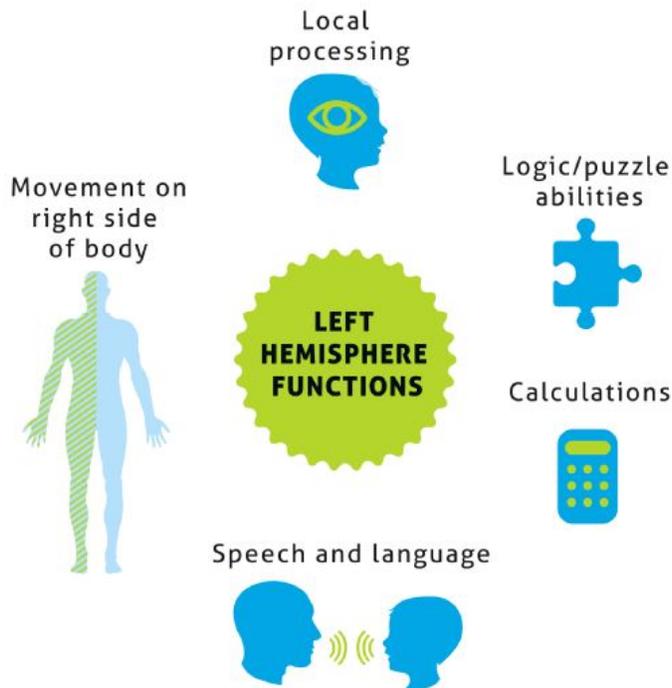


Integration Between the Two Hemispheres of the Brain

The human brain is composed of two hemispheres, the left and right, which function like two networked computers. The left hemisphere receives motor and sensory input from the right side of the body and the right hemisphere receives input from the left side of the body. When we bring the two systems together and begin the task of developing harmony and synchronicity, the first step is to achieve an efficient balance between the operations taking place in the two sides of the brain.

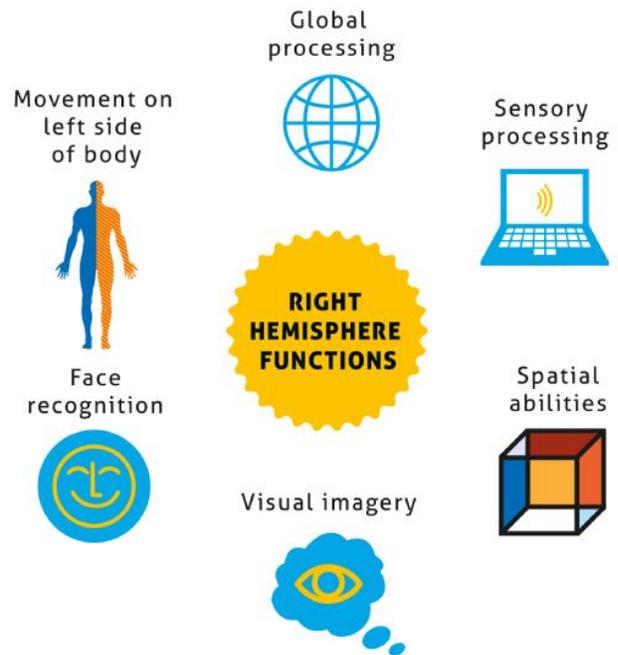


The left hemisphere of the brain is responsible for:

Most mental processes involve both sides of the brain. Therefore, integration problems between the two hemispheres can result in inefficiencies in brain processes. What results is the understanding that people with reading problems, central auditory processing disorders, language delay and other learning problems will be greatly aided by improved integration between the two sides of their brain.

Weak integration between the two sides of the brain can lead to a vicious cycle. A person who has a learning problem may suppress one eye (corresponding to one side of their brain). This may be a symptom of a lack of good hemispherical integration skills. But because suppressing one eye means that the person reads with one eye only, the "strong eye", the brain networks used to support the "weak" eye will become further disorganized through lack of use, exacerbating the initial lack of integration.

The right hemisphere of the brain is responsible for:



Since the left hemisphere of the brain controls movements on the right side of the body and the right hemisphere of the brain controls movements on the left side of the body, a person can refine the integration between the two sides of the brain through activities involving both sides of their body. These movements bring the two systems into closer collaboration and calibrate an appropriate balance between the two sides of the system.

One of the most significant points about a person's perceptual and motor skill development continuum is the establishment of a synchronized cross pattern creep (crawling). This is the point where both sides of the body and both hemispheres of the brain are operating within the framework and under the control of a consistent timing system. This is a system in which the standards for measure of both sides of the body are matched perfectly. For the left leg to move forward synchronously with the right arm and for the same pattern to occur when the right leg and left arm move, there is a requirement that the time and space increments for both sides of the brain be in phase.

As the child begins to learn to walk, the sensory integration and balance requirements become much greater. In order to achieve synchronicity, the child must achieve a higher level of integration between the two hemispheres of the brain. The most efficient possible walking pattern for a human being is the one in which the two arms are swinging as pendulums counterbalancing the movement of the legs and setting the rhythmic pace for the total movement pattern.

Successful integration between the two sides of the brain is necessary for improving all brain processes including those for reading, writing, academic achievement, motor skills development, and all other higher order cognitive processes. Performing Interactive Metronome-Home activities is an excellent way to improve this hemispheric integration.