Childhood Neurodevelopment

Academic Learning

Academic learning, problem-solving, and critical thinking requires all of the skills below.

Executive Functioning Skills & Self-Regulation

EF skills include attention, sustained attention, divided attention, focus, working memory, auditory and visual memory, organization, planning, physical and and emotional self-regulation, and more.

Social Skills

This involves the ability to interact and commuicate with others. Examples: active listening, empathy, emotional awareness, appropriate body language, and the understanding of social cues,

Speech and Communication Skills

This involves the cognitive processes needed to effectively speak and communicate needs, use speech socially, and use non-verbal cues, such as body language.

Sensory-Motor Coordination

As neural pathways are strengthened and developed, the sensory systems and motor systems connect for simultaneously.
Examples: Speech, Catching a ball, riding a bike, writing

Gross and Fine Motor Control

Gross motor skills develop first and then fine motor. These are developed through reflex patterns as they mature and integrate.
Examples of Gross Motor: Crawling, Jumping, Running, Climbing
Examples of Fine Motor: Tongue and lips, eye movements, fingers

Sensory Systems

The sensory systems are developed through the emergence and integration of reflex patterns.
Examples: Proprioception, tactility, vestibular, auditory, visual, interoception

Righting and Postural Reflexes

These patterns are not present at birth but emerge within the first few months of life.
Examples: Headrighting, Landau, Hands-Pulling (Pull-to-Sit)

Primitive Reflexes & Innate Rocking Movements

Primitive reflex patterns are present at birth. Focused on protection and survival of the infant and beginning postural control and intentional movement.
Examples: Babkin Palmonental, Moro, Babinski, Rooting
Innate rocking motions are self-initiated. Involved in reflex and sensory development.

Gestational Movements

Archtype Movements
Pre-birth Movements

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