Brain Training

- Strengthen Cognitive Processing Skills
- Make learning faster, easier, and more efficient

What are cognitive skills?

- Ability of the brain to process information, make sense of what it experiences and do specific things such as see, hear, think, plan, do sports, dance, walk, remember, learn

- Most common groups of cognitive skills
  - Attention
  - Memory, working memory, long-term memory
  - Visual Processing
  - Auditory Processing
  - Processing speed
  - Logic and reasoning

- Cognitive skills can only be developed through experience and training; they cannot be taught like reading or math or languages

- Cognitive skills empower learning how to read or do math

Cognitive skill assessment

- Most tests determine what you know—content or learned skills such as reading or math

- A cognitive skill assessment measures the relative strength of a core group of cognitive skills

- We use the Gibson Test, an online cognitive skills assessment that has been standardized

- Results provide a measurement of how skills compare to a diverse range of peer students across the country

- Percentile score: percentile indicates the percent of subjects at the subject age who scored below and above that level. For example, a 45th percentile score would mean 55% of subjects the same age scored higher than that level.

Why are cognitive skills weak?

- The average percentile score ranges 40-60 out of 100

- If a student scored below 40 percentile for any given skill tested, that skill is considered below average; below 25 is considered to be very low and likely causing learning challenges

- Genetics can play a role in determining skill levels; however, student life experiences play a significant role in building strong cognitive skills

- Ages 0-5 are one of the strongest brain development stages

- Students who struggle with reading generally did not develop a strong foundational skill base and background knowledge base from ages 0-8.

Can cognitive skills be strengthened?

- Yes, with the proper training, cognitive skills can be strengthened

- The training identifies the threshold of competence, then drills a student with tasks that challenge the brain

- Similar to exercise, the brain gets stronger with consistent training

- The training becomes more challenging as a student progresses through each level

Introduction to BrainSkills

- BrainSkills is an online version of a cognitive skill training program developed for clinical application

- One of the founders of the Black Youth Success Movement worked with the clinical brain training company to develop an online version of the clinical training.

- The online training is being used by clinics worldwide

Training process

- A computer with high-speed internet access is required
  - Students train 30-60 minutes daily, 4-5 days per week
- Student completes the Gibson Test to establish a baseline
- Student is introduced to the ten core exercises and tries the program for a couple of sessions
- Student is asked to select the five exercises they like and want to work on
  - The other five exercises are disabled temporarily
  - This give voice to each student and begins with a positive experience
  - If a student has especially low skills, we may start with only one or two exercises they are able to do initially
- Each week the Family Ambassador reviews progress and asks the student which exercises they want to focus on the following week
  - The FA adjusts access until the student completes all exercises
  - The FA may do a screen sharing as needed to provide coaching

Exercises

- There are ten different core exercises
- Typical skills trained include:
  - Attention
  - Processing speed
  - Attention
  - Memory
  - Logic and reasoning
  - Visual processing
  - Auditory processing
  - Rhythm

Summary

- Strong cognitive processing skills empower learning
- Cognitive processing skills can be strengthened with the proper training
- Training is most effective to help students who struggle
- However, every student can benefit
  - The training can provide even high performing students with an extra advantage over peer student who do not train