



Visual Processing

- Reading starts with visual processing
- How well your visual processing system works impacts reading success

What is Visual processing?

- Optical
 - Ensure each student has had a visual eye exam of the optical system and receives glasses/contacts as needed
- Brain processing
 - The brain must process visual stimuli that comes through the optical system in order to make sense of it
- Three types of brain processing strongly related to reading
 - Irlen Syndrome
 - Tracking, fixation, saccades
 - Processing Speed, pattern recognition

Irlen Syndrome

- 10-12% of the population have difficulty reading because the brain cannot process the background light effectively bouncing off printed materials or from a computer screen
- <https://irlen.com>
 - Go to www.irlen.com, select a page with a lot of print and white background and click on the sunglass icons at the top to change the background. See if any of the colors make it easier to read.
 - Do a screening and obtain overlays as needed.
 - Sample screening questionnaire is located on training page for the Black Youth Success Movement website
- Videos
 - Do an internet search and find videos that explain the topic



Tracking, fixation, saccades

- Tracking—ability of the eyes to follow the words on a page during the reading process, left to right and from the end of a sentence back to the beginning of the next sentence
- Fixation—ability to focus down exactly to the right point on a page in order to read
- Saccades—ability to jump in segments across a sentence to read more quickly vs. focusing on every letter or word
- If a student cannot read yet, it is challenging to test the above elements.
- Click the button next to link for this presentation on the website. It presents numbers which most students should be able “read” to determine how well their tracking, fixation, and saccades abilities are working.



Processing speed Rapid pattern recognition

- Reading is the process of recognizing letter patterns as words, decoding
- Go to the following link to test processing speed and rapid pattern recognition
- [Pattern Recognition Exercise](#)

Summary

- How well the brain processes information from our eyes is critical to fluent reading
- The steps outlined in this presentation address most of the likely potential issues that impact reading success
- They are easy to do and are low cost or free
- If any of these items are impeding reading success, they need to be addressed before expecting more instruction to work