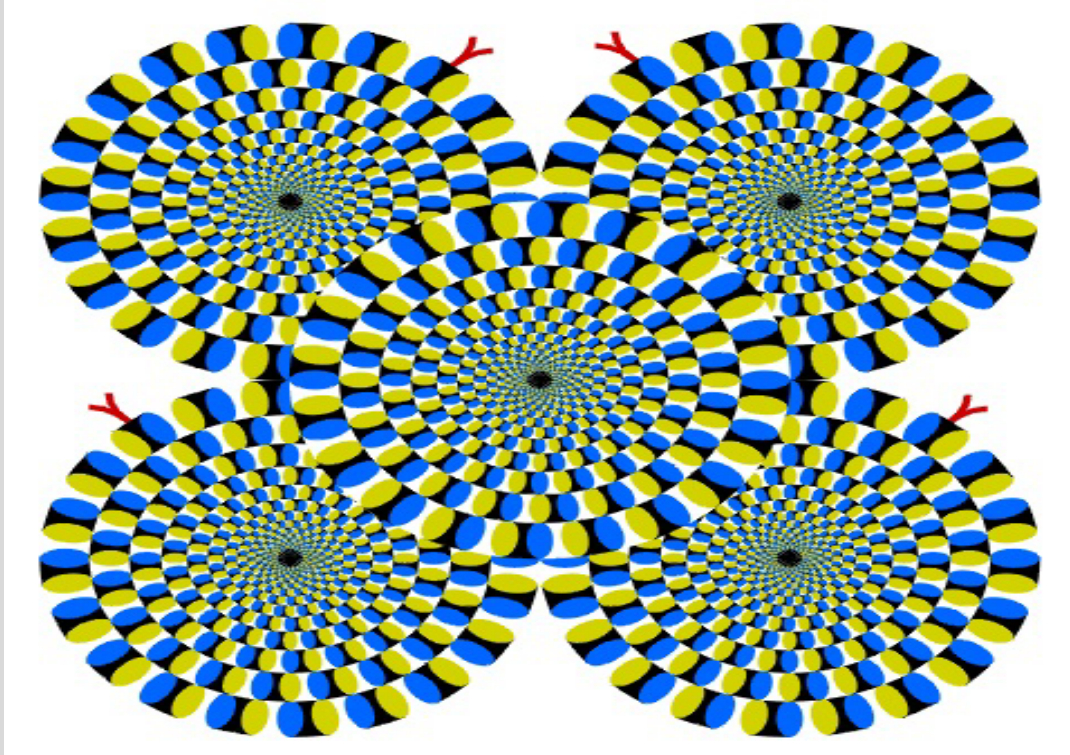
- Emotional, behavioral, psychological implications
- ADD/HD
- Depth perception & sensory integration
- Sleeping difficulties
- Visual fragmentation

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Visual Processing Dominates



Optical Illusions

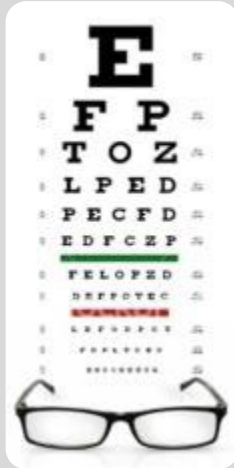


- Illusion is "a mismatch between the immediate visual impression and the actual object"
- All senses need to be interpreted through the brain -- and these interpretations can go wrong
- Perception doesn't match the physical reality of the world

Irlen Is Not...

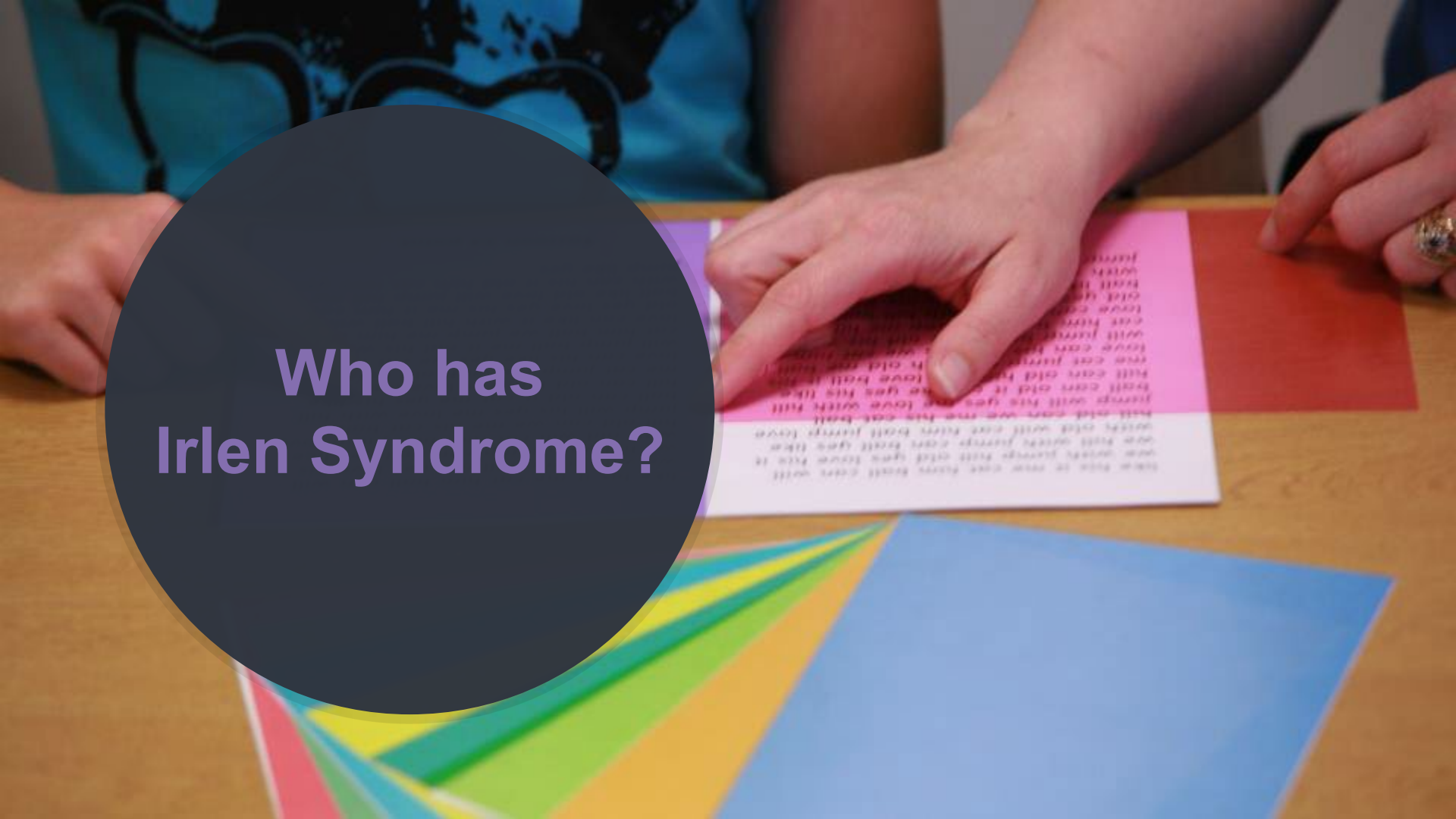
Not Identified By Current Tests

- Educational
- Medical
- Ophthalmological



Not A Method of Instruction





Who has
Irlen Syndrome?

Identifying the Population



70%

Head injury,
concussion,
or whip lash

46%

Learning
disabilities,
reading
problems

33%

ADHD,
Dyslexia,
behavior
problems

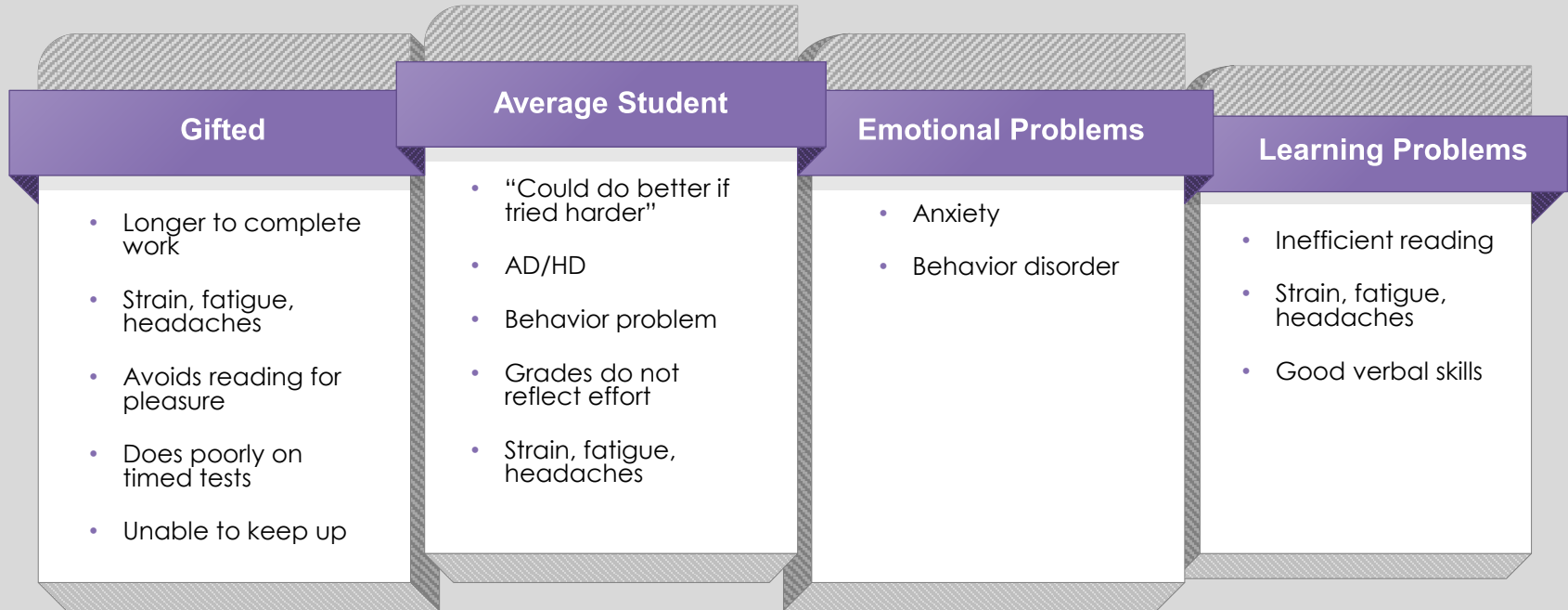
30%

Autism

14%

General population,
gifted, good readers

Different Manifestations



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



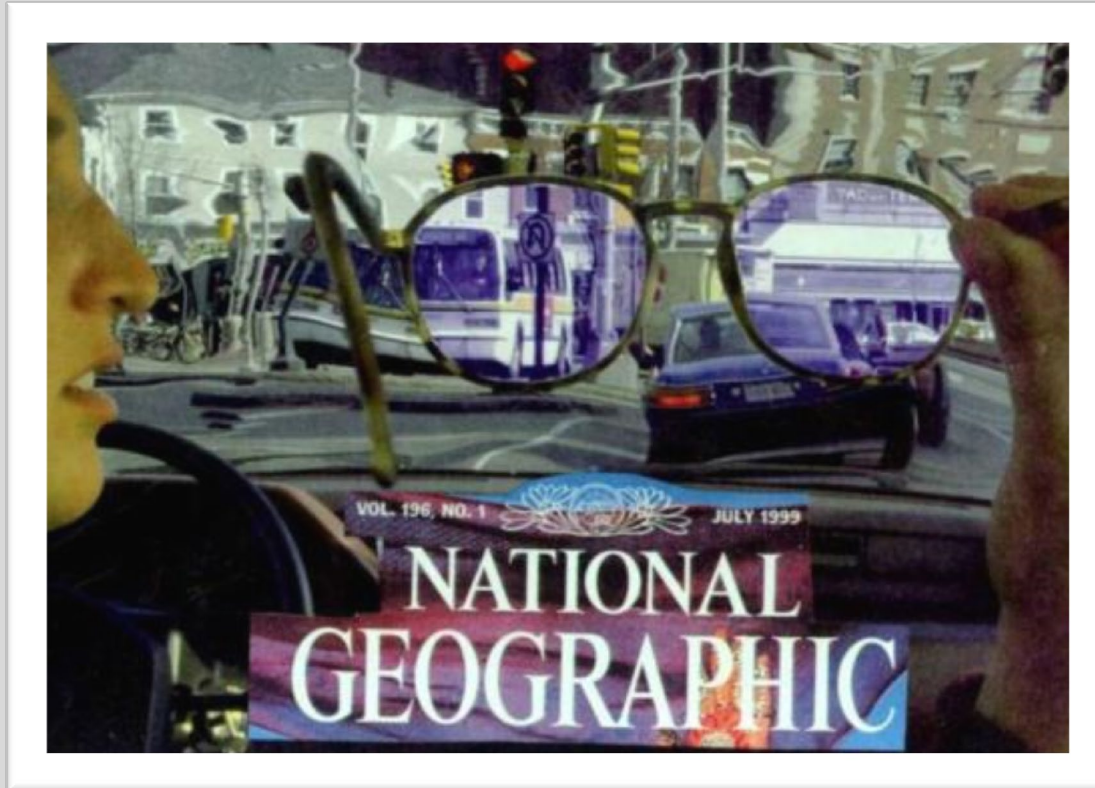
Diseases & Co-morbidity

- 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

However, by the end of the day he had decided that this school was better than the last one even though he didn't like it. Nobody had offered to pull his head off, rip his coat off, or throw his shoes over the roof. On the other hand, nobody had spoken to him either. By Thursday after noon, nothing had changed. Bill was not entirely surprised no one spoke to him because no one knew he was there every day. He was with another group. He only saw his class together at registration after that. They were split up for all their lessons. Maths with 1x English with 1c games with 2y a lesson which was mysteriously called GS with 1x. At the end of that period he was nowiser about GS than he had been at the beginning. It seemed that the class was on page 135 of book 2 while the teacher was on page 135 of book 3 as both books had identical covers. The lesson was over before any one noticed. Bill had no book anyway being advised to share with a boy in a pink shirt who kept his elbow firmly between Bill and the book. When the bell rang Bill grabbed the boy in the pink shirt before he could leave. However, by the end of the day he had decided that this school was better than the last one even though he didn't like it. Nobody had offered to pull his head off, rip his coat off, or throw his shoes over the roof. On the other hand, nobody had spoken to him either. By Thursday after noon, nothing had changed. Bill was not entirely surprised no one spoke to him because no one knew he was there every day. He was with another group. He only saw his class together at registration after that. They were split up for all their lessons. Maths with 1x English with 1c games with 2y a lesson which was mysteriously called GS with 1x. At the end of that period he was nowiser about GS than he had been at the beginning. It seemed that the class was on page 135 of book 2 while the teacher was on page 135 of book 3 as both books had identical covers. The lesson was over before any one noticed. Bill had

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Washout

OBSERVATIONS:

Arthur is a friendly, talkative boy who speaks in a rather loud voice. He impressed 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 table. Arthur seemed to be making a good effort on all the test items, but he worked rapidly and had difficulty sustaining his attention for any length of time. Some impulsive and impulsivity were noted. Arthur appeared to resist academic tasks, resorting to manipulative behavior which included diverting conversation, making excuses, and various feints and evasions which produced falsely favorable conditions. Arthur expended considerable energy avoiding a job rather than accepting the responsibility for one. He was quite anxious concerning his performance, and he frequently requested reassurance as to the accuracy of his responses. It was important to him to do well, and he became increasingly tense and nervous when he was threatened with failure. Arthur did not give up when challenged, but he sometimes needed to be encouraged or reminded that task avoidance behaviors would not be effective in this situation.

ANALYSIS AND RECOMMENDATIONS:

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 subtest 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 in the analysis and formation of abstract designs and in the awareness of cause and effect and time sequence; Arthur reached the ceiling score ceiling in both of these areas. The examiner feels that the results of the verbal section of the WISC may represent a minimal evaluation of Arthur's potential in these skills. The unevenness of his performance seems to reflect, in part, his irregular school attendance and slow academic progress, anxiety, and some perceptual immaturities. Borderline deficiencies on the auditory association ~~subtest~~ 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 sustaining his attention, and he seems to have a disability involving the auditory perceptual modality, 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 seems to mix manuscript cursive forms, suggesting some confusion and a need for individualized instruction in the

Blurry

BY ANDREW J. SOSTEK
AND RICHARD J. WYATT

As any parent, grandparent, or baby-sitter knows, some babies are adaptable, placid, and regular in their habits, while others are difficult and unpredictable. Differences in temperament show up from the first day of life: some infants sleep very little, others sleep a lot, some infants are highly sensitive and cranky, others are quiet and unresponsive.

Since newborns have not been exposed to the world for long, environmental factors beyond the womb can hardly account for such differences in temperament. Rather, the differences must be largely a result of genetic influences. Yet those have been few, if any, attempts to relate different biological endowments at birth to newborns' behavior.

We have based our research at the National Institute of Mental Health (NIMH) that behavioral differences in newborns are associated with an enzyme that circulates in both the blood and the brain, monoamine oxidase (MAO). By comparing the amounts of MAO in the blood of newborns with their performance on behavioral tests, we concluded that those with lower levels of MAO tended to be more sensitive and anxious than those with high MAO. The lower MAO newborns were also more active and performed better on those relating to motor functioning.

In the brain, monoamine oxidase that MAO influences behavior by breaking down the chemical neurotransmitters that carry messages between neurons. By preventing neurotransmission from building up, MAO quietens the brain cells that would otherwise be activated. Low levels of MAO thus mean more activity—higher arousal—in the brain.

We know that some of our subjects with MAO had been found as newborns because their levels of MAO and their behavior. Others MAO levels and their behavior that MAO had not been found as newborns and diagnosed with schizophrenia and depression

sives had lower-than-normal amounts of MAO in their blood. In a study of normal adults, Monte Buchsbaum and his associates uncovered an association between low MAO and a variety of distinctive personality traits, including gregariousness, a tendency to drink and experiment with drugs, an active, varied sex life, and a preference for activities such as motorcycle riding.

Was MAO present in the blood of infants in the same relative amounts,



and could it similarly influence their behavior? To find out, we first measured the blood of 23 newborns. Some after birth, blood is routinely taken from the part of the umbilical cord that is attached to the placenta to determine blood type. We obtained permission to analyze the remaining fetal blood.

We found approximately the same variation in the range of MAO levels among our 23 infants as among the 600 adults measured in previous studies. The MAO levels were also similar regardless of the type of delivery, most, gestational, or stillbirth, and the mother during delivery. Previous research has shown that the levels of MAO found in the blood of different people fall generally in seven (for example, athletes

tical [same-egg] twins have very similar amounts and people in the same family generally have quite similar amounts. Thus, we assume that the MAO levels found in the blood at birth are biologically fixed.

To measure behavioral differences among our sample, we gave the Neonatal Behavior Assessment Scale (NBAS) to the 23 infants on their second day of life. The NBAS assesses infants' reactions to a range of sights and sounds and provides an evaluation of their motor functioning and arousal patterns. In one group of items, for example, the examiner rings a bell, shakes a rattle, and shines a flashlight at sleeping newborns to assess their ability to screen out stimuli; infants who wake easily or cannot stop responding are either more arousable or have less efficient information-processing skill.

To see how MAO related to the infants' NBAS scores, we compared the infants who had the most MAO to those with the least MAO. The most notable difference was in arousability. During the 30 minutes of testing, low-MAO newborns were much more active and easily aroused; they cried more often, took longer to console, and required more holding and rocking to quiet down. They also displayed better muscular coordination.

Our research shows that one enzyme in the blood and brain seems tied to individual differences among newborns. We don't know whether other brain chemicals—such as the endorphins—are present in sufficient quantities at birth and also influence infant behavior. It is also an open question whether these biological predispositions are constant throughout the life span—that is, whether the more active infants grow up to be outgoing adolescents and adults while the placid ones become quiet, more introverted adults. **E**

Andrew J. Sostek is an assistant professor at the Adult Diagnostic Branch, Special Clinical Health Research, NIMH, Bethesda, Maryland, and of the NIMH.

Shaky

PROMISES PROMISES
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Halo

We all see thing the same way.
We see words in groups or phrases.
The print is more dominant than the
background. The print shows no
movement. 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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Swirl

Part of the reason for the difficulty of this job is that the government is not a unitary body. It is a collection of many different departments, each with its own interests and objectives. This makes it difficult to coordinate policy and action across the different departments. For example, the Department of Health and the Department of Social Security have different priorities and objectives, which makes it difficult to coordinate policy in the area of social security.

Social policy for the aged in the United States once again illustrates the complexity of the problem. The various agencies of the United States government are not a unitary body. They are a collection of many different departments, each with its own interests and objectives. This makes it difficult to coordinate policy and action across the different departments. For example, the Department of Health and the Department of Social Security have different priorities and objectives, which makes it difficult to coordinate policy in the area of social security.

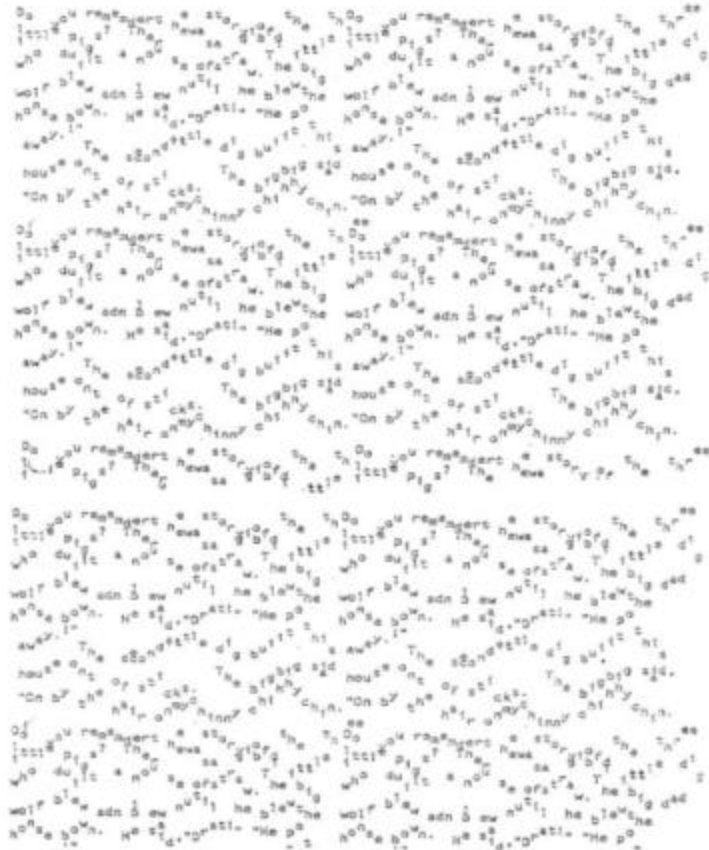
In addition, Congress failed to grant sufficient funds to the various organizations and administrations involved in the problem. This has made it difficult for them to carry out their responsibilities. For example, the Department of Health and the Department of Social Security have not received sufficient funds to carry out their responsibilities. This has made it difficult for them to coordinate policy and action across the different departments.

various interests, the interest groups, providers, and professionals in the field. For example, the interest groups of the aged have different priorities and objectives, which makes it difficult to coordinate policy and action across the different interest groups. For example, the interest groups of the aged have different priorities and objectives, which makes it difficult to coordinate policy and action across the different interest groups.

Another aspect of the problem is the lack of coordination between the different agencies of the United States government. For example, the Department of Health and the Department of Social Security have different priorities and objectives, which makes it difficult to coordinate policy and action across the different departments. This has made it difficult for them to coordinate policy and action across the different departments.

A related problem is that the government has not encouraged the breaking down of barriers between specialized categories of services or needs. This has made it difficult for the government to provide a coordinated and integrated system of services. For example, the government has not encouraged the breaking down of barriers between specialized categories of services or needs. This has made it difficult for the government to provide a coordinated and integrated system of services.

Seesaws

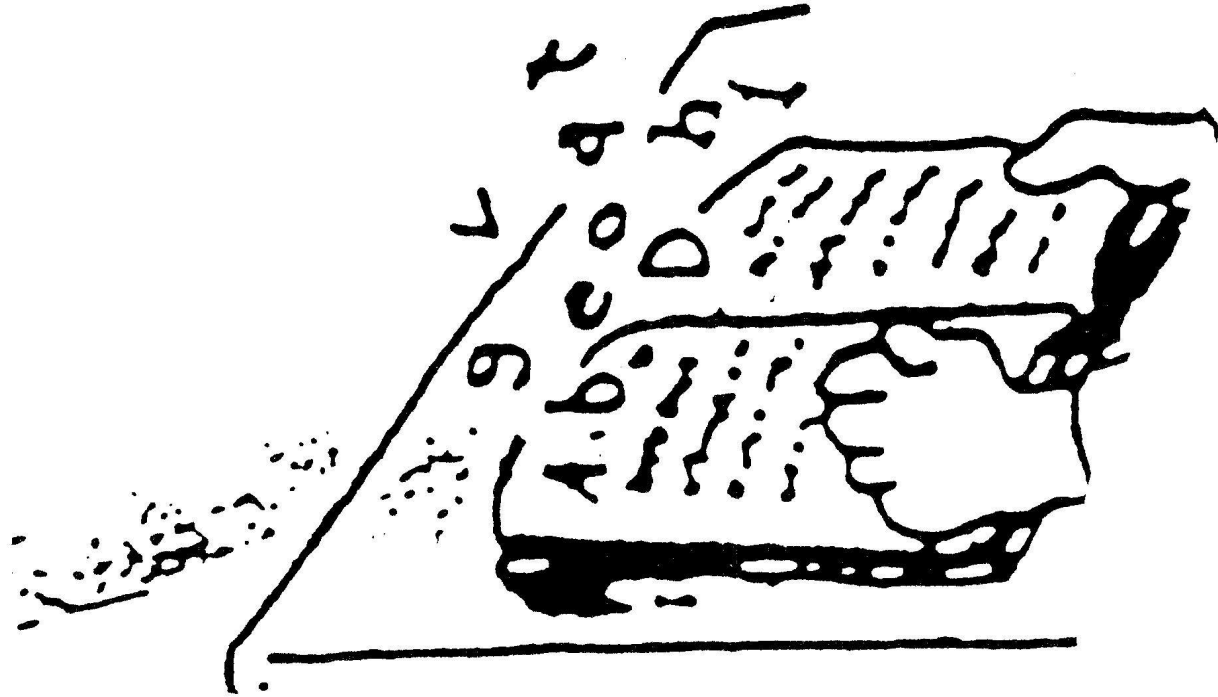


Star Wars

[illegible]

The five day outlook calls for seasonal temperatures with highs in the 70's and lows in the 50's. Today is expected to be fair and with a high of 72. Tomorrow night will be cool with showers. A high of 76 is expected, with a 40% chance of rain. The five day outlook calls for seasonal temperatures with highs in the 70's and lows in the 50's. Today is expected to be fair and with a high of 72. Tomorrow night will be cool with showers. A high of 76 is expected, with a 40% chance of rain.

Floating



Wavy

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), because it's in the Windows Task Tray (bottom right). This may be immediately visible the DVZ-RT computers (Control and Space). This may be immediately visible on all

If the Code Meter task Tray icon is green, then the computer being viewed. On those computers the icon will be gray, but it will work because the network is up. If the icon is green, then the computer is up and the network is up. If the icon is gray, then the computer is down or the network is down. If the icon is gray, then the computer is down or the network is down. If the icon is gray, then the computer is down or the network is down.

Also, on all Samplers, you will see an AI Copying icon because the program is not present, launch it from the desktop and will change later.

Also, On all
automatically in
and will change later

If the icon is not present, launch it from the desktop icon, or load the program from the Start Menu -
Programs/Audio Impressions/Al Strings and launch Al Strings. If the icon is not installed, the program will be installed.
load or the Win95 key is not present, so please make sure the program is installed correctly, together with the valid key over the
computers, that they're all networked correctly, together with the valid key over the
click on the icon and a message box will appear, saying "Al Strings is not installed. That also loads
Start Menu -
of the

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 "asis" (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.

Ripple

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.

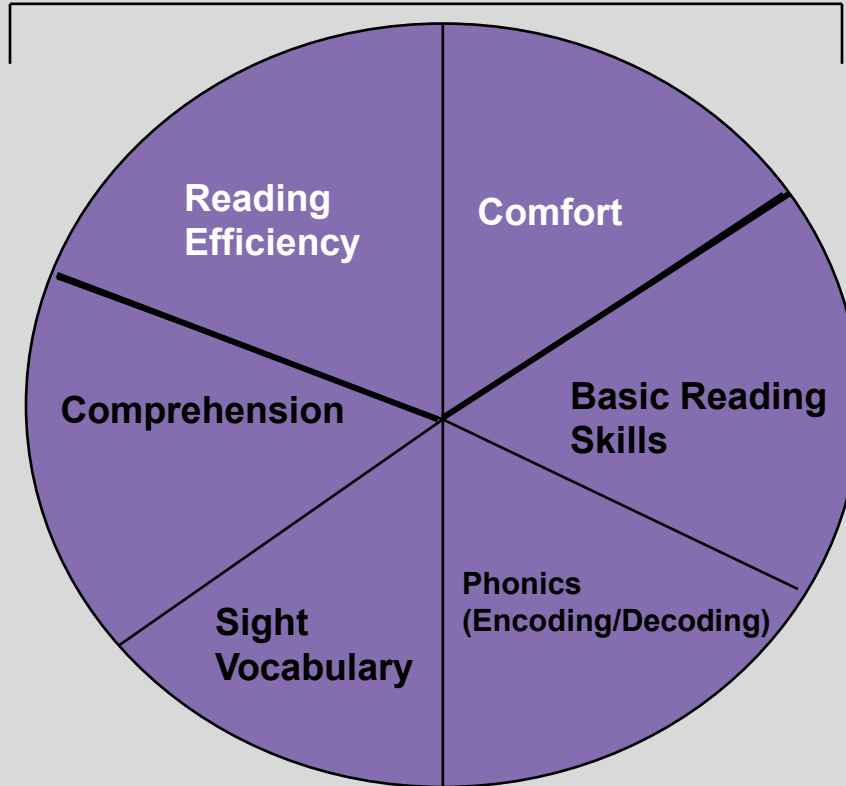
If the icon is not present, launch it from the desktop icon, or look in the Start Menu - Programs/Audio Impressions/AI Strings and launch AI Crypt. If it isn't there, it failed to load or the Wibu key is not connected so please make sure it's present on one of the computers, that they're all networked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

Irlen Subskills Affect Reading

Distortions

Print
Background
Span of
Recognition



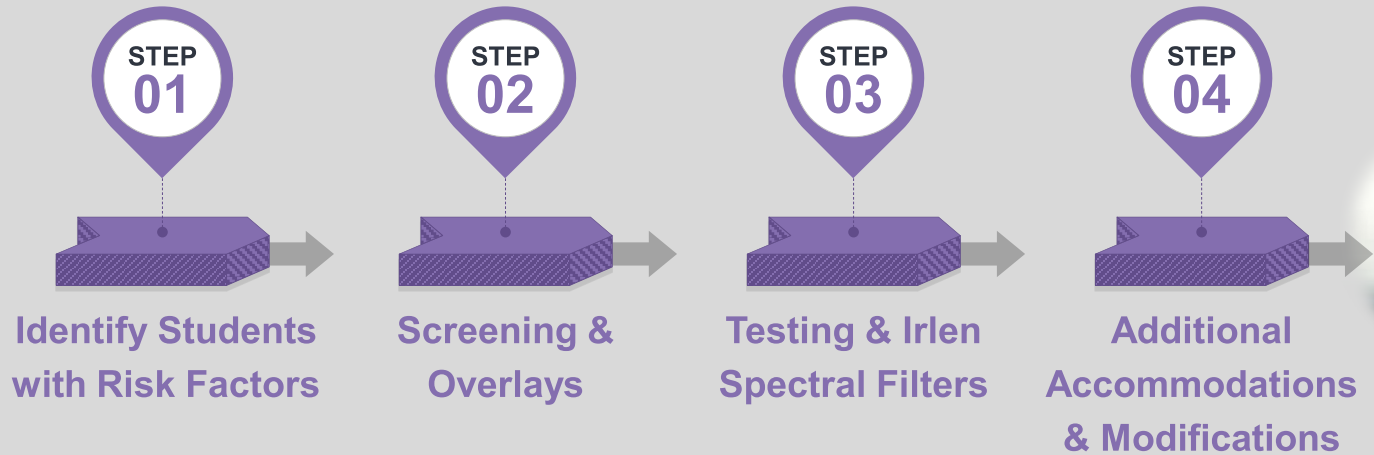
Reading Rate
Comprehension
Sight Vocabulary
Sustained Attention
Flow & Fluency
Basic Reading Skills

A young boy with short brown hair and black-rimmed glasses is the central figure. He is wearing a purple t-shirt and looking slightly to his left with a thoughtful expression. His hand is partially visible near his face. The background is a classroom with colorful lockers (red, green, blue) and shelves filled with various items. Other students are partially visible in the background, one in a blue shirt on the right.

THE SOLUTION

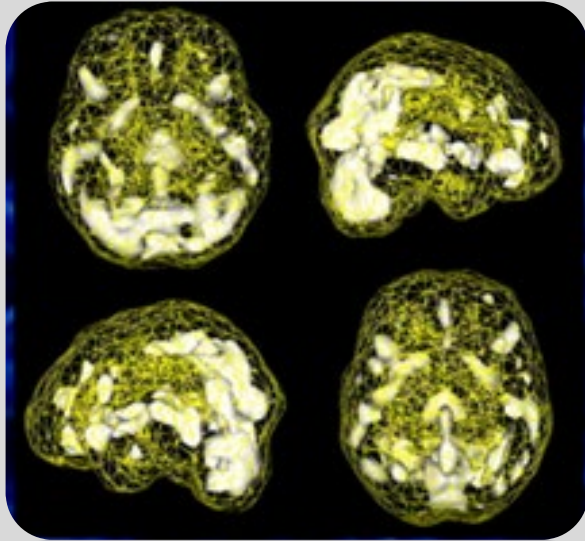
The Irlen Method

The Irlen Method

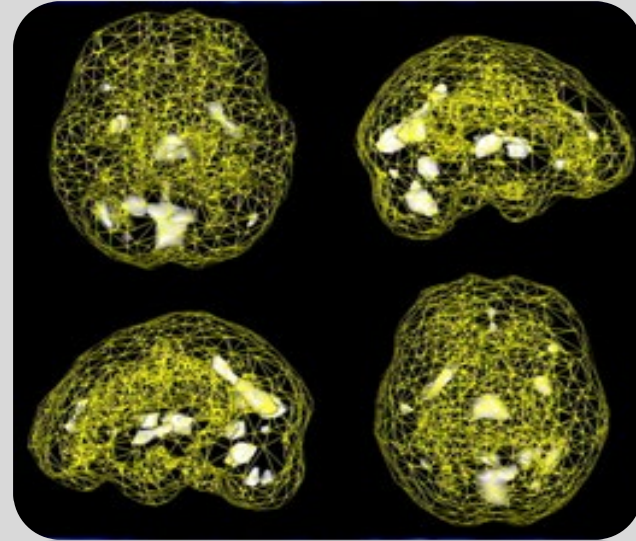


The Result: A Calmer Brain

Without Irlen Lenses



With Irlen Lenses

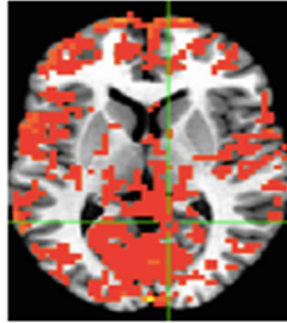


Courtesy of Daniel Amen, M.D.

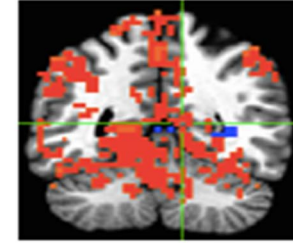
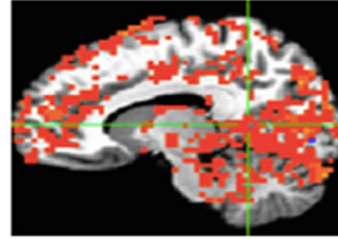
Research

Sub2

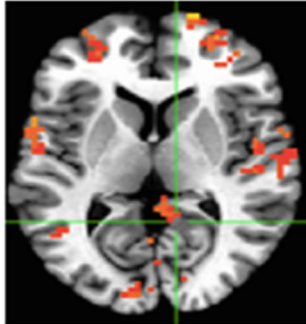
OVERACTIVITY



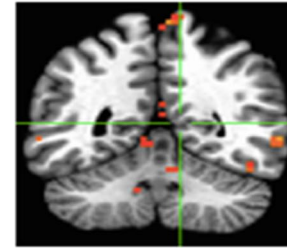
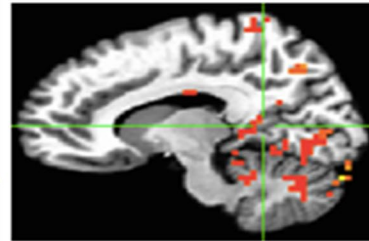
Blank lens



Spectral filter



CALM BRAIN



 Red indicates activity

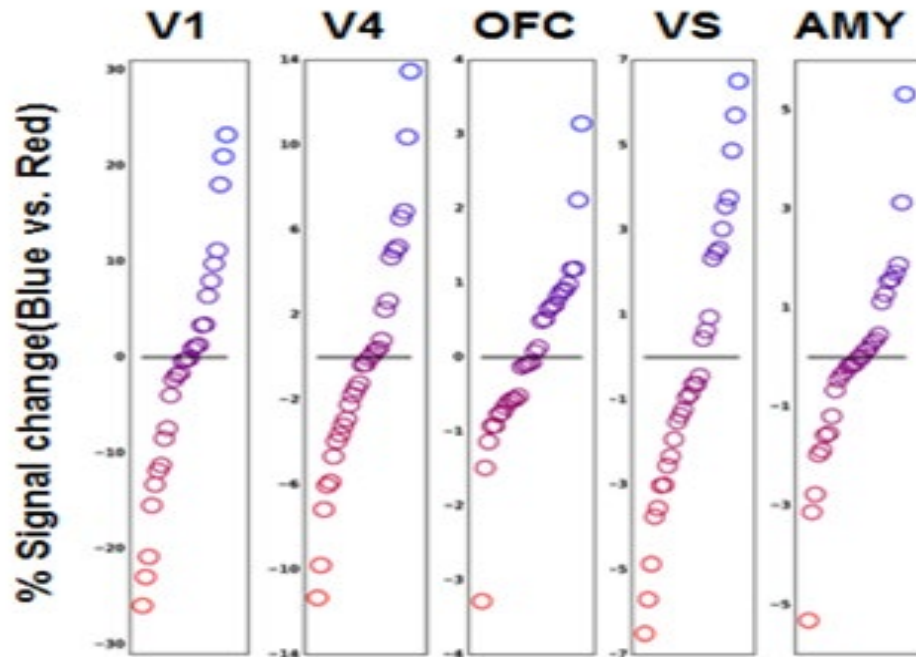
Color Influences How the Brain Works

- 1** How colors influence the brain, even in perceptual regions, is highly dependent on the individual.
Why is this important? This supports Irlen's approach that one color does not fit all.
- 2** Colors change how the visual and emotional brain interact and thus communicate.
Why is this important? It's just cool! It shows color can fundamentally change how the brain works.
- 3** Color cortex (V4), which is central to color processing, orchestrates the changes in brain communication.
Why is this important? It shows that color perceptual processing mediates how other brain regions interact. If you remove its influence, color influences on altered brain communication disappears.

Individual Brains are Tuned Differently to Color

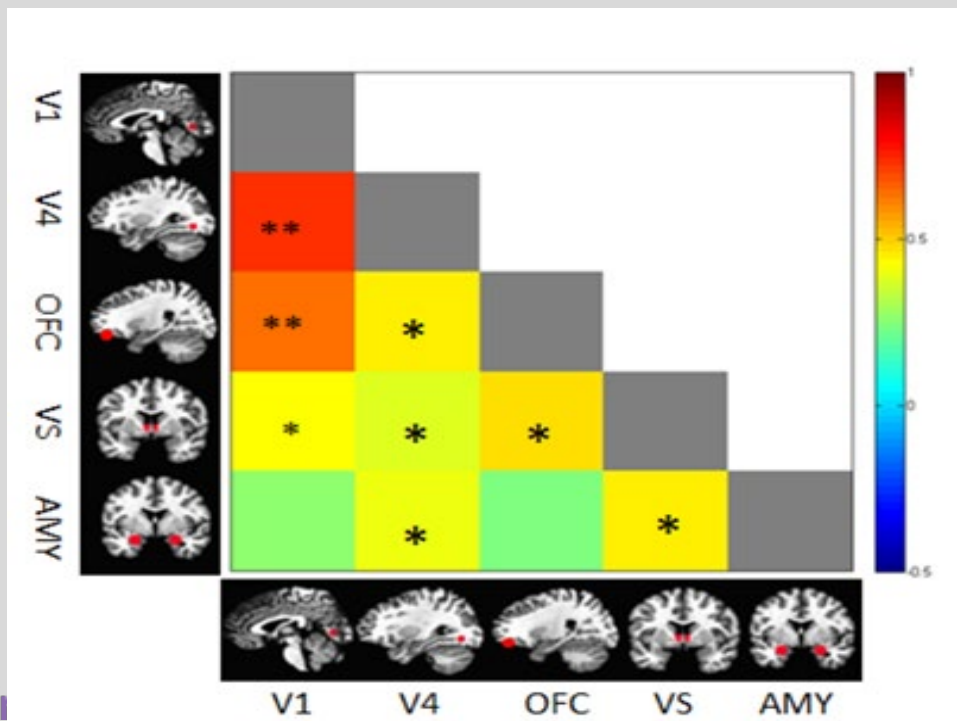
In 5 brain areas, individual responses to color differ.

Blue dots show a differential tuning towards blue, and red dots a tuning towards red, with purple in between.



Color Influences How Brain Regions Interact...

...And thus how we process information



Removing color activity in V4 (color cortex) abolishes how other brain regions communicate with each other.

Color processing influences brain dynamics.

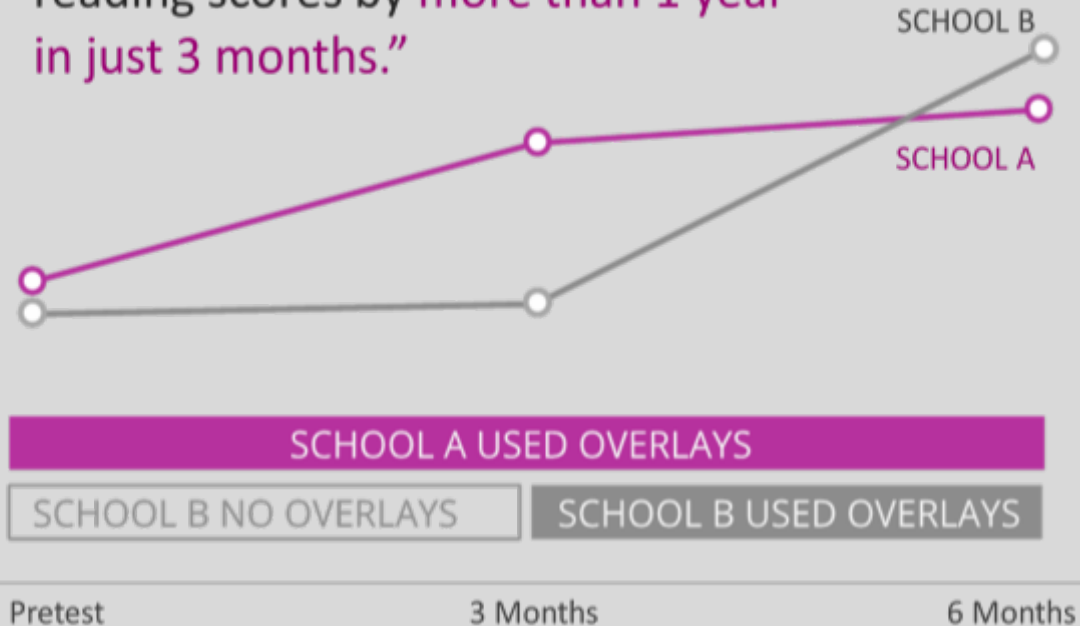
Positive Reading Findings

- **2020: Eye-tracking data** shows objective improvements with overlays (reduced the number of Fixations and Regressions and improved Span of Recognition, Reading Rate, Relative Efficiency, and Comprehension)
- **2018: Increased speed especially for those with discomfort.** 13% of the children presented an improvement of at least 15% in reading speed with the use of spectral overlays. Pupils with severe reading difficulties tended to have more improvement in RRT with spectral overlays. Children with severe reading discomfort obtained the highest gains in RRT. Overlays can improve reading performance, particularly in those children with severe visual discomfort
- **2015: fMRI data correlates directly with improved reading measures.** The reading speed of patients improved more than 20% while wearing the selected lenses. When compared to the before-lens session, the after-lens session identified significant regions of activation in the left middle and superior temporal gyri (paired t-test; maximal z score, 5.38; Montreal Neurological Institute coordinate, -60 / -39 / 0; threshold at $p < 0.05$; corrected for multiple comparisons using family-wise error). No region of activation at the same threshold was found in the before-lens session as compared to the after-lens session. Conclusions: In the current study, we confirmed activation in the left middle and superior temporal gyri during sentence reading after wearing color-tinted lenses.

Nobel et al. (2004)

Noble, J., Orton, M., Irlen, S., Robinson, G. (2004). A controlled field study of the use of colored overlays on reading achievement. *Australian Journal of Learning Disabilities*, 9, 14-22.

“Students using overlays improved reading scores by **more than 1 year in just 3 months.**”



General
Population
953,748

17.4%

Special
Education
167,530

35%

Specific
LD
58,636

46%

Irlen
Syndrome
26,972

50%

Return to
Mainstream
13,486

Cost Difference
to educate SLD vs GE
\$4,969.94/pupil

Cost Savings
with Irlen Intervention
\$67 million/year

**RETURNED 50% SPED CHILDREN
TO REGULAR EDUCATION STATUS**

1999 Pioneer Valley Pilot Project, Massachusetts, USA.
A study funded by the Massachusetts State Legislature and
the Massachusetts Department of Education

TBI/Migraine

Tosta, S., Ferreira, M., Lewine, J., & Anderson, A. (2024). Individualized spectral filters alleviate persistent photophobia, headaches and migraines in active duty military and Veterans following brain trauma, Brain Injury, DOI: 10.1080/02699052.2024.2309253

- Monthly migraine frequency decreased significantly from an average of 14.8 to 1.9
- **74% reporting no migraines post-intervention**
- Prescription and over-the-counter medication use decreased by more than 70%

Sensory Issues Associated with ADHD, ASD, SLD

Wada, M., Hayashi, K., Seino, K., Ishii, N., Nawa, T., & Nishimaki, K. (2023). Qualitative and quantitative analysis of self-reported sensory issues in individuals with neurodevelopmental disorders. *Frontiers in Psychiatry*, 14, 1077542.

- 64% of individuals with ADHD report visual sensory sensitivities as the first, second, or third most distressing sensory sensitivity they experience.
- Auditory problems were reported as the most distressing sensory issue among the participants. In addition to auditory problems, individuals with ASD frequently reported more tactile problems, and individuals with SLD reported more visual problems.

ADHD

BarNir, A., Shaked, H., Elad, S., & Tosta, S. (2023). Evidence for Overlapping Visual Processing Difficulties in Adult ADHD and Visual Stress. Perceptual and Motor Skills, 00315125231192809.

- Fifty-nine adults (age 18-50), diagnosed with both ADHD and visual stress received either spectral filters (n = 39) or no intervention (n = 20) to address visual processing difficulties.
- Administered the MOXO d-CPT, a computer based continuous performance test, before the intervention and one hour after the intervention to assess any short-term change in the participants' attention profile.
- Used the APA's DSM-5 ADHD checklist before and 3–6 months after the intervention to assess long-term intervention impact after 3–6 months.
- The intervention group had significant short- and long-term improvements in overall attention compared to the control group ($X^2(1, N = 59) = 20.10, p < .001$).
- **49% of participants with short term and 64% with long-term intervention no longer met criteria for an ADHD diagnosis.**

What Can You Do?



Treatment: The Irlen® Method

➤ Screening and Overlays

- Identify individuals who can be helped
- Creates awareness of symptoms & language to talk about the problem
- Improves reading

➤ Testing and Irlen® Spectral Filters

- Used for math, copying, listening skills, depth perception, sports, driving, attention and concentration

Overlays vs. Irlen® Spectral Filters

Overlays are an Interim Intervention

- Overlays can only be used for reading
- Limited color selection
- Cumbersome
- Overlays scratch
- Need to be replaced

Spectral Filters are More Comprehensive

- Different color than the overlay: Transmitted vs. reflected light
- Worn as lenses or contact lenses: CR 39, no UV, no tint, no scratch or AR coatings
- Eliminates headaches and other physical symptoms
- Changes in: depth perception, driving, copying, math, computers, light sensitivity
- Optimizes reading

When To Test

Varies depending on:

- Verbal ability
- Self-awareness
- Severity & type of distortions
- Compensatory strategies

Not just once:

- Elementary age, Middle School, High School

Factors to Consider

Vision

- Wear glasses for screening

Lighting

- Similar to school or work

Seating

- Directly across from client

Family members, classroom teachers

- Participate by doing one task, overlays, and reading

Screening Forms

Fill out prior to screening

- Self-Test for Irlen Syndrome
- Irlen Academic Skills Sheet (optional)
- Parent Permission Form (schools only)

During screening

- Short Intake Form
- Irlen Reading Perceptual Scale (IRPS)
- Screening Report
- Copies of appropriate distortion pages

Short Intake Form

Problem

- Parent & child describe
- Wish list of things want to improve

Vision History

- Wear reading Rx for testing

Reading History Questions

- Q 1&2: identify those with Irlen
- Q 3,4,5: determine severity (matches scores on Section 1 of IRPS)
- Severe: onset one word to 20 minutes
- Moderate: onset 20 to 40 minutes
- Slight: onset 40 to 60 minutes
- Q5: severe if report headaches, nausea, or feeling dizzy or sleepy

Short Intake: Environmental Questions

- Lighting can affect behavior, listening, attention, and performance
- Lighting can affect how you feel and create physical symptoms
- Individuals report problem to any of the questions need Irlen® Spectral Filters and will wear them all the time

Non-Irlen Profile

- Environment is clear & stable
- Stays clear & stable
- Feels comfortable and stays comfortable

Short Intake Family History

Identify family members with Irlen

- Light sensitive
- Build breaks into reading
- Avoid reading
- Read magazines or newspapers
- Gets strain, headaches, or other physical symptoms from reading

Identifies who else in the family should be screened

Screen parent with child

**Irlen Reading Perceptual Scale
IRPS Screening Manual
11th Edition, Winter 2010
© 1987-2017**

IRPS Process Testing

Observation

- Squint
- Blink
- Shade page
- Frown
- Close one eye
- Move closer to/further away
- Head tracking
- Rub eyes
- Red, watery eyes

Listening

- Cadence
- Pauses/hesitations
- Speed and fluency

Self Reported Problems

- Type of distortions
- Discomfort
- Type and amount
- Amount of improvement

Reasons for Screening

- Identify those with Irlen Syndrome
- Determine severity (slight, moderate, severe)
- Create awareness of symptoms (see and feel)
- Language to talk about what you see - (distortions and discomfort)
- Educate the client
- What they see vs. others see
- Reading, copying, math, writing, etc.
- Counseling tool (self-concept and behavior)
- Differential diagnosis (subskills related to Irlen)
- Determine correct colored overlay(s)
- Improve performance, attention & concentration

Reading Strategy Questionnaire (RSQ)

Administration Method

- Individually, group, sent home for parents to answer

When

- Beginning or end of IRPS testing

Reading Instructions

- Read exactly as written
- Repeat instructions frequently

Questions on Profile Sheet

- Can be rephrased or elaborated
- Use age-appropriate language
- Parents and/or child can answer

Scoring & Interpretation

- Severity of Irlen Syndrome

Section One

When to Administer

Do First

- To determine whether to screen
- To determine priority

Do Last

- Gives screener information
- Have both child and parent answer
- Score both child's and parent's answers

Scoring

Some questions have multiple options

- Circle each option that applies
- Give one point (always) or ½ point (sometimes) for each
- You can have more than one point for a question
- Record both child's and parent's scores on IRPS Profile Sheet

Scoring & Interpretation

Non-candidate:	0 on both
Slight Irlen:	1-3 on both
Moderate:	4-7 on either
Severe:	8+ on either

Severe: if reports headaches, nausea, dizziness, or sleepiness

Explain scores to client

Irlen® Reading Perceptual Scale (IRPS)

By Helen L. Irlen

Name Sue Brown Sex: M ☐ F ☒ Age 11 Grade 6
 Address 123 West Howard Road City Long Beach State CA Zip 90807
 Phone No. _____ Cell No. 562.123.4567 Email Sbee@gmail.com Date 07/04/19
 Examiner Helen Irlen Reading RX Yes No

PROFILE SHEET

	N/A	SLIGHT	MODERATE	SEVERE
SECTION 1 RSQ				
Reading Difficulties	0	1 2 3	4 5 6 7	8 9 10 11 12 13 14 15 16 17 18+
Reading Discomfort	0	1 2 3	4 5 6 7	8 9 10 11 12 13 14 15 16 17 18+

SECTION 2 TASKS

Box A	Black: jiggle dance move blurry 3D close in change crooked wave cross disappear			
Box B	White: bright stands out 3D colours flicker flash sparkle glow glare			
Pumpkin				
Penguin				
Musical Lines	Physical Symptoms: eyes, head, tired			
Span of Recognition	0	1 2 3	4 5 6 7 8	9 10 11 12 13 14
Pointing Task	0	1 2 3	4 5 6	7 8 9 10 11 12 13 14 15 16 17

SECTION 3 OVERLAYS

Colour(s)	<u>Purple – Blue Grey</u>	Glare/Non Glare	<u>Mom/Dad</u>	<u>Turquoise</u>	(G/NG)
White Page					
Bright/Glary	N/A	Slight	Moderate	Considerable	✓
Uncomfortable	N/A	Slight	Moderate	Considerable	✓
Blurry	N/A	Slight	Moderate	Considerable	✓
Moving	N/A	Slight	Moderate	Considerable	✓
Poor Spacing	N/A	Slight	Moderate	Considerable	✓
Other Distortions		Slight	Moderate	Considerable	✓
Disappear		Slight	Moderate	Considerable	✓
Slow & Hesitant	N/A	Slight	Moderate	Considerable	✓
Error Rate	N/A	Slight	Moderate	Considerable	✓
Strain & Fatigue	N/A	Slight	Moderate	Considerable	✓
Short Attention Span	N/A	Slight	Moderate	Considerable	✓
Weak Comprehension	N/A	Slight	Moderate	Considerable	✓

SECTION 4

Distortion Page(s) _____

Comments _____

SECTION 1 RSQ

SAY: Think about what reading for information is like when you get to the point where you want to stop reading. You can answer "Often," "Sometimes," "Never," or Don't Know "D.K."

READING DIFFICULTIES

	Often	Sometimes	Never	D.K.
1. Do you accidentally skip lines or sentences?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Do you lose your place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you misread words?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you skip words or punctuation marks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you read the same line over again?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you read words from lines above or below?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you avoid reading or reading aloud?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is your reading slow or choppy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are you bothered by white or shiny pages?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you look away, rest, or take breaks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Are you restless, active, fidgety, or easily distracted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you feel frustrated, angry, or exhausted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you find that reading gets harder the longer you read?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Do you use your finger or marker?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you have a problem understanding what you read?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Do you have a problem remembering what you read?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Does it take effort to stay on the words you are reading?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. What else happens when reading?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Often Sometimes

TOTAL= (☐ X 1) + (☐ X 1/2) =

READING DISCOMFORT

	Often	Sometimes	Never	D.K.
1. Do your eyes bother you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Do they feel strained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do they get red or watery?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do they hurt, ache, or burn?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do they feel dry, sandy, scratchy, or itchy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you rub your eyes or around your eyes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you feel tired, drowsy, or fatigued?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Does your head bother you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Do you get a headache?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you get dizzy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you feel nauseated or sick to your stomach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you open your eyes wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you squint or frown?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Do you find yourself blinking frequently?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you move closer to or further from the page?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Does it bother you to read under fluorescent lights?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Is it harder to read in bright lighting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. What else bothers you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Often Sometimes

TOTAL= (☐ X 1) + (☐ X 1/2) =

SCORE: Some questions have multiple options. Circle each "yes" response and put the total in the appropriate "Often" or "Sometimes" box. Total the numbers in the "OFTEN" column and multiply by ONE. Total the numbers in "SOMETIMES" column and multiply by HALF (1/2). Add one point for any additional response. Circle the appropriate numbers on the Profile Sheet, Section 1 (RSQ).

SECTION 1 RSQ

SAY: Think about what reading for information is like when you get to the point where you want to stop reading. You can answer "Often," "Sometimes," "Never," or Don't Know "D.K."

READING DIFFICULTIES

	Often	Sometimes	Never	Mom D.K.
1. Do you accidentally skip lines or sentences?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Do you lose your place?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Do you misread words?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you skip words or punctuation marks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you read the same line over again?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you read words from lines above or below?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you avoid reading or reading aloud?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is your reading slow or choppy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are you bothered by white or shiny pages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you look away, rest, or take breaks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Are you restless, active, fidgety, or easily distracted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you feel frustrated, angry, or exhausted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you find that reading gets harder the longer you read?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14. Do you use your finger or marker?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you have a problem understanding what you read?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Do you have a problem remembering what you read?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Does it take effort to stay on the words you are reading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. What else happens when reading?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

$$\text{TOTAL} = (12 \times 1) + (1 \times \frac{1}{2}) = 13\frac{1}{2}$$

Mom 6x1 = 6

READING DISCOMFORT

	Often	Sometimes	Never	Mom D.K.
1. Do your eyes bother you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Do they feel strained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Do they get red or watery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do they hurt, ache, or burn?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Do they feel dry, sandy, scratchy, or itchy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Do you rub your eyes or around your eyes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you feel tired, drowsy, or fatigued?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Does your head bother you?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Do you get a headache?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you get dizzy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you feel nauseated or sick to your stomach?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you open your eyes wide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Do you squint or frown?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Do you find yourself blinking frequently?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Do you move closer to or further from the page?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Does it bother you to read under fluorescent lights?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Is it harder to read in bright lighting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. What else bothers you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

$$\text{TOTAL} = (9 \times 1) + (1 \times \frac{1}{2}) = 9\frac{1}{2}$$

Mom 9x1 = 9

SCORE: Some questions have multiple options. Circle each "yes" response and put the total in the appropriate "Often" or "Sometimes" box. Total the numbers in the "OFTEN" column and multiply by ONE. Total the numbers in the "SOMETIMES" column and multiply by HALF (1/2). Add one point for any additional response. Circle the appropriate numbers on the Profile Sheet, Section 1 (RSQ).

Section Two

Tasks

Process Testing

Whether the client gets the right answer isn't as important as what happens to the client while doing the task.

- Listen
- Watch
- Client self-reporting

Order of Administration

- When to do less tasks
- When to do more tasks
- Test parent on one task

Reasons for Doing the Tasks

- Creates an awareness of a full array of distortions
- Provides language to describe problems
- Creates an awareness of symptoms of discomfort & severity (0-10)
- Creates an awareness of location: head, forehead, eyes, neck, shoulders, jaw, back, stomach, or breathing
- Provide indicators for selecting overlay color

Directions

- Tasks must be directly in front of the client
- At a reading distance
- Parents sit at testing table so they can see nonverbal behavior
- Follow all directions in IRPS Manual
- Read directions exactly as written
- Questions can be rephrased, explained, simplified, or bold words not read

Distortions, Discomfort, and Behaviors

- What you see and what you hear
- Similar to what happens during reading
- Feedback to client
- Does this happen at some point when you read?
- Do you ever feel this way at some point when you read?

Recording

- Irlen problems are in bold/capitals
- Circle or underline
- Substitute client's language
- Record degree of discomfort (0-10)
- A score of 8+ or client reports headaches, nausea, or dizzy
- Reduce lighting and/or go to overlay section
- Highlight or circle on IRPS Profile Sheet

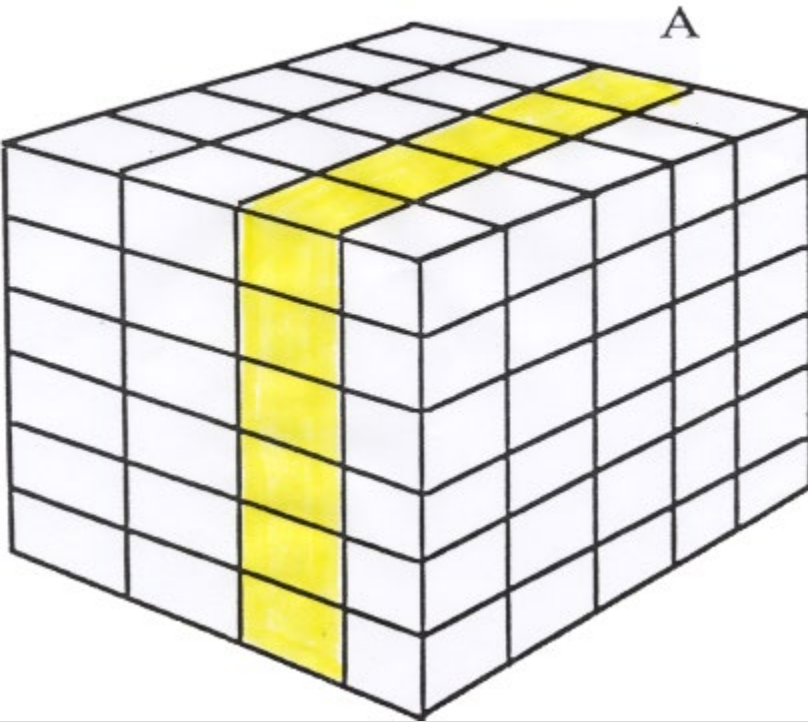
Scoring

- Documenting type of print and/or background distortions
- Number of distortions does NOT equate to severity
- Will not have equal difficulty on all tasks
- Indicators for overlay color selection

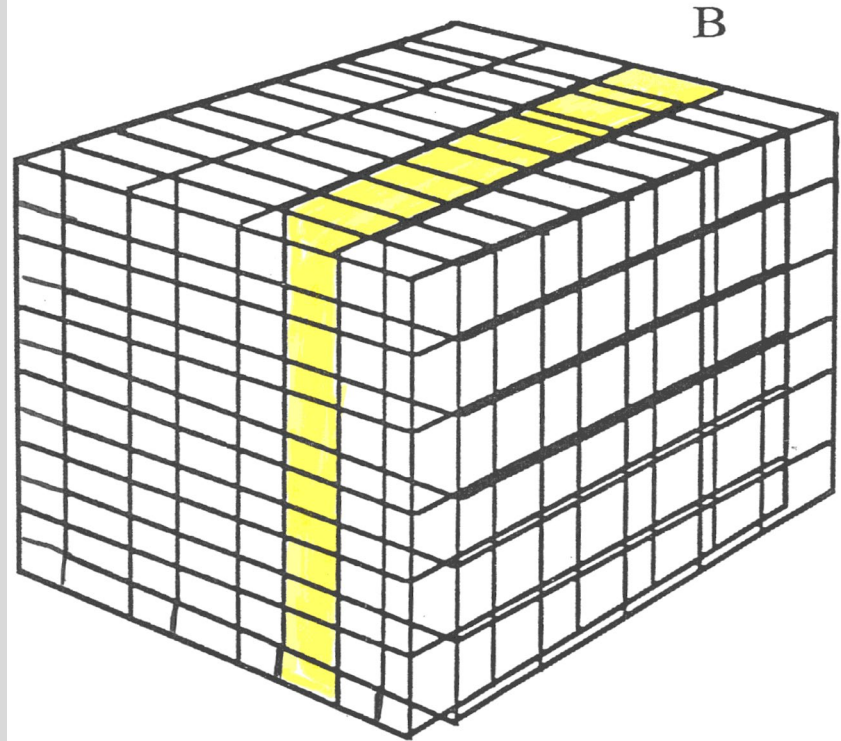
Box A, Box B, Pumpkin, Penguin

- Do not mark Task Book
- Client cannot use finger when counting
- Screener: watch and listen
- Write down your observations
- Ask client the questions on IRPS form
- Remain neutral
- Q 7-18: client must look at box
- Q 18: score amount of discomfort
- Relate problems reported to reading

BOX A



BOX B

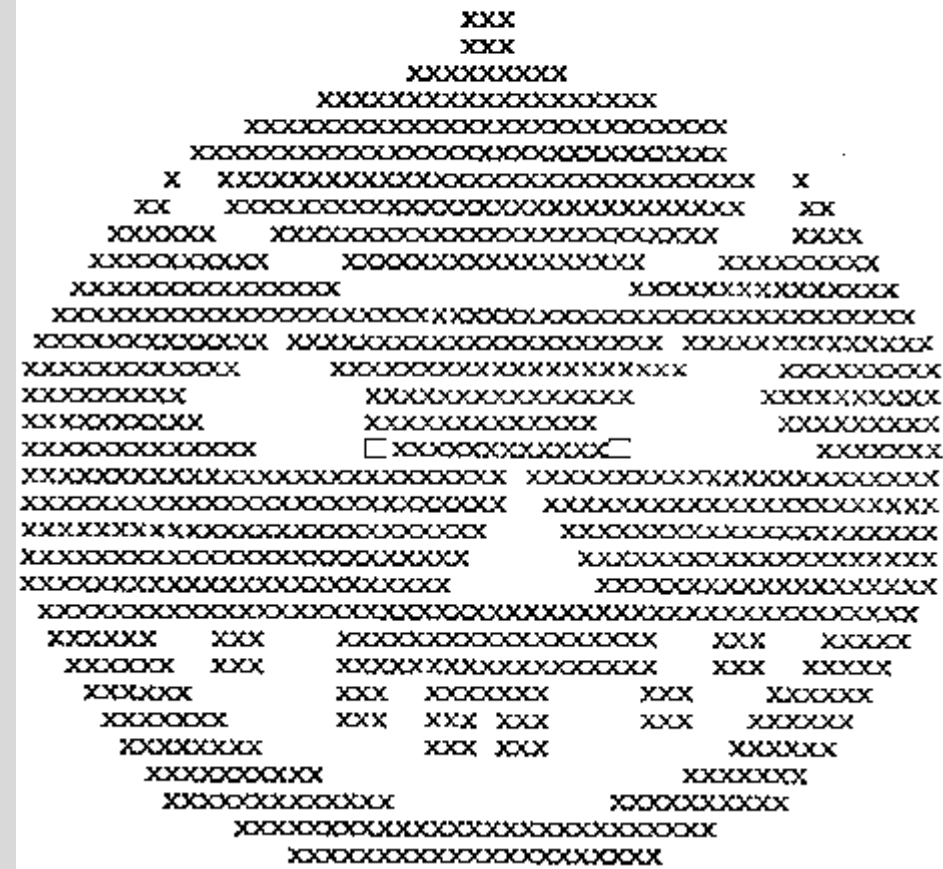


Box B Reminders

- Administer right after Box A
- Test parent on Box B
- Have child give directions to parent
- Screener asks parent IRPS questions
- Relate distortions and behaviors to reading
- Discomfort 8+
- Turn off fluorescent lights
- Dim lighting
- Stop doing tasks and go to overlay section

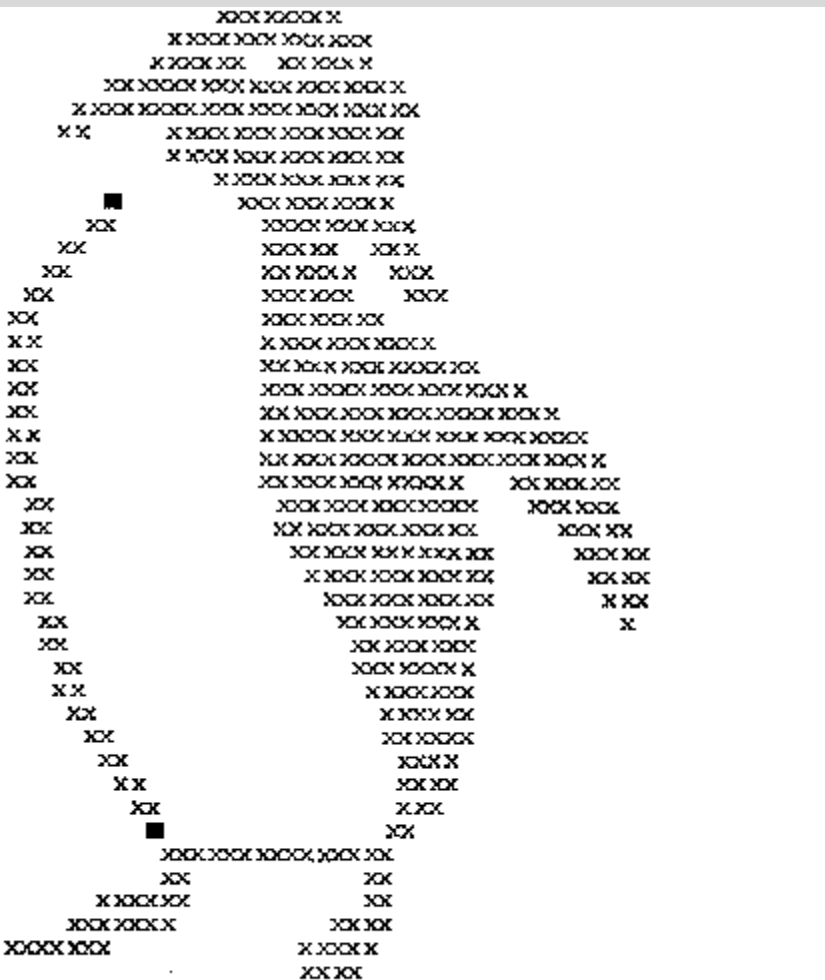
PICTURE A

PICTURE B



Pumpkins Reminders

- Read directions
- Probe
- Use child's language for "symbols"
- Show both pictures and count both X's and %'s
- Discomfort 8+
- Modify lighting and/or go to overlay section
- Can be used to select overlays
- Looks: eliminates distortions
- Counting: more accurate
- Able to recognize picture as a pumpkin



Penguin Reminders

- Use for students with difficulties in math
- Use in countries where read from top to bottom
- Use to discriminate between similar colors

SECTION 2

TASKS

	Box A	Box B	Pumpkin	Penguin	Other
1. Was it easy or HARD ? What made it hard?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Did the other lines/symbols DISTRACT or CONFUSE you or did they not bother you?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Did you feel like you WOULD or would not lose your place if you blinked?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. DID or didn't you lose your place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did your eyes WANDER or stay in the correct place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. DID or didn't it take an effort to stay on the correct spot?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SAY: Look at the page and keep looking while I ask you the following questions.

7. Do all the lines/symbols you counted stay still or do any JIGGLE, DANCE, or MOVE ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Do any get BLURRY or are all the lines easy to see?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Do the lines/symbols stay flat or RISE UP or FLOAT ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the white STAND OUT or stay in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Do the lines/symbols CLOSE IN or stay in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Are any of the surrounding lines/symbols clear, BLURRY, MOVING, or CHANGING ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Does the white get BRIGHTER, DIMMER, or stay the same ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Do you see white or COLOUR(S) ? yellow.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. DOES or doesn't the page flicker, flash, sparkle, glow, or glare?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Does it feel comfortable or UNCOMFORTABLE ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. What else do you see happening or changing? <i>Is the box was starting to separate + form another box. eye hurt. (see individual notes)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SCORE: Place a check if the client mentions any of the words in bold print and circle the word. The words in bold print are SSS symptoms. On the Profile Sheet, circle the symptoms mentioned and write in any symptoms not listed.

OBSERVATIONS and COMMENTS

Squints	Shades Eyes or Page	Pauses/Hesitates	Frowns
Blinks	Head Track	Moves Closer	Opens Eyes Wide
Cadence	Guesses	Moves Away	Nonattentive

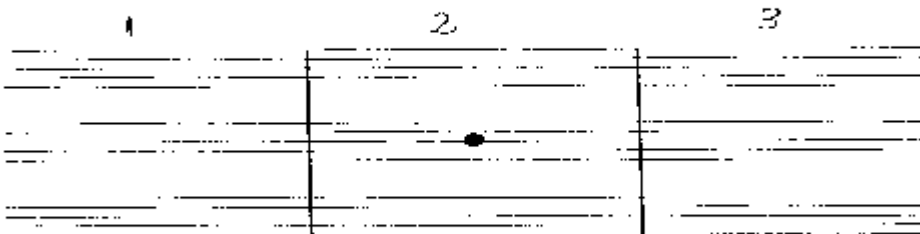
Box A counted correctly. - shaded eyes getting blurry; keeps looking away eyes starting to hurt, fidgety, rolling shoulders; rubbed eyes.

Box B moved head, blinked, rubbed eyes, rising up, S-O, blurry, shades eyes. Box turning yellow, in circle effect counted correctly.

Pumpkin - line up and become a bracelet, white stands out more, the x's become circles inside of squares, counted 11 x's sparkle.

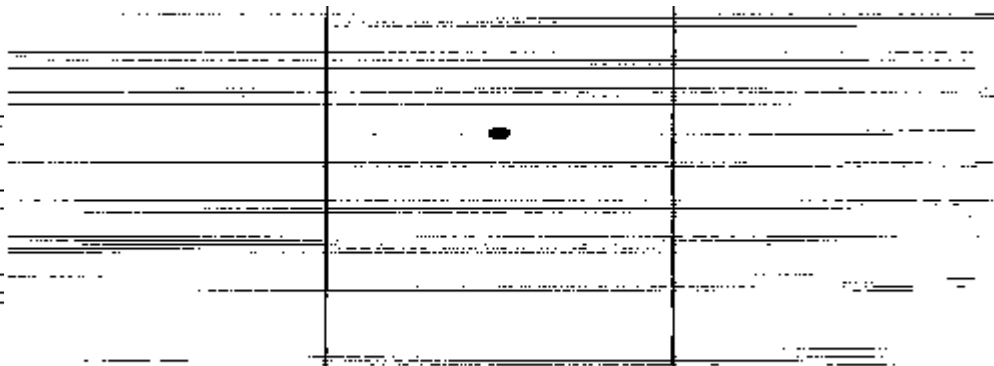
Penguin x's are becoming squares with circles, played with chair, side is fading & disappearing, white spot appears at neck, centay!! sighed, counted 25, deep breath, dizzy, glow, glare, penguin got smaller Dutch Page on lines.

Musical Lines A (Under 10 years)



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Musical Lines B (10 years-Adult)

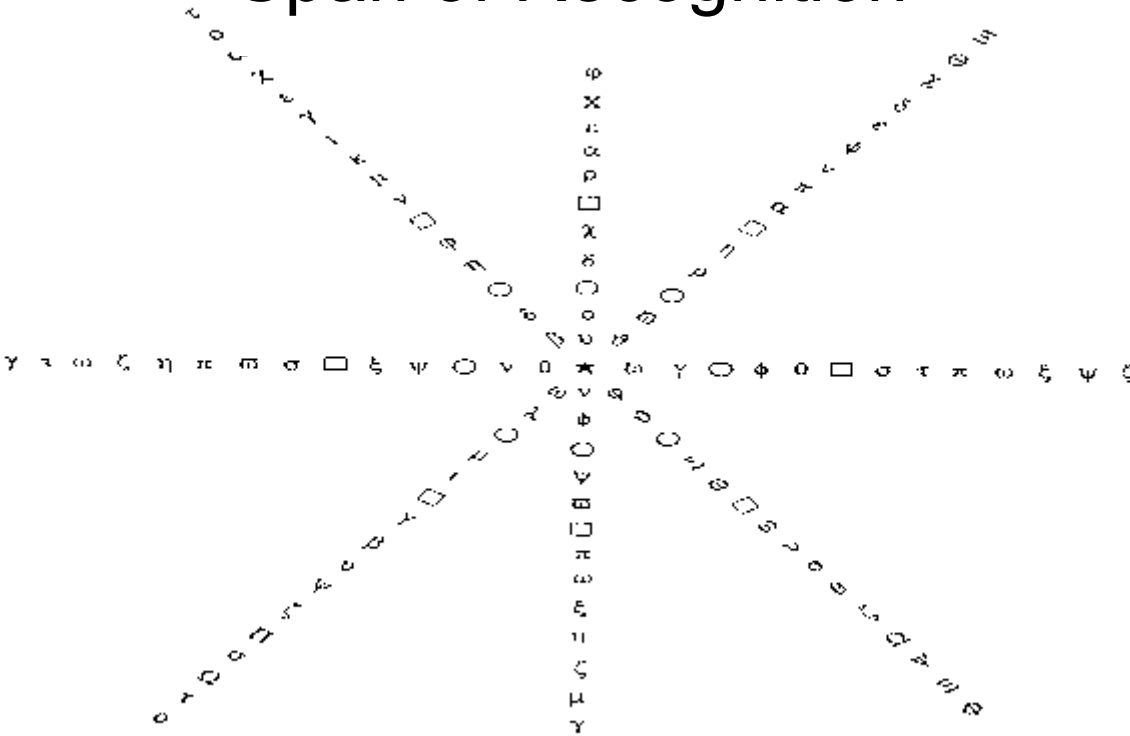


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Musical Lines Reminders

- Good general task
- Use when few symptoms on Boxes or Pumpkin
- Questions on back page of the IRPS record form

Span of Recognition



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- Provides new and different information
- Score 1 point for each circle which cannot be seen or gets blurry, moves, changes, or disappears
- Score ½ point for each box which cannot be seen or gets blurry, moves, changes, or disappears
- Score 2 points if star is not clear or stable

MUSICAL LINES

Column 2

- | | A | B |
|--|---------|----------|
| 1. Are they crooked or straight? | crooked | straight |
| 2. Do they wiggle or wave? | yes | no |
| 3. Do they spread out? | yes | no |
| 4. Do they come together? | yes | no |
| 5. Do the lines float off the page? | yes | no |
| 6. Do the lines merge, cross, or touch? | yes | no |
| 7. Do they flicker? | yes | no |
| 8. Do they disappear? | yes | no |
| 9. Do you see flashes of light? | yes | no |
| 10. Do you see colour(s)? | yes | no |
| 11. Do the vertical lines stay straight? | no | yes |
| 12. What happens, if anything, in the white spaces? <u>Big Space - looks smaller</u> | | |
| 13. Does anything else happen? | | |
| 14. How do your eyes feel? <u>dry, hurt</u> | | |

Columns 1 & 3

- | | A | B |
|---|---------|----------|
| 15. Can you see them? | no | yes |
| 16. Are they crooked or straight? | crooked | straight |
| 17. Do they wave? | yes | no |
| 18. Do they spread out? | yes | no |
| 19. Do they come together? | yes | no |
| 20. Do the lines float off the page? | yes | no |
| 21. Do the lines merge, cross, or touch? | yes | no |
| 22. Do they flicker? | yes | no |
| 23. Do they disappear? | yes | no |
| 24. Do you see flashes of light? | yes | no |
| 25. Do you see colour(s)? <u>yellow</u> | yes | no |
| 26. Do the vertical lines stay straight? | no | yes |
| 27. How do your eyes feel? <u>dry, hurt</u> | | |
| 28. What happens, if anything, in the white spaces? | | |
| 29. Does anything else happen? | | |

SCORE: Circle the answers in either Column A or B. Write down any other SSS symptoms not mentioned. If you marked an answer in Column A, on the Profile Sheet circle the symptoms mentioned and write down any other SSS symptoms.

SPAN OF RECOGNITION

Circles Missed $\boxed{1} \times 1 = \boxed{1}$

Boxes Missed $\boxed{8} \times 1/2 = \boxed{4}$

TOTAL

5

SCORE: Total and circle this number on the Profile Sheet.

POINTING TASK

A

B

WITH OVERLAY

WITHOUT OVERLAY

2 seconds10 seconds10 seconds10 seconds4 seconds7 secondsAverage No. Seconds A 5.3Average No. Seconds B 9TOTAL B 9 - TOTAL A 5 = 4

SCORE: Subtract the average number of seconds with the overlay from the average number of seconds without the overlay. Circle this number on the Profile Sheet.

SECTION 3

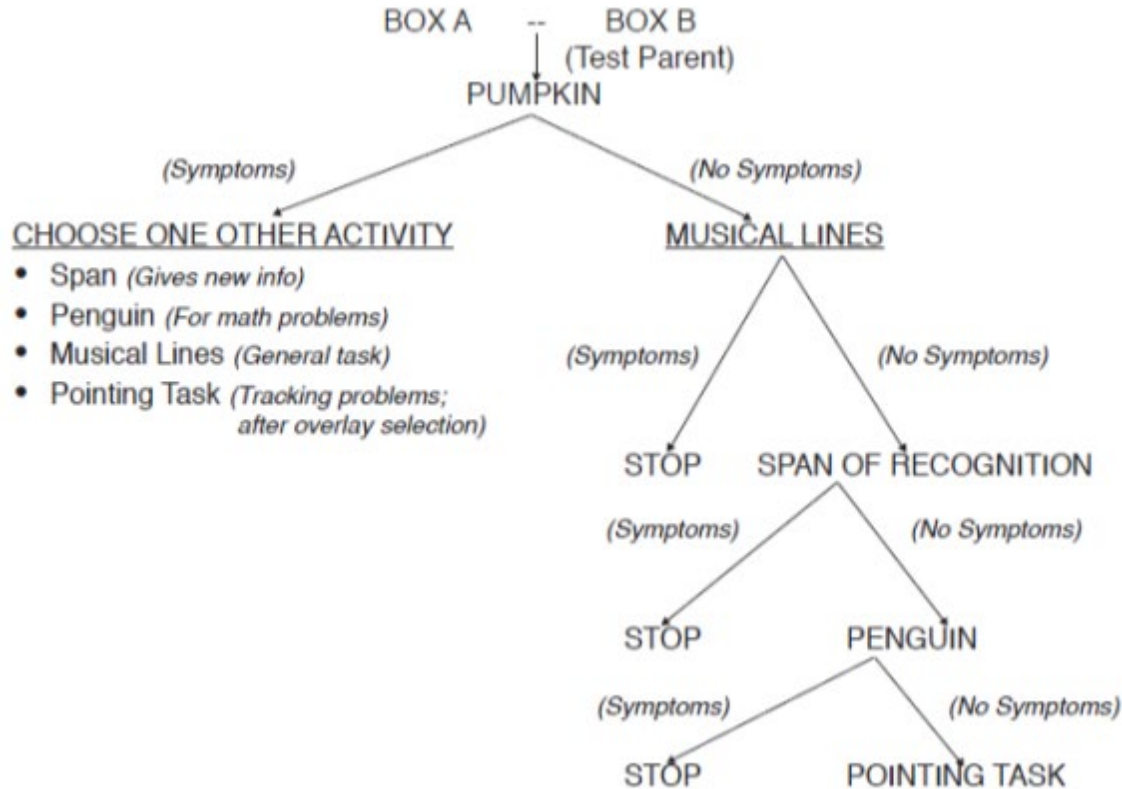
OVERLAYS

SCORE: Circle reported areas of difficulty without the overlay in Column of the Profile Sheet. After the client reads, circle whether the amount of improvement with the overlay is slight, moderate, or considerable.

Pointing Task Reminders

- Administered only after overlay has been selected
- Least discriminatory of all tasks
- Practice and strategies affect score
- Many with Irlen may not have a problem
- Use with those who lose their place

Order of Administration Chart



Section Three

Irlen® Overlays

- Some colors same as white
- Some colors increase discomfort and/or distortions
- Some colors better than white
- But one color, or combination of overlays, which will stop distortions and discomfort

Alternatives to Dutch Page

- Pumpkin
- Numbers page
- Musical page
- Math page
- Irlen Chart
- Child's reading material

10 Steps

1. Identify distortions and discomfort
2. Compare overlays
3. Side by side
4. Whole page
5. Combine overlays
6. Glare vs. non-glare
7. Mark differences between overlays and white page
8. Read letters and words with and without overlays
9. Test family members and have family member read with and without an overlay
10. Record amount of improvement for both child and parent

Choose Between Similar Colors

- Place overlays over the whole page
- Scan across a line of print with overlays side-by-side
- Brightness “biggest bang for your buck”
- Redo any of the tasks (counting symbols, Pumpkin, Box A or B, Span of Recognition)
- Sustained reading on Spache DRT

Irlen® Overlay Reminders

- Read all directions exactly as written
- Keep page or task covered with overlay
- Combination of colors
- Check order
- Different number of overlays with different lighting
- Test parent and have parent read with overlay
- Give parent and client overlays to use

Irlen® Overlays - Final Selection

- Provides comfort (select comfort over clarity)
- Stops all the individual's distortions
- Keeps print easy to see
- Clear & stable
- Provides good contrast
- Also try magnifying bar

Non-Candidate

- No difference between the colored overlays
- No overlays are good and none are bad
- Prefers the white page over any of the colors
- Print is clear and stable with white
- White page is comfortable and no distortions

Choosing a Color When there Aren't Distortions

- White or glare only problem
- White feels the brightest when overlay removed
- Read with overlays at home and/or school

Needs More Than One Irlen® Overlay?

- Read aloud and add or remove one layer at a time
- Vary order to see which is best
- May need different number of overlays in different lighting

“Changes” Overlay Preference

- Illness
- Antibiotics, medications, or drug use
- Growth spurts or hormonal changes (including puberty)
- Emotional trauma or stress
- Accidents (e.g. head injury, whip lash)
- Chemotherapy
- Operations
- Change in visual prescription
- Lighting

Testing Poor Reporters or Young Children

- Early Childhood Screening Kit
- Read aloud with different colors
- Copy on different colored paper
- Count symbols on Pumpkin
- Read rows of letters with different colors
- Read letters on Irlen Chart
- Hidden pictures

Distortion Pages

- Show each distortion page
- Give a copy of page(s) to the client: Validation, Understanding
- Send copy along with the Screener Report
- All copies MUST have: ©Perceptual Development Corporation

Profiles

- Non Irlen
- Efficient reader with no discomfort
- Little or no problems reported on tasks
- No difference between overlays
- Prefers white to any overlay
- Irlen Candidate
- Moderate or high score on either reading difficulties or discomfort (Section One)
- Reports one distortion or discomfort on Tasks
- Selects an overlay
- Reports moderate improvement with overlay

IRPS
INTERPRETATION OF PROFILE SHEET

	Section 1 Check Sheet		Section 2 Tasks	Section 3 Overlays
	Reading Difficulties	Reading Discomfort	Distortions/ Discomfort	Amount of Improvement
Excellent Candidate	A Score of 4+ on Either		One + Distortion or Discomfort	Moderate Improvement in one or more areas on the white page
Good Candidate				
Possible Candidate	4+ on Either		One symptom	Slight or No Improvement
Non Candidate	0-3		No symptoms	Prefers the white page

Why Irlen® Spectral Filters are Better than Overlays

- More convenient and more effective
- Provide improvements in sports, depth perception, headaches, driving, night driving, fatigue, fluorescent lights, copying, computer use, music, listening
- Do NOT change the color of things in the environment
- Allow for improved reading speed and fluency

Irlen Screening Report Form

Provide Each Client

- Private Practice Report w/distortion page(s)
- School District Report w/distortion page(s)
- Accommodation Plan when appropriate

“Care” of Irlen® Overlays

Cleaning

- Clean with soft cloth
- Use Irlen® Lens Cleaner
- Do not use other eyeglass cleaners

Customization

- Cut to page or paragraph size
- Cardboard frame
- Frame borders with masking tape

Additions

- Use similar colored paper
- Place one or two side by side over computer screen

Children Who Refuse To Use Irlen® Overlays

- Teacher should organize the student's folder with overlay
- Have overlays available in the classroom so that other children can also use overlays
- Cut overlays (to fit the size of a book or book marker size)
- Used for homework and tests only
- Establish rewards for overlay use
- **Suggest Irlen Spectral Filters or contact lenses**
- Screen adults in the school and have them use overlays

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
<http://www.rosco.com/us/filters/cinegel.asp>
- 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

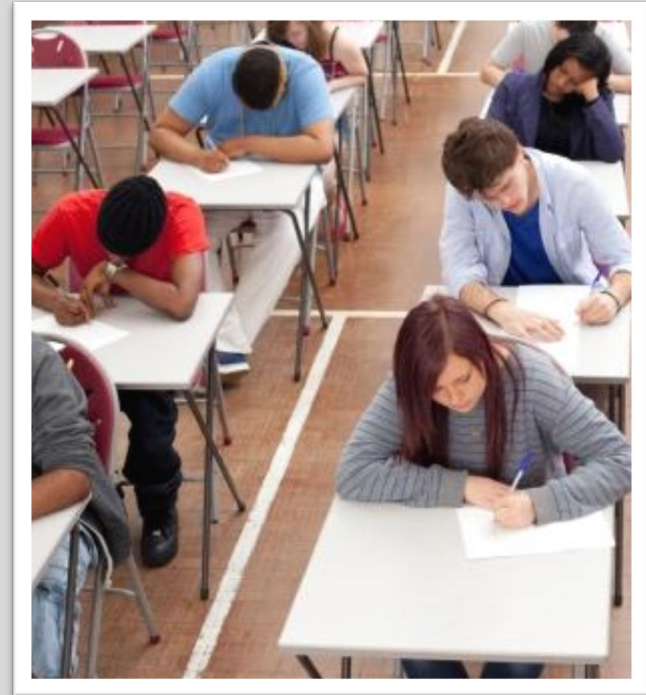
Reading Modifications

- 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



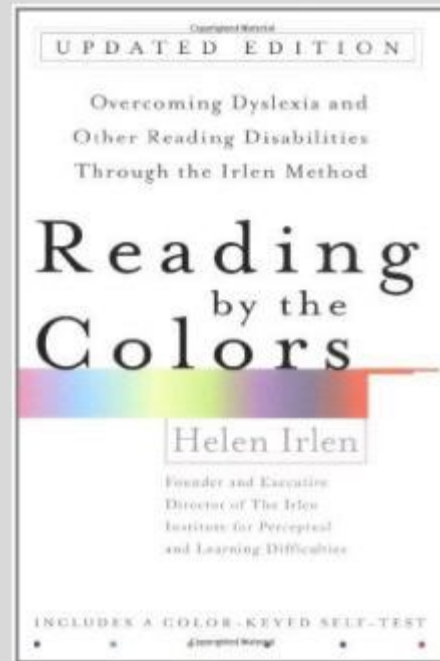
Testing Modifications

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



Resources

- Irlen NewsAlerts
- Irlen National and International Conferences
- www.irlen.com and other Irlen websites
- Facebook: Irlen Institute
- YouTube: Irlen & Irlen Institute
- Twitter
- Various Podcasts
- “Reading By The Colors” by Helen Irlen
- “The Irlen Revolution: A Guide to Changing Your Perception and Your Life” by Helen Irlen
- “Sports Concussions ... and Getting Back in the Game of Life” by Helen Irlen



WEBSITE/FACEBOOK/BLOGS: Regulations

Any personal/professional website you create involving information, pictures, or reference to Irlen® methods or syndrome will:

- Retain the Irlen® copyright.
- Refer to www.Irlen.com or provide a hyperlink to this Irlen website on front page.
- Wherever Spectral Filters are shown, (including under Q&A) they need to appear as Irlen® Spectral Filters.
- Any pictures or material taken from Helen Irlen's books, Facebook, or website will include the copyright and source.