

The Science of Early Childhood Research

The experts in the science of early childhood research tell us...

- *Earliest years are critical for brain development and learning.*
- *Build your child's vocabulary: talk with them, read to them and sing and dance with them.*
- *Engage with your child and nurture a positive relationship.* The relationship with parents, caregivers and other adults shape the child's brain and lays the foundation for future developmental outcomes.
- *Ensure that your child grows in an environment that is not overly anxiety-causing or stressful.*

A Few Statistics for You to Note!

(These stats are courtesy of the Center on the Developing Child at Harvard University.)

- ✓ **700 New Neural Connections Created** Per Second in the Earliest Years of Life
- ✓ **At 18 months** Vocabulary Disparities Start to Appear
- ✓ **90 - 100%** Chance of Developmental Delays When Young Children Experience 6 - 7 Risk Factors
- ✓ **3:1**—The Odds of Adult Heart Disease After 7 - 8 Adverse Childhood Experiences

The National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University has created a number of resources on the science of early childhood. They want to make this information from the experts accessible to a wide variety of readers. The following reports (papers) are available at their website:

http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/

- **# 1: Young children develop in an environment of relationships.**
- **#2: Children's Emotional Development Is Built into the Architecture of Their Brains**
- **#3: Excessive Stress Disrupts the Architecture of the Developing Brain**
- **#4: Early Exposure to Toxic Substances Damages Brain Architecture**
- **#5: The Timing and Quality of Early Experiences Combine to Shape Brain Architecture**
- **#6: Establishing a Level Foundation for Life: Mental Health Begins in Early Childhood**
- **#7: Workforce Development, Welfare Reform, and Child Well-Being**
- **#8: Maternal Depression Can Undermine the Development of Young Children**
- **#9: Persistent Fear and Anxiety Can Affect Young Children's Learning and Development**
- **#10: Early Experiences Can Alter Gene Expression and Affect Long-Term Development**

- **#11: Building the Brain's " Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function**
- **#12: The Science of Neglect: The Persistent Absence of Responsive Care Disrupts the Developing Brain**

The following link offers ideas and strategies for preparing your child for school success:

<http://www.zerotothree.org/public-policy/school-readiness-infographic.html>