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# The Amazing Brain: What Every Parent and Caregiver Needs to Know

Experience Shapes Our Brains. How your child's brain develops each and every day is being shaped by the environment and experiences you provide. The world your child lives in actually affects how their brain grows. Your child needs lots of new, positive experiences in a safe, stable home environment to build a healthy brain. Healthy relationships are the most important experience your child can have.

We can help children grow healthy brains by following these six simple steps.

#### **Step 1: Help Me Make Connections**

A baby's brain is ready to connect. Babies build their brains by connecting with you and the world around them. At birth, a baby's brain has 100 BILLION nerve cells called neurons that are waiting to connect. Each neuron can make thousands of connections or only a few depending on a child's environment and experiences. Spending quality time with your child can increase your child's brain power. You can help your baby build brain connections by talking, hugging, singing, reading, playing, and exploring the world together.

The brain is a "use it or lose it" machine. There are windows of opportunity in early brain development. Some of these windows close very quickly. For example, areas of the brain involved in vision are connected by 18 months of age. If an infant's vision is blocked by a cataract or an eye patch at the time when the brain needs to be making connections for vision, a child will lose the ability to ever see out of the affected eye.

Children need the right experience at the right time. Learn as much as you can about age-appropriate activities to take advantage of windows of opportunity for your child's brain development. For example, children can learn to speak a second language without an accent. This window of opportunity starts to close as a teenager and it becomes much harder to learn and speak a second language without an accent.

# Step 2: Be There For Me

Healthy, caring relationships are food for a child's growing brain. By 6 months of age, babies can tell the difference between faces they know and don't know just as well as you can! By 18 months of age, the areas of the brain that control emotions are connecting. Babies learn about healthy relationships and how to handle stress from you, so if you are stressed, your baby will be too. Your child needs you to love them, comfort them, and encourage them. Make sure that other caregivers are also providing a safe, nurturing environment for your child.

# Step 3: Understand the Building Blocks Of My Brain

A child's brain develops from the bottom up like a stack of building blocks. The brainstem and midbrain are the first areas of the brain to develop and connect. These areas are called the "survival brain" because they control body functions that keep us alive such as blood pressure and body temperature. The limbic system is the next building block of the brain. When you have a "gut response" about something, this comes from the limbic system in your brain which handles our basic emotions.

The top building block of the brain is the cortex. This is the last area of the brain to mature. The cortex is responsible for our most complicated thinking from decision-making to multi-tasking to controlling our emotions. Reading, writing, language, and arithmetic are all cortex functions so children need to spend lots of time in this area of their brains to learn these new skills.

### Step 4: Build My Self-Esteem

It's more than just words. We can build a child's selfesteem through praise, encouragement, and positive experiences. Children need to hear that we believe in them and that they can be whatever they want to be. Give your child opportunities to succeed at new tasks and develop skills. From praising your child for sharing a toy with another child to teaching them how to climb up the stairs, your encouraging words can boost your child's confidence and ability to face challenges.

# Step 5: I Need to Feel Safe

There are big brain changes during adolescence. Adolescents do not have all the hardware in their brains yet to think like an adult. The adolescent brain goes through major remodeling that starts around puberty and continues into the early 20's. Teens need parents and caregivers in their lives more than ever to help them finish building their brains. How teens spend their time matters!

# Step 6: Keep Being There!

Children need to feel safe. Creating a safe home isn't just the things you do to prevent your child from getting hurt such as plugging outlets, putting safety gates on stairways, and keeping poisons out-of-reach. It's about creating a predictable, stable environment for your child. When a child feels safe and nurtured, they can focus their energy on upper brain development and learning. Children growing up in fear or chaos tend to spend more time in "survival brain" trying to feel OK. They adapt to their environment, but it comes at a high cost. Because these children are spending less time in the cortex or "thinking brain," they often have problems paying attention, sitting still, and controlling their emotions.

#### Some Information You Should Know

- A baby's brain uses THREE TIMES the amount of energy that your brain does—that's a busy brain!!
- By 6 years of age, a child's brain will be 95% of its adult size and have more connections than all the stars and planets in the galaxies.
- Children who watch more television during the first three years of life are more likely to have problems with attention deficit disorders when they are 7 to 9 years old.

# The Amazing Brain: Trauma and the Potential for Healing, 2008, Philadelphia, PA.

This brochure was written by Linda Burgess Chamberlain, PhD, MPH with support from the Institute for Safe Families and Multiplying Connections of the Health Federation of Philadelphia and Advocates for Youth.

Linda Burgess Chamberlain is the founding director of the Alaska Family Violence Prevention Project. An epidemiologist specializing in domestic violence, she is an internationally recognized speaker on the effects of violence on children and brain development. She lives on a rural homestead outside of Homer, Alaska with her dog team. A national Kellogg Leadership Fellow, Dr. Chamberlain is also a motivational speaker and uses "lessons from the trail" to promote key strategies for teamwork and leadership. For more information visit: <a href="http://www.instituteforsafefamilies.org/materials/amazing-brain">http://www.instituteforsafefamilies.org/materials/amazing-brain</a>

# Guide for Busy Parents The Parenting Plan

What do you want your children to know and be able to do by the time they are eighteen?

That's not a question we often consider when we are talking about child raising. But it's one we need to ask, and doing so will make the whole job of parenting so much easier.

### Why Set Goals?

Goal setting seems a little too bureaucratic and business-like to have any place in parenting. When we're dealing with our children we sometimes lurch from one event to another – getting them up and dressed in the morning, supervising art projects and reading bedtime stories. It's all about doing and not much about planning.

Setting long-term goals makes all those daily activities easier. Once you have decided where you're heading in this parenting journey you can ask yourself how each decision will help your child reach the goals you've set.

## **How to Set Goals**

Sit down together to make your plans. If you are parenting alone ask a friend to work with you.

Remember your childhood. What sorts of things did your parents or other important adults do that you really liked? Can you do the same things? Of course you can.

Think about when you were a young adult. What skills did you have that were important once you became independent? What skills were you missing?

Okay, so what do you want your child to know when he turns eighteen?

# **Using Goals**

Now, when you are about to develop a rule, have a conversation or set a consequence with your child, you can ask yourself: "How will this help him to reach the parenting goals we've set?"

For example, you can't get him to take responsibility for his actions. He forgot his lunch for the third time this week. You've already told him that this is his responsibility. So what do you do? If you take his lunch to school, does that teach him responsibility? Or if you let him go one day without lunch, will that help him learn to take responsibility for his lunch? Or, is the goal too high?

#### **Bottom Line**

Setting parenting goals set a standard for you to follow in your day-to-day parenting.

#### **Parenting Corner**

Search: How to Successfully Build an "Integrated" Child – Daniel Siegel

Search: Why Teenagers Act Crazy

Search: Preventing School Violence: A Sustainable Approach

For more information parenting books "The Whole Brain Child" and "Parenting from the inside out" by Daniel Siegel are available for purchase at our office.

#### **Mobile Apps**

# KnowBullying a free app from SAMHSA

Research shows that spending at least 15 minutes a day talking with your kids can build the foundation for a strong relationship, develop their resilience to peer pressure, and help prevent bullying.

# \*\*\*Net News\*\*\*

Here are some web sites you & your family may find helpful:

Search: Mindfulness and Neural Integration: Daniel Siegel, MD at TEDxStud

Search: 9 Things Good Listeners Do Differently

Search: Change Your Brain, Change Your Life -Daniel Amen

# Self-Help Corner:

City of Edmonton Community Resources: 211

Support Network / Distress Line: 780-482-HELP

Kid Help Line: 1-800-668-6868