



Building Your Babies Brain Connections

by Peg Cramer

"Play, Talk, and Read: To Help Your Child Succeed!" is more than a clever saying, it is backed by volumes of educational research.

Why you should Connect

"What does my child learn when she is so small?"

Your baby is learning to be socially aware. Shortly after birth, she will look at you and her brain will make the connection that you are an important person in her life. She will also make the connection that your voice is the voice of that special person who loves and cares for her. She will turn her head towards the sound of your voice when she hears it. She also loves to hear language and will try to converse with you almost from birth. Over the first few months of life, she will become aware of how her body moves and will begin to explore the world through her five senses. Some extra things you can do for your child is sing to her as you change or dress her. If you sing nursery rhymes or cute little songs like Twinkle Twinkle Little Star or Old MacDonald Had A Farm will help build nero pathways within your child's brain. Your baby doesn't care if you can carry a tune or not! Just sing away!

A child's brain is amazing!

Facts about Brain Development and How Children Learn

- Brain development begins soon after conception.
- At birth, a child has 100 billion brain cells (neurons) and 50 trillion connections (synapses).
- Early childhood experiences exert a dramatic impact and physically determine how the brain is "wired."
- In the first months of life, the number of synapses increases 20 times to more than 1,000 trillion synapses.
- Early sensory experiences create new synapses and repetition of experiences strengthen them.
- Growth continues and a single neuron can connect with as many as 15,000 other neurons.

- A three year old child has twice as many connections as an adult.
- The number of connections could easily go up or down by 25 percent or more, depending upon whether a child grows up in an enriched environment.
- Some researchers believe "the number of words an infant hears each day is the single most important predictor of later intelligence, school success, and social competence."
- Those synapses that aren't used wither away in a process called pruning.
- By the time a child is 5 years old, 90% of brain connections will be made. There will never be a time in their lives when the experiences they have will be of greater importance.
- At about age 10, the brain begins to dramatically prune extra connections and make order of the tangled circuitry of the brain.
- New synapses grow throughout life and adults continue to learn, but they do not master new skills so quickly or rebound from setbacks so easily.

***Helpful tips on how to Connect for Success:**

PLAY

Play is not only fun - it's the way kids learn!

"What kinds of games can my small infant play?"

- **Infants** love to play and sing. Clap, peek-a-boo, throw kisses, wave bye-bye, and make noises are fun. They also need safe tummy playtime. Have your eyes connect. Expressions are very important. Put bright musical or interactive toys near your baby. With your child on your lap, explore the toys, talk about them with your child, help their hands to play too.

"My toddler is into everything, but I can't always sit and play if I am working in the kitchen."

- Fancy toys are great, but give **Toddlers** everyday toys - pots, pans and plastic bowls. Let the fun learning begin! ***Suggestion:** Empty a bottom drawer in you kitchen so your child will have a special place to

- play when with you in the kitchen together. Your child will need to know safe boundaries and an area that is just for him/her.
- **Preschoolers** pretend - and that pretending helps them succeed as a big person. In the kitchen, pull up a safe chair for your preschool child to stand on. Plastic mixing bowls, wooden spoons and a muffin mix will be a fun way to have your child to contribute to the family as well as learn life skills and math too!
 - **Play time is connect time!**

***FOLLOW THE LEADER**

- Kids learn best when you follow **their lead**.
- Play with your **infant** by doing what **THEY** do. Smile when they smile coo when they coo.
- **Toddlers** need to show you how much they learn every day, so let them show you how to set up their blocks, push their stroller or tell the story the way they want to.
- **Preschoolers** love to pretend - and you should follow their lead - let them be the directors: pretend the way they want you to pretend, play what they want to play without changing it the adult way, - then you share in their fun... **now that's following the leader!**

TALK

"My baby is beginning to say baby talk. It is so cute, is talking to my baby helping her learn?"

- Brains are amazing! Kids are born with 100 billion neurons just waiting to connect. To get those neurons going **start talking!**
- **Infants** listen to your every word. The more you say, the more they learn! What you say isn't as important as how you say it and the change of voice tone and expression you use. If you talk about the stock market or tell a cute story like the three bears, talk is talk when you are talking to an infant.
- **Toddlers** need to hear full sentences so their vocabularies grow. Help your child by using words to help her better understand the world around her including words that help describe feelings, objects, and

- every day things. Instead of saying, "Look at the truck!" say, "Look at the big yellow and orange truck. It has pictures of fruit on its side!"
- **Preschoolers** should hear big words that big people use. Answer ALL of your Child's questions and if one is too tough, and sometimes they are, look up the answer together at the library or the internet. It is better to say, "I'd like to know the answer too!" instead of "I don't know."

So turn off technology and turn on the talk!

READ

"Does it matter what I read to my child?"

Bright colored pictures and fun picture book stories are always the best, but when your child is sitting on your lap and you are reading the newspaper or magazine; summarize the article, tell how you feel about the story, and/or point to the pictures. Being a reading model is also one of the most important behaviors you can pass on to your child.

- **Infants**, yep itty-bitty babies - they have a need to read. Newborns? Absolutely, a child is never too young or too old to be read to.
- **Toddlers** *know* they can read - so help them get up to speed. Take some time - at least 30 minutes a day - and read! You don't have to read for all the minutes in one sitting. Take several times during your busy day to sit with your child. It is an investment in your child's future, as well as a great time for you two to connect.
- **Pre-schoolers** should be read to two or three times a day (at least). They will have favorite stories that they like to hear over and over. Soon, the child will be able to "read" that favorite story on his own, retelling the story from memory or by using the pictures as a guide. This is a great skill, even if your child forgets bits and pieces of the story, support him in his endeavor and ask him questions about what happened in the story that was happy, sad, good, or bad. These comprehension questions are helping your child bring his understanding of the story to a new level.

"What is Environmental print?"

Environmental print is the name educators give words children see in their everyday environment. McDonalds, Burger King, K-Mart, etc. are all names they can start to "read". You say, "Today we are going to K-Mart. K-Mart has a M in it like Mommy!" When you get to the store say, " Look, there is the sign for K-Mart" It is red and blue. See the "M!" For an extra teachable moment, say the letter sound "Mm" makes like: "Mommy, mouse, monkey."

"There are so many books, how do I choose which ones to read?"

- **Preschoolers** they are growing up and like longer words and stories. Visit your local public library and talk to the children's book specialist there. These experts are up on the best literature around. Load up a bag with stories you and your child pick out together and start reading! You can always purchase favorite books you read from the library at your local bookstore to start your child's own library.
- In addition to just reading to your child, discuss what happens in the stories, poems, and nursery rhymes. Talk about who the main character is, what was the problem in the story and how did the characters solve the problem. Talk about the rhyming words, find some words that look alike (the, the), look at letters, and punctuation too.

***Remember, the more you interact with your child, the more neuro-pathways your child's brain will develop! School is right around the corner.

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Peg Cramer has been an Early Childhood educator since 1978, earning her Master in the Art of Teaching. Peg also currently serves on the Governor's Mentor Michigan Providers Council. She is a consultant for Children In Full Bloom, LLC and has published numerous educational materials. Peg also facilitates workshops, and writes articles for educators and parents.