

Getting Set for Life

Why are the 'EARLY YEARS' so important?

Because $\frac{3}{4}$ of a person's brain development happens after birth, mostly by age five!

That makes humans far more affected by their world than any other living being. Much of the brain's development during these critical first years depends on the quality of a child's experiences and relationships, whether good or bad. The effects of early experiences and relationships are long-lasting; they largely set the stage for the kind of person a child will become - how they'll get along with others, how they'll control their emotions, how well they'll do in school and what kind of relationships they'll have.



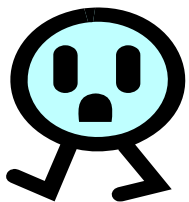
Early brain development results from connections made among brain cells in these important first years. If a child has very little stimulation and not much in the way of love and security, there is little going on to make or strengthen the connections necessary for healthy brain growth and development. And if the child has very bad experiences, the brain can make unhealthy connections.

Brain development refers to much more than intellectual development, or how smart someone is. The brain controls everything we do, everything we are; socially, emotionally and physically.

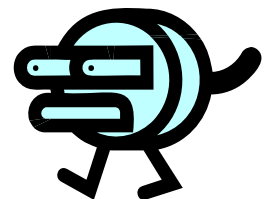
Making Connections

Positive experiences with family and others, combined with stimulating activities will “zap” brain connections into place. When your child feels safe and secure, the brain forms connections that ease anxiety. Then he can handle all the new stimulation and information coming his way.

Good connections come from:



- ✓ Smiling at your child and making eye contact
- ✓ Talking, singing and reading to your child
- ✓ Listening and responding to the sounds he makes
- ✓ Staying calm when your child is upset
- ✓ Helping your child get along with others
- ✓ Making sure your child feels loved and cherished
- ✓ Helping your child feel comfortable exploring the world around him



The connections which will later determine how the baby thinks, learns, feels, gets along with others, and sees the world around him are formed as the child relates, and has experience with his world and the people in it. This process is what we call 'brain wiring', and you and your child do it together.

“Wiring” can be good or bad

Think of a child's early experiences as food and exercise for the brain. Repeated experiences and new opportunities nourish and strengthen the brain, making healthy connections (eg, when a child needs a hug and gets one, or has fun playing games with a caregiver) Repeated negative experiences (being ignored or rejected when he needs to be comforted, or being made to feel like a failure when he doesn't succeed at a new task) make negative and unhealthy connections.

Based on all these experiences, the child forms a picture of the world as either a rewarding and secure place or as a punishing and dangerous one.

What happens in the first few years has a long-lasting effect on health, confidence, the ability to cope with life's changes, school performance and what kind of adult and parent he will become.

And while it is never too late to improve the quality of a child's life, trying later to overcome negative experiences is much harder than getting it right the first time.



How the Brain gets Wired

At birth, a baby's brain has about 100 billion brain cells, called neurons. The baby can dimly see, hear, smell, and respond to touch. After birth, each neuron expands, and the brain grows in size. By adulthood, the brain will weigh four times as much.

The neurons connect to as many as 15,000 other neurons, forming pathways. Brain function depends on being able to send signals rapidly from one part of the brain to another, which makes developing a network of pathways essential in order to think, feel or move.

By age three, a child's brain has 1 000 trillion connections - twice as many as an adult. Then there is gradual discarding of connections until late adolescence, when about half the connections have been cast off. This leaves about 500 trillion - which stays the same for life.

There are periods when it's best for certain functions, like language, to develop. Once this window for development is over, the brain begins to discard connections that are not strong enough, which makes it much more difficult for the child to learn later on. Think of it like building a house - it's much easier to wire it as you build, instead of later once the walls are up.

How does the child's brain “Know” which connections to keep and which to discard? Through experiences that you, your family, and others provide. **Brain development is a ‘Use it or lose it’ process.** Repeating a connection increases its strength until it eventually becomes permanent. Connections that are not used often enough in the early years become eliminated. In this way, the experiences of the first years of life influence the adults they become.



**Ontario Early Years offers workshops and presentations on this subject.
For more info, please call 358 - 1451 x 0**