



Visual Processing

- Black Youth achieve equity in education
- Black Youth become the highest performing group on national and state academic tests
- All Black Youth achieve their full potential



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
- <https://eyecanlearn.com/tracking/saccades/>
 - Click on the link to access various eye exercises
 - Scroll down to number saccades
 - Use this exercise to evaluate fixation, tracking and saccades
 - This exercise also evaluates and trains rapid automatic naming, a key skill in fluent reading



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
 - <https://cogread.org/PRE/>



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