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“WHY THE “HYPE” WITH EARLY STIMULATION?” AND THE TREMENDOUS EFFECT OF EARLY STIMULATION ON THE YOUNG CHILD

Research has shown the intelligence of the young child is hugely impacted by early stimulation. During pregnancy, up to the age of two years tremendous brain development takes place, also known as brain spurts.

The first brain spurt occurs between the eight (8th) and thirteen (13th) week after conception and during this period the amount of brain cells the baby will be born with is formed.

The amount of brain cells the child is born with does play a role, but researchers all agree that the significant factor of intelligence is in the continuous stimulation of the brain cells.

To understand the stimulation of the brain cells we need to look at the dendrites, the short-branched extension of a nerve cell along which impulses received from other cells at synapses are transmitted to the cell body. These short-branched extensions develop in all directions to form a network of mutual entanglement. This phase of development happens during the second (2nd) brain spurt, from ten (10) weeks before birth until age two (2).

As Foundation Phase Educators and parents of the young child, it is important for us to know that the dendrites only develop as a response to a stimulus and the more stimulation a baby or toddler receive, the better the mutual entanglement of the dendrites between the brain cells will be.

Researchers all agree that this network of mutual entanglement is more significant than the amount of brain cells the child is born with.

It is then also because of this network of mutual entanglement that we see the rapid growth of the brain. It is during this time that most of the intellectual development and basic learning takes place.

At birth the size of the baby’s brain is 25% of the size of what the adult brain is going to be, at six (6) month it is 50%, at two and a half (2 ½), 76% and at six (6) years old it makes out 90% of what the actual adult brain is going to be.

This leaves us with a small window period between 0-6 years to do as much as we can to assure that our children develop to the best of their ability. It is also because of this that we consider our daily programme and curriculum as one of the most important aspects of our schools and our success.

Me. L Rautenbach
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