

# HOW THE BODY SUPPORTS LEARNING

## BALANCE



Balance helps us become & stay stable; receive & make sense of information in our gravity-based world. Our balance system "grounds" us, helping us feel stable when we **move** quickly, **and**, when we are trying to be **still**. It monitors our body & our environment & makes body & head adjustments to make us stable. Our vestibular system (balance) impacts the development of, & functions with, other vital sensory systems including vision, hearing & proprioception. It helps us make sense of our world, by keeping us balanced.

## LISTENING & AUDITORY PROCESSING

Efficient listening requires us to be able to hear well & select the sounds to which we need to attend. We need to be able to ignore irrelevant sounds & focus on important ones. We need to remember what we hear, make connections with visual cues, combine & reproduce the sounds we hear so we can speak & communicate clearly. Listening isn't just hearing; it's making sense of the sounds our ears receive. Our hearing & listening ability informs us about our environment & help us process our world.



## VISION



Good vision for learning is much more than seeing well. Both eyes need to work well together to provide a stable visual platform that helps us process & interpret the information we receive through our eyes. Both eyes need to focus on the same target so we don't get conflicting images that can confuse our brain when it comes to activities like reading, writing & catching balls. Our eyes need to move smoothly up, down and side to side. Good binocular vision provides a clearer perspective for learning.

## PROPRIOCEPTION

To support learning, we need to know where our body is, how it is positioned, & how to move it. Knowing where our body is in space helps us develop fine & gross motor movements. Controlling movement for learning requires an implicit understanding of how to move our muscles, including how much pressure or force to use & where to direct the action. If we don't know where we are in space, learning can be awkward, & we can seem clumsy.



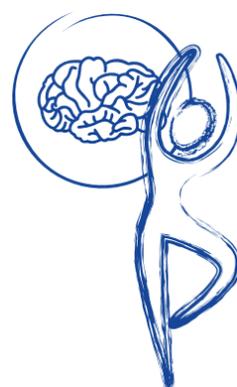
## NEURO-MOTOR MATURITY



Our body, brain & sensory systems develop through movements that are reflex driven. Our primitive reflexes with which we are born should mature & be integrated into a mature central nervous system that supports our body to function effectively. If they remain immature, they can impede the development of subsequent postural control & movement. If neuro-motor immaturity persists, our body responses can interfere with the learning process.

## BODY & BRAIN INTEGRATION

Learning is more than just a cognitive/thinking function. Developmentally, the body leads the brain in processing, making meaning & learning about our world. Neuro-motor & sensory maturity are the foundations for learning success.



**The body that doesn't support learning can interfere with learning.**

