

Your Gymnastics Center: An Educational Treasure Chest of Gold

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The No Child Left Behind legislation prompts parents to seek programs that help children meet the mandated academic standards expected of today's youth. Without your assistance, parents may overlook your gym as a valuable resource. You can help them see the real value of gymnastics programs by linking these programs to academic benefits, which is the focus created by No Child Left Behind and standards-based education.

The following chart can act as your treasure map, illustrating the fundamental relationship between gymnastics and academic goals. The right side of the chart lists activities common to gymnastics. The left side shows the link to academic skills and school success. Becoming familiar with the terms discussed in the next few paragraphs will provide clues on how to uncover the treasure chest of riches inherent in all gymnastics programs.

What Happens in Brain-Body Development

The more a child tumbles, climbs, creeps, and crawls, the more densely wired the brain becomes for academic success. Movement is the architect of a child's brain. The two hemispheres of the brain are designed to constantly communicate with one another. The left side of the brain controls the right side of the body, and vice versa. Bilateral activities, common to all gymnastic programs, require both sides of the body to work together and separately. Coordinated movement patterns create efficiency in the brain. Efficient pathways create fluent readers who complete reading tasks with ease. For example, during reading, the left hemisphere attends to letters and the sequence of words, while the right side of the brain focuses on comprehending what is read. Reading fluency depends on an intimate conversation between the two hemispheres of the brain— a clear signal.

Bouncing on the trampoline, tumbling down a mat, swinging from the bars—all these activities help wire the brain and integrate the vestibular system. Located in the inner ear, the vestibular system is intricately connected with the brain. Its job is to make sense of all perceived sensory information from the environment and tell us where our bodies are in space. Like the hub of a wheel, the vestibular system integrates vision, hearing, balance, and skin sensations. If children have poor sensory processing skills, they may have a difficult time learning gymnastics skills or regulating behavior. Weaknesses observed in gymnastics classes may lead to discovering that the child is struggling in school as well.



Checklist for Spotting Learning Difficulties

The following list indicates signs that can point to possible learning challenges. These categories coincide with the treasure map chart above.

1 Social and Organizational Skills

- runs from equipment to equipment without self-control
- has difficulty following multi-step directions; must have directions – hits, bites, or is overly aggressive
- often disturbs and annoys other children

2 Sensory Processing

- avoids rotational movement or excessively seeks rotational movement
- avoids appropriate touch from coaches and other children
- seeks too much touch; clingy, whiny, hard to please
- walks on toes or uses fists during mat work instead of balls of feet and open palms
- excessively seeks or avoids tactile sensations like chalk on hands or foam pit

3 Postural Control

- has extreme difficulty with balance skills or beam work
- has difficulty with activities requiring the contraction of stomach and back muscles
- has difficulty with activities requiring tucks and extension patterns
- shows weak muscle tone and strength when performing bar work and general skills
- has difficulty with upper- and lower-body integration

4 Bilateral Integration

- has difficulty with two sides of the body working as a team or separately
- has difficulty with sequencing, learning choreographed routines, and timing
- has difficulty with skipping and locomotor patterns
- appears clumsy for most tasks

5 Body Awareness

- loses self in transitions and can't figure out where to go next
- is frequently placed at front or back of line for discipline reasons
- has difficulty mirroring movements
- easily frustrated and is quick to become angry

Foundational Physical Skills for Children

If a child at your center has many concerns on this list, talk with the parents and recommend they seek an evaluation from an occupational therapist who specializes in sensory processing challenges. Sensory issues are common underlying factors in ADHD, Autism Spectrum Disorder, and developmental delays. When children are involved in movement activities that help organize the sensory system, quite often their symptoms lessen or go away altogether.

While most reading readiness programs state goals, such as writing one's name independently or sounding out simple words, essential physical foundation skills need to be in place for preschool children to be able to keep up with intense academic demands of today's kindergarten classrooms.

By kindergarten, all children should:

- be able to move eyes separately from the head
- track and converge eyes
- have core postural muscles developed

- cross midline and possess bilateral integration
- know dominant hand
- maintain steady beat rhythm
- have an internal sense of balance
- explore their world confidently and imaginatively

Gymnastics with an Academic Twist

Marcia Carter, owner of the Oroville Gymnastics Sports Academy and LEAPS Preschool, began a program specifically designed to help children be more successful in her gymnastics classes and at school. Meeting the needs of the families in her community, she offers specialized classes to build the foundational skills critical for success inside gyms and inside classrooms.



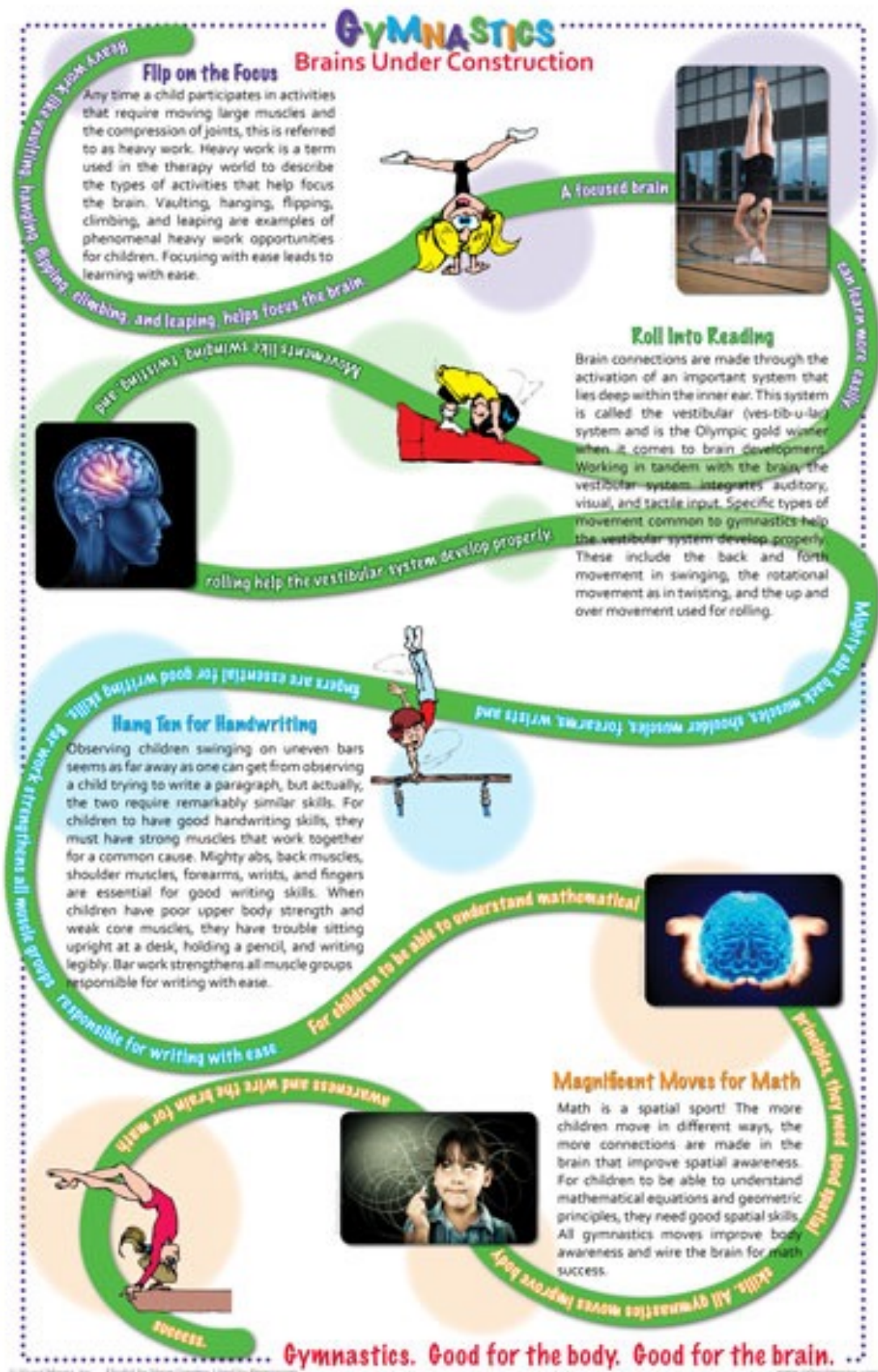
A teacher in Marcia Carter's community describes the benefits for children involved in classes offering gymnastics with an academic twist. "During these past four years I have been teaching kindergarten. I have noticed that the children from your preschool achieve reading goals sooner and with more ease than ever seen before. The children who come from your preschool are always well prepared for high state standards expected to be learned by kindergartners. I congratulate and thank you for all you do to help kindergarten students achieve these high expectations."

Dr. Nancy Bates, owner of Gym Magic Sports Center and Preschool in Las Cruces, N.M., offers classes focusing on building a solid foundation for learning. "We emphasize education and learning. The response from our staff, parents, and children has been incredibly positive." Gym Magic also created a new program, Magical Moves (for 6 months to 3 years of age), which has led to partnerships with many early intervention groups. The response has been so positive that the early intervention groups have had to rotate families in and out of Gym Magic's program because too many families want to participate in the new program.

Gymnastics centers experience a dramatic increase in enrollment when offering classes with an academic twist. If your gym is empty during the day, adding classes focusing on academic foundational skills may help increase revenue while offering a great service to the community and parents who homeschool their children.

As a parent of a child with special needs, I believe that it takes a team to raise a child with special needs. My child's team includes her gymnastics coach right alongside her special education teacher. My daughter comes alive when she is at a gymnastics center. While usually burdened with expressive language delays, she becomes talkative and animated because her vestibular system gets a jumpstart from tumbling, swinging on bars, and jumping on the trampoline. When she is with her peers, her gymnastics skills are a communication tool for her—a way to connect. Always lagging behind her peers academically, it is magical to see her shine through gymnastics.

Ensure that your treasure chest of educational gold is clearly embossed with a giant "X" that marks the spot where academic excellence begins—in your gymnastics center!



For a great resource illustrating the fundamental relationship between gymnastics and academic goals, grab a FREE download of our poster: [Gymnastics: Brains Under Construction](#).