

Curriculum for Children with Motor Delays, Autism, ADHD/ADD, LD and Obesity

By Mark Sickel

Fitness for Health is a state-of-the-art fitness facility specializing in programs for children with coordination and motor delays, ADHD/ADD, LD, weigh management, and self-esteem issues. The Sportwall is an important part of our equipment; but in addition to its more well-known uses, we have devised other creative ways to utilize the Sportwall to meet the needs of our population. Our innovative uses for the Sportwall include the goals of increasing motor planning and processing, multi-planal movement, improving academics, increasing tracking abilities and cardiovascular endurance.

We have placed letters of the alphabet above or below each light and incorporate word games with throwing, kicking or ground stroke accuracy. This improves tracking and processing for an athlete and adds an academic component for children. A baseball fielding variation is to roll or pop-up balls towards a player's glove. He must quickly pick up the ball, identify the appropriate letter called out, and accurately throw the ball. This sport specific activity improves processing, motor planning and sports skills. This can also be adapted for racquet and hand/birdie activities.

Another activity uses the game 4-2 with the child raising his arms and hitting the lights out as he moves right/left across the panels, and the left/right as e moves back. Once this is grasped the feed are integrated into the process. The progression then uses the right hand to hit the light to the left, followed by using the feet to cross the midline. Also, simultaneous centralizing movement can be added by having the participant use both hands to hit a light. All sports activities require upper and lower extremity movements in single and multiple planes and this variation promotes that.

A time modification to the tic-tac-toe game allows for the increased cardiovascular endurance. After throwing the ball to initiate an X or O, a 5-10 second time limit is verbally counted each time so that the speed of the game is increased. This forces the child to move more quickly and make fast decisions which assists in improving processing abilities.

To increase cardiovascular endurance and motor planning we use game 4-1 for 30 seconds and a weighted ball. The medicine ball is placed 20 feet away from the center of the left wall panel with a spot marked 20 feet away from the center of the right wall panel. The child runs up hits lights out, runs to the ball, picks it up and carries it to the other sport, puts it down, runs up and hits another light and continues the pattern until the time runs out – usually 30 second intervals. There are variations to this using multiple bases to run to and from. Heart rate monitored to track level of exertion.

An activity used to increase tracking and cardiovascular endurance uses game 3-2 set for 240 seconds. The goal is to score as many points as possible kicking a soccer ball (or oversized tennis ball) at the lights illuminated on 1 of the 3 panels. Another person is defending (like a goalie), so the kicker must constantly move, as well as kick accurately.

This activity also works on motor planning and strategizing. A variation of this working mostly on cardiovascular endurance is game 9-1 set for 15 seconds during which one kicks a soccer ball anywhere at the Sportwall while being defended from even getting the kick off. This also helps develop abilities of an actual soccer game.

Another variation we devised helps improve memory, recall, focus and visual spatial awareness. Using laminated cards of photos of the Sportwall with different light patterns, the child view the card for 3-30 seconds (depending on his level). Then using game 4-1, the child must recreate the pattern from the Sportwall. This visualization, recall and focus are also important for athletes.

Thus, the Sportwall has become a resource for varied activities to help develop fundamental sports skills, visual spatial awareness, tracking, motor planning and processing, cardiovascular endurance and many other needs. We look forward to continuing to devise innovative activities using the Sportwall.