



Frequently Asked Questions

Differences in Other Programs

Most programs are designed to improve brain-based skill-sets. In contrast, NeuroCoach® does not focus on skill sets, but rather on developing, strengthening, regulating, and repairing the neuro-circuits that produce skill sets. Most programs are good for what they are attempting to do, but are incomplete by themselves or overlook repairing important milestones. Within the brain, the cortical-striatal-thalamic-cortical (CSTC) loop is responsible for monitoring a variety of functions, including executive functions such as attention and decision-making. Information enters the prefrontal cortex and is relayed to the striatum, then to the thalamus, and finally feeds back to the prefrontal cortex. All aspects of this system must be equally strong in order for the brain to function at full capacity and efficiency. Many programs only work on one specific area of the feedback/feedforward loop, offering an incomplete remediation or neurodevelopment solution. NeuroCoach® offers a complete program that pays attention to not only the CSTC loop, but also to all neuro-networks and neuro-circuits.

NeuroCoach® BrainyArcade NeuroCoach® BrainyArcade is a complete cognitive rehabilitation program that utilizes proprietary analysis, evaluation, and neuro-imaging (NeuroCodeX®) to formulate individualized brain-based protocols for each individual in the program. BrainyArcade® combines not only auditory processing, language/communication processing, sensory integration, motor planning, and visual processing, but also executive function, decision making, attention, impulse control in order to fully integrate all brain processes as an integrated unit thus allowing full expression of maximum IQ potential and natural talents and abilities. In other words, the BrainyArcade program's intent is to allow the brain to fully develop and mature by properly repairing broken links in the neuro-circuitry. Ultimately, the program goal is to produce an optimized brain.

Lumosity Internet-based program intended for individuals with 'normalized' brains. This program is not intended for those with traumatic brain injuries (TBI), NeuroDevelopmental Delays, Addictions, Learning Disabilities, etc. It is intended for those wishing to keep their brain processing active (at the current level), without repairing brain damage or developmental delays. This program works the cortical area of the brain only and does not focus on developing higher brain processes or integration within other brain systems. Lumosity is not recommended for remediation.

EXAMPLE: If you wish to keep your muscles toned, you would go to a gym to workout. You would choose whatever machines you felt like on that particular day in order to keep your chosen muscle group toned. That is what Lumosity does for the brain. However, if you were in an accident and broke your leg or arm or other bone, you would NOT go to the gym and begin working out with the hope that you would heal that broken bone and torn muscle. Instead, you would go to the ER, have them X-Ray the bone and limb and set it properly. Afterward, you would work with a professional Physical Therapist (PT) to appropriately exercise those muscles and bones until proper healing took place. Until proper remediation has been completed, a trip to the gym would not be recommended.

PACE Processing and Cognitive Enhancement (PACE) was designed and developed for students 6-18 who are having difficulty with academic skills. This program engages the brain processes mostly related to the visual system, but does not address fully the other 4 sensory systems (auditory, sensory, language, olfactory). This program was designed by an optometrist and focuses predominately on techniques that effect visual processing. While many of the activities are good, the program ignores the order of the brain's developmental process. Therefore, many of the activities are applied prematurely for kids who have not completed important developmental milestones. Further, PACE is delivered through physical exercises without monitoring the brain's performance, so there are no objective measurements that document and track what has improved.

FastForward FastForward Language Program develops skill sets for listening accuracy, phonological awareness, and language structures and is designed to help students who are communicating below grade level. However, FastForward is not a developmental program. It is a good program, which we recommend when the individual's brain has reached appropriate developmental milestones. FastForward focuses on auditory processing and language development. Therefore, while it is a good program for speech and language it is incomplete as a cognitive neurodevelopment program or cognitive repair program.

Interactive Metronome IM is a computer-based technology that attempts to exercise motor planning and sequencing. IM, by its nature, engages only the brain's feedback loops in a one-way process only. However, the brain doesn't operate this way. The brain uses both feed-forward and feedback loops in order to influence self-regulation, attention, concentration, and other information processing abilities. Both feed-forward and feedback are necessary for proper brain development. If we only strengthen the feedback loops many actions in life such as paying attention, self-regulation, self-control will occur only with continuous conscious effort rather than allowing the brain to simply perform without continuous effort. In other words, the individual will have difficulty with multi-tasking or doing more than one thing at a time.

