**HOW MOVEMENT AFFECTS SKILL DEVELOPMENT**

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| **Brain Area** | **Developmental Activities** | **Helps Develop** |
| **Instinctive Brain**  **Primitive Brain ( Limbic System**) | **Grasping, touching, walking crawling, reaching, turning, pushing, pulling, scooting, and moving limbs** | **Gross motor skills**  **Pre-writing ability**  **Hand-eye coordination** |
| **Vestibular Brain**  **The Cerebellum and Ears** | **Spinning, twirling, tumbling, climbing, balancing listening, swinging, dancing, rolling, jumping, turning cartwheels,** | **Sports and biking**  **Writing and reading**  **Fine motor skills, typing, word processing,**  **Musical Play, banging, rhyming, clicking, and keyboarding** |
| **Emotional Brain** | **Massage, stroking, hugging, cuddling, playing together, and socializing** | **Confidence, cooperation, social skills, bonding, attunement, love, Security**  **Attachment** |
| **The Thinking Brain**  **Cerebral Cortex**  ( | **Stacking, assembling puzzles, pattern recognition, making patterns, playing word games, repetitive play, playing with rules, appreciating music** | **Cognitive processes, operational thinking, problem-solving, logic development, math, memory, vocabulary, writing, painting, reading fluency, spelling** |

**Adapt**

**ed from: How Physical Activity Builds Your Child’s Mental Abilities- Dryden & Rose, 1995, pg. 38**

**Brains and outcomes are unique. The brain is the only organ where the internal architecture is shaped by events and conditions in the outside world!**

**The outside world includes the womb, home, school, community, world, and planet! Humans learn in the context of society, family, and community.**