

HOW THE BODY SUPPORTS LEARNING



BALANCE

Balance helps us stay stable, receive and make sense of information in our gravity-based world. Our balance (vestibular) system "grounds" us by providing stability when we move quickly, **and**, when we are trying to be **still**. It monitors and makes adjustments to any movement of the head, our body or our environment. It impacts the development and function of other vital sensory systems: vision, hearing, proprioception that help us make sense of our world.

LISTENING & AUDITORY PROCESSING

Efficient listening requires us to be able to hear well and select the sounds to which we need to attend. We need to be able to ignore irrelevant sounds and focus on important ones. We need to remember what we hear, make connections with visual cues, combine and reproduce the sounds we hear to speak and communicate clearly. Listening isn't just hearing; it's making sense of the sounds our ears receive. Our hearing and listening ability inform us about our environment and helps 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 and 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 and catching balls. They 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, and how to move it. Knowing where our body is in space helps us develop fine and 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 and where to direct the action. If we don't know where we are in space, learning can be awkward, and we can seem clumsy.



NEURO-MOTOR MATURITY

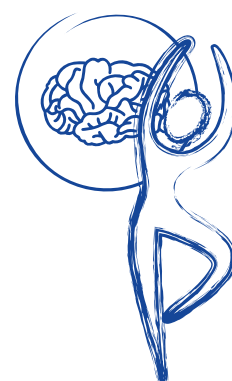


Our body, brain and sensory systems develop through movements that are reflex driven. Our primitive reflexes, with which we are born, should mature and be integrated into a mature central nervous system that supports our body to function effectively. If they remain immature, they can impede the development of subsequent postural reflexes crucial for supporting postural control and 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 function. Developmentally, the body leads the brain in processing, making meaning and learning about our world.

Neuro-motor and sensory maturity are the foundations for learning success.



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