



Brain Beats Music

Movement Drives Brain Development

At present we are facing a developmental crisis with many children starting formal schooling without being physically ready. As a result, many have trouble reaching their full potential. Because children are less active in their early years due to containerisation, (being confined to prams, highchairs, car seats and baby activity centres/walkers), having smaller back yards for playing in, and the use of electronic toys and screen time, their brains are not receiving the necessary stimulation to develop as they need to.

To function effectively in a school classroom, children need to have mastered a series of essential movement stages. These learning experiences involve both the brain and the body. Some of the key developmental skills that are required for school are:

- Eye Fitness
- Midline development
- Vestibular development (balance)
- Proprioception (the sense of self)

Eye Fitness

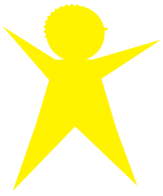
Eye fitness is essential in order to function in a classroom setting. Children need experiences where their eyes can sweep across wide areas, where they track objects, where they shift their focus between near and far, and where they use their peripheral vision. Movement-based music activities are a great way for children's eyes to get the exercise they require.

Midline Development

What is the difference between these letters:- **b, p, d**? - Each is made up of a circle and a line. Without well-established midlines, children will see no difference between these letters. Teaching writing before midlines and directionality are established may only lead to frustration for the child.

The body has three midlines: front/back, top/bottom, left/right. It is important that children develop all three midlines, and movement is the way our bodies do this. Children need sequential experiences with movements that lead up to, and include, crossing their midlines. Crossing a midline is when one side of the body crosses over the other such as making an X with your arms or your legs in our song, *Oh I am a Pirate*. Eventually, through repetition, children develop independent movement across the midline.





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The Body Teaches the Brain

Vestibular Development (balance)

The vestibular system is controlled by cilia surrounded by nerve endings inside the ear. Children need vestibular stimulation from birth. Vestibular movements enhance balance, language, vision, emotional development, muscular development and concentration.

Experiences that develop the vestibular system include balancing, going upside down, rolling, spinning (fast and slow), swinging, swimming underwater, wheelbarrow walking, and tumbling.

Since the most complex form of balance is to be still, it is essential to classroom success that children receive plenty of opportunities to develop their vestibular system before they reach school age. Movement-based music activities are a great way for children to develop their vestibular systems.

Proprioception (the sense of self)

Proprioception is the unconscious awareness of your body and where you are in space. Our muscles, tendons and ligaments record information about position, space, body awareness and force. As children move they develop understandings and gradually begin to understand their place in space and what to expect from their bodies.

For example, a child with an underdeveloped sense of force might hold their pencil either too tightly or too loosely. This will make writing or drawing activities in a classroom very frustrating for them. Movement-based music activities using elastic, instruments and holding hands with a partner help children to develop a sense of how much force is required to achieve a task, and their sense of proprioception.

Music Urges us to Move

At Brain Beats Music our goal is to use music as a means to encourage children to move in ways that drive their brain development. Music is motivational. It makes us happy, and it urges us to move. By being exposed to songs that encourage them to move their bodies in ways that have been shown to enhance brain development, children will not even notice that they are learning – they will be too busy having fun!

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