

Tumbling to Academic Success

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 gymnastics 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 creating a clear signal.

Participates in activities requiring deep pressure to the joints, such as mat and bar work. →

Joint sensation adequate for correct pencil grip, forming letters accurately, and appropriate pencil tension.

Listens to coach and processes multi-step directions including sequences & complex motor patterns. →

Listens to teacher's instructions, follows multi-step directions, understands complex math patterns.

Participates in vestibular and heavy work activities: rolling, climbing, jumping, swinging, crawling through the pit, hanging from bars, handstands. →

Vestibular system is working properly so that visual, auditory, and tactile information is integrated, leading to reading with ease, and enjoying tactile experiences.

Accomplishes movements on various equipment requiring core postural strength. →

Sits without rocking the chair, knee sitting, or lying body across desk.

Enjoys warm up routines with music and keeps a steady beat rhythm with ease. →

Understands the rhythmic nature of reading and speech, leading to fluency skills.

Bouncing on the trampoline, tumbling down a mat, swinging from the bars – all of 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.

By Debra Em Wilson, M.A., Reading Specialist

Moves from station to station without getting "lost." →

Easily transitions between subjects.

Takes risks when learning new movements. →

"Can do" attitude toward academic skills.

Performs sequential rhythmic activities using full integration of auditory, visual, and tactile systems. →

Learns with ease and can process auditory, visual, and tactile information as needed for academics.

Accurately integrates vision with motor skills and makes adjustments in timing as needed to complete complex skills. →

Good letter spacing while writing; while reading relates story to self and others due to good self awareness.

Understands directional terms including over, under, next to, and between. →

Distinguishes between letters b/d/p/q and writes with no reversals.

Lines up without pushing others; sits and waits for turns without bothering others. →

Patiently waits for turn in class and honors other's personal space.