Visual Assessment in Preparation for Online Learning

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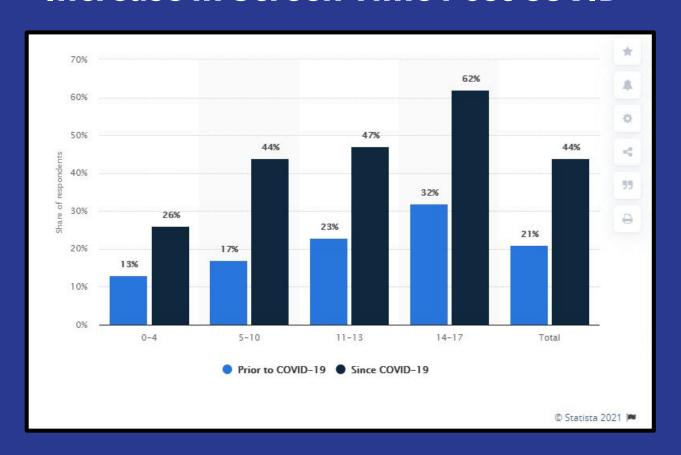
Average Amount of Screentime by Age

Age Group (in years)	Daily Average of Screen Time	Year Data Was Collected
Under 2	42 minutes	2017
2-4	2 hours, 39 minutes	2017
5-8	2 hours, 59 minutes	2017
8-12	4 hours, 44 minutes	2019
13-18	7 hours, 22 minutes	2019

Rideout, Vicky; Robb, Michael, B. (2019). "The Common Sense census: Media use by tweens and teens, 2019 Rideout, Vicky; Robb, Michael, B. (2019). "The Common Sense census: Media use by tweens and teens, 2019



Increase in Screen Time Post COVID





Often <u>unrecognized</u>, yet... vision problems can affect a child's reading and learning

- Affect a significantly high percentage of children 6-18 years old
- Occurs equally among boys and girls
- Impacts reading performance
- Often associated with learning problems
- Often associated with behavioral problems
- Typically have 20/20 eyesight!



Vision....More than Acuity

- Vision is a process
- Good vision requires the skillful input of visual information
- Good vision requires the skillful <u>processing</u> of visual information
- Good vision requires the skillful <u>integration</u> of the visual system with other sensory systems in order to make use of visual information



Eyesight vs Vision

Eyesight: The measurement of how clearly we see at certain distances

- Nearsighted
- Farsighted
- Astigmatism

20/20 VISION IS **NOT** ENOUGH

A vision test does not test:

- A Child's focusing ability -
 - Tracking -
- Visual perception skills -

A child that sees like this can pass a vision screening.

A child that sees like this can pass a vision screening.





A child that sees like this can pass a vision screening.



THIS IS 20/30 VISION

A chlid taht sees Ikie tihs can psas a vsioin scereinng DYSLEXIA

Many children **pass** their annual school vision screening, or the pediatrician's eye chart, but **remain undiagnosed** with problems of the visual system.

So, is it any wonder why your child can't sit still for 20 minutes to do homework?

Vision:

- Eye Teaming (Binocular Vision)
- Focusing System (Accommodation)
- Eye Tracking (Oculomotor)
- Depth Perception
- Peripheral Vision
- Visual Motor Integration
- Visual Vestibular Integration
- Visual Laterality
- Visual Directionality
- Visual Spatial
- Visual Closure
- Visual Discrimination
- Visual Memory
- Visual Sequential Memory
- Visual Figure Ground

80% of the neurological pathways in the brain connect with the visual system!



During an online reading task a child with a vision related learning problem will typically

- Struggle even though he/she is very bright
- Need to use their finger or a marker to keep their place
- His/her ability to read is worse when the print gets smaller
- Miscalls easy words like "this" or "the"
- Adopts an unusual posture/head tilt when reading
- Struggles with concentration
- Takes longer to complete assignments



Visual Assessment

Developmental Vision Examination Includes:

- Comprehensive Eye Exam- Asses if glasses needed, evaluation of eye health
- <u>Evaluation of Eye Teaming</u>-Eye alignment, convergence/divergence ranges and flexibility
- <u>Evaluation of Eye Tracking</u>-Pursuits and saccades
- <u>Evaluation of Focusing System</u>-Accommodative strength, accuracy, and flexibility



Common Diagnoses

Convergence Insufficiency

Innogine how strenuous it would be if while reading you were seeing double.

Accommodative Dysfunction

The child may complain of blurred vision while reading or will just give up quickly when reading.

Oculomotor Dysfunction

It is hard to pay attention to what ^{the} meaning is when words seem to ^{jump} around ^{on} the page.



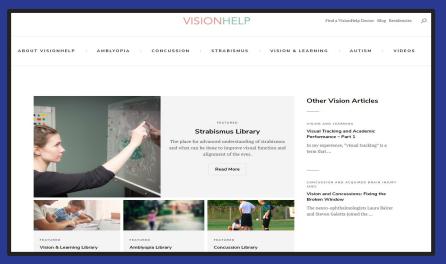
Assessment Of Visual Processing

Evaluation Includes:

- Eye Movements for Reading
- Visual Motor Coordination
- Left/Right Awareness
- Reversals
- Visual Discrimination
- Visual Closure
- Visual Memory
- Visual Form Constancy
- Visual Spatial Relationships
- Visual Sequential Memory
- Visual Figure Ground



Online Resources



www.visionhelp.com





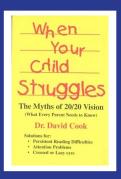
www.visionhelp.wordpress.com



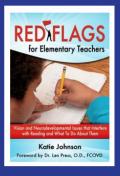


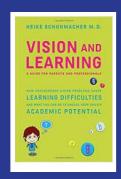
Printed Resources





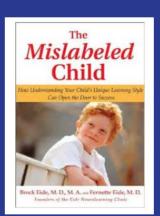


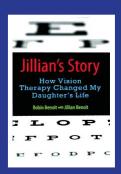


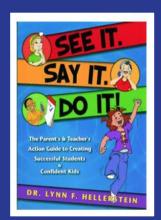














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