When we invest in a child's

## FIRST 2000 DAYS

we create the best outcomes in education, health and economic well-being for everyone in North Carolina.



There are only 2,000 days between the time a baby is born and when he or she will begin kindergarten.

During that time brain architecture is forming, creating the foundation for all future learning.



### Early Learning Investments Are

Military, business and law enforcement leaders are calling for greater investments in young children to ensure our national security, keep us globally competitive and reduce crime.

### Better third grade outcomes

The early years are so defining that by the time children turn eight, their third grade outcomes can predict future academic achievement and career success.



### A 7-10% ROI



Every dollar invested in early childhood education produces a 7-10% annual return.

### Home visits increase success

Voluntary home visiting programs reduce health care costs, improve school readiness and success, reduce need for remedial education and increase family



### Less crime



self-sufficiency.

At-risk children who participated in a high quality early childhood program were significantly less likely to be arrested for a violent crime by age 18.

### For a list of citations visit

### Essential to America's Future

- 75% of Americans aged 17 to 24 cannot meet the military's eligibility requirements.
- Business leaders are frustrated by an inability to hire workers with critical thinking and problem-solving skills.
- Law enforcement professionals struggle with growing prison populations.

### Higher salaries

33% higher average salaries.

At-risk children who participated in a high quality early childhood program were more likely to be employed and earned



### **Higher graduation rates**



High quality early childhood programs increase graduation rates by as much as 44%,

### Higher reading & math scores

A 2011 Duke University study found children had higher third grade reading and math scores in counties that received more funding for Smart Start and NC PreK when those children were younger.



### Health & Nutrition



Early education with health and nutritional components help improve adult health and prevent chronic disease.

www.first2000days.org.

# Begins with the Brain

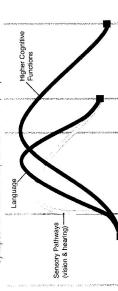
Brains are built not born.

The brain is one of the only organs not fully developed at birth. Most of the cells are there, but the connections – the wiring that forms the architecture is not. These connections develop in early childhood. Every experience a baby has forms a neural connection in the brain. In the early years, 700 connections (synapses) are formed every second!

Not all of these connections will last. After connections peak, the brain begins a pruning process. Connections that are used more are strengthened and those that are not are pruned, providing either a strong or weak foundation for all future health and learning.

# Human Brain Development

Synapse formation is dependent on early experiences.



-8-7-6-5-4-3-2-10123456789101112345678910111213141516171819 Conception to Birth — Age in Months — Age in Wears

Sensory Pathways (vision & hearing) Language Higher Cognitive Functions This graph Illustrates when connections peak for different brain functions.





Social and emotional skills, sometimes called "soft skills" are as important as cognitive skills in determining success in school, work and life.

These skills are developed during children's earliest years. Learning to play with others develops language skills and improved tearwork; making up games and rules develops negotiation skills; learning to follow rules develops ethics; and early exploration develops creating thinking and problem solving skills.

A survey of business leaders found that employers view "soft" skills as even more important to work-readiness than traditional skills, like reading, writing and math.

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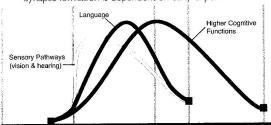
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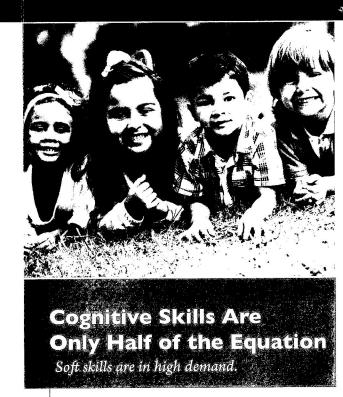
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Thild development is a dynamic, interactive process that is not predetermined. It occurs in the context of relationships, experiences and environments. With quality early child development experiences, children are school ready, graduate from high school and grow into productive citizens and valuable employees.



Health in the earliest years lays the groundwork for future well-being. High quality early child development programs with health and nutritional components help prevent adult chronic diseases and promote better health.

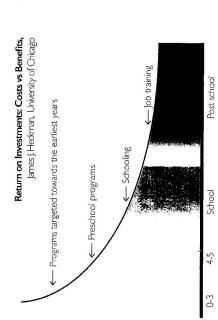
A study of children who participated in the Carolina Abecedarian early learning program showed significantly improved health as adults as compared to the group that did not participate. They experience fewer illnesses as adults, make healthier lifestyle choices, have lower rates of high blood pressure and have significantly lower risk of heart disease.



For children to have the opportunity to realize their potential, they need good health, strong families and high quality early learning and school experiences.

- Good Health: Early experiences are built into our bodies.
- Strong Families: Parents are a child's
  - first and best teacher.
     Quality Early Learning: Brains are

built, not born.



Rate of Return to Investment in Human Capital

Nobel prize winning economist James Heckman's research found that dollars invested in early education have the greatest return on investment.

High quality early development and learning yields:

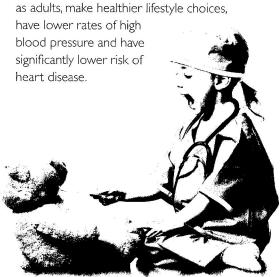
- Fewer special education placements
- Higher graduation rates
- Reduced crime
- Higher earnings
- Less reliance on social services

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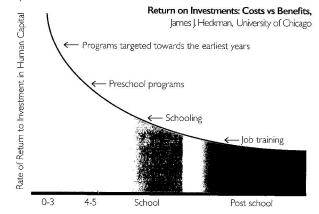


# Building a Foundation for Success

The foundation for learning is built during a child's first 2,000 days.

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- **Strong Families:** Parents are a child's first and best teacher.
- Quality Early Learning: Brains are built, not born.



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The First 2,000 Days website makes it easy to show your support for young children. www.first2000days.org



### Get the info

- Sign up for alerts.
- Like us on Facebook.
- · Follow us on Twitter.

### Pass It On

- Share resources.
- Link to the website.
- Host a presentation.

### Take Action

- · Sign the commitment to young children.
- · Be a NC Voice for children.
- Become a Champion.





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The First 2,000 Days is an initiative of the North Carolina Early Childhood Foundation.