

The Case for Investing in Muskegon County's Youngest Generation

*A White Paper by the Great Start Collaborative of Muskegon County
on the Critical Need for Early Investment in Children and Families*

“Earlier is better than later. We know this because years of research tells us that one clear principle of brain development is that providing the right childhood experiences and reducing those that may be detrimental will be the most effective and least costly means for promoting healthy brain architecture, brain chemistry and early child development.”

Pat Levitt, Ph.D.
Kennedy Center for
Research on Human
Development



The conclusion of the first decade of the new century is an auspicious time to look forward and imagine Muskegon County's future. We can safely predict many things. For instance, the world is moving into a knowledge-based economy in which every job has become more dependent on technology. Also, we are living in a “flat” world where our colleagues and competitors are electronically rather than physically connected.

What does all of this mean? Are we ready to face the challenges of this future? Consider these facts:

- Eighteen percent of all children in the United States live in poverty. The percentage rises to 22% in Muskegon County. Low-income children typically enter school lacking the language, social, and emotional skills to succeed. Studies show that at age four children living in poverty are 18 months below the developmental norm and that by age 10 the gap is even higher.
- The top jobs in demand 10 years from now do not even exist today.
- If you are “1 in a million,” there are 1,300 more just like you in China and 1,100 just like you in India. The number of Chinese in the top 25% tier of I.Q. is greater than the total population of North America.
- In 2010 the U.S. ratio of worker-to-retiree is 3.3 to 1; in the year 2050 the ratio could be as low as 2 to 1.

Now consider one other fact...the people who will be responsible for navigating our society through this global economy while supporting sixty percent more retirees are still in diapers!

Clearly, if we had only one strategy for preparing for the future it should be to invest in our youngest citizens and to invest as early as possible.

Early family environments are major predictors of cognitive and socio-emotional abilities, as well as crime, health and obesity. This observation is a major source of concern because family environments in the U.S. and many other countries around the world have deteriorated over the past 40 years.

Dr. James Heckman,
University of Chicago



Early Investment—the earlier the better

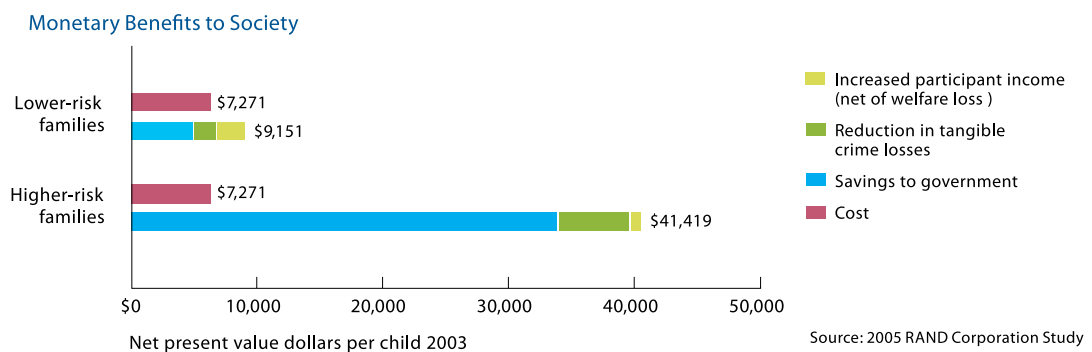
The research on early brain structure and development is both consistent and compelling: The brain develops rapidly during the early years of life; the actions of adults caring and interacting with the child profoundly influence the child's development and the stage for success or struggle in life is well-established during these critical years.

We know that at birth the human brain structure is ready to develop sensory and perceptual growth that is the foundation for cognition, language, social behavior and emotions. The brain is much more sensitive to experience in the first two years of life than at any other time. It is at this time that the foundations for higher orders of cognition, language and social emotions skills are formed. And, conversely, this is when adverse and stressful experience can interfere with brain development and seriously hurt the child's potential for learning.

Early investment has been shown to be a cost-effective strategy with positive long-term societal

outcomes. Dr. James Heckman, Nobel Laureate in Economics and University of Chicago professor, has concluded the following regarding investing in young children: *“Early interventions promote schooling, reduce crime, promote workforce productivity and reduce teenage pregnancy. These interventions are estimated to have high benefit-cost ratios and rates of return. Early interventions have much higher returns than other later interventions such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, tuition subsidies or expenditure on police.”*

What does this investment look like? It equates to investing in each child's family because parents are a child's first and most important teacher. It is investing in the child's health, and it is investing in the enrichment of the child's early care and education. Various studies conducted by the Rand Corporation, Minneapolis Federal Reserve Bank and the Brookings Institute show a return on investment ranging from 4:1 to 17:1 on early childhood development programs.



Investing in Parents

Fifteen percent of all Muskegon County newborns have teenage mothers and slightly more than one in four children less than five years old live in poverty. Such factors can be serious inhibitors of a child's optimum development across all modalities. Supporting young parents at this critical time is a crucial and profitable investment. Home visitation programs that pair a medical or social work professional with mothers through their pregnancy and the first years of a the child's life have proven to be extremely effective. The Rand Corporation analyzed the return on investment for the Nurse Home Partnership, a

premier parent support program, and found that it returned \$5 for every \$1 invested. The study found that families involved in the program experienced the following:

- 48% reduction in child abuse and neglect,
- 56% reduction in emergency room visits for accidents and poisonings,
- 59% reduction in arrests at child age 15,
- 67% reduction in behavioral and intellectual problems at child age six,
- 72% fewer convictions of mothers at child age 15.

Investing in Health

The most important time in a child's life to develop good health is before she is born. Research shows that the health determinants of low birth weight and preterm births follow a child into adulthood and can be passed on to the next generation. The good health of an infant starts with the good health of the mother and proper prenatal care. The average cost of prenatal care that provides proper nutrition,

avoidance of toxic substances such as alcohol and tobacco, maintaining health, preventing pre-term births and low birth weights in Muskegon County is \$3,300. The average cost of hospitalization for a low birth weight baby is \$75,000. If we could cut the number of low birth weight babies in half, Muskegon County would save \$3,585,000.

Investing in Early Education

Language Development

Recent research by medical anthropologist Kathleen Wermke of the University of Würzburg in Germany has shown that newborn infants cry with distinctive accents: a German baby's cry is different than an American or a Chinese baby's cry. Besides being an interesting trivia fact, this shows us how early language develops. The researchers postulate that the infants had developed their "accents" in utero through hearing their mother's voices. It is easy to see why a child who is in a language rich environment will come to kindergarten knowing more than 1,200 words, triple the number of words a child from an impoverished environment may know. This is the beginning of an educational gap that, without intervention, continues to grow.

Getting Ready to Learn

The "executive brain" which eventually directs adult decision making and leadership is nearly fully formed by the age of four. The executive brain is responsible for such tasks as surveying information, imposing organization, formulating plans, setting goals, keeping track of changing circumstances, and even anticipating numerous possibilities and modifying goals accordingly. These functions are essential to the development of knowledge domains for facts, figures, words and images. This is what is developing when a toddler in preschool learns to find his crayons and choose which colors to use to draw a picture of the sun or his house. The toddler is learning to be an "executor" when he is encouraged to put away his crayons in the proper place before story time can begin. He is also using "executive"

skills when he plays the role of the Prince from his story time during his playtime. The early years are prime times when the human brain is particularly efficient at learning specific tasks and for most physical, cognitive and social emotional learning. To invest in this "window of opportunity" is sensible and smart.

Preschool

Preschool is more than learning the alphabet or counting to ten; preschool gets children ready for school by developing the child's ability to learn through attending to their health and nutrition, their social and emotional skills, and engaging their parents. A quality preschool provides an enriched environment that stimulates a child's active brain activity, taking advantage of the prime time for development. The gains a child makes in preschool create a base the child grows from throughout his school career. This is especially important for children from low-income families who typically enter kindergarten behind their peers without the benefit of preschool. Results speak. Through over forty years of study, the Perry Preschool Project has shown that children who have a quality preschool experience

- Gain two years in reading and math skills,
- Are 40% less likely to repeat grades and 50% less likely to be placed in Special Education,
- Are 29% more likely to graduate from high school,
- Are three times more likely to enroll in college,
- Are better employed and earn 33% more than peers.

"Estimates indicate that a high-school dropout costs society \$243,000 to \$388,000 in present-value dollars over his lifetime."

Rand Research



We hope that our leaders in government, business, and education will be our partners and help our youngest children reach for the stars and achieve their fullest potential.



Cost of Doing Nothing

We should ask what our future would look like without investing in our youngest children. In other words, what is the cost of doing nothing? The Rand Corporation studied a wide array of early childhood development programs throughout the United States. They found that for each positive child outcome affected by these programs there was a corresponding monetary benefit to the public.

Monetary Savings (or Costs) from Affected Child Outcomes

Effect on Child Outcome	Benefits (or Costs) to Government
Reduced child maltreatment	Lower costs to child welfare system
Reduced incidence of teen childbearing	Lower costs for public health care system and social welfare programs
Reduced grade repetition	Fewer years spent in K-12 education
Reduced use of special education	Lower costs for special education
Increased labor force participation and earnings in adulthood	Increased tax revenue
Reduced use of welfare and other means-tested programs	Reduced administrative costs for social welfare programs; reduced welfare-program transfer payments
Reduced crime and contact with criminal justice system	Lower Monetary costs for the criminal justice system
Improved pregnancy outcomes	Lower medical costs from fewer low birth weight babies

SOURCE: Adapted from Lynn A. Karoly, M. Rebecca Kilburn, and Jill S. Cannon, *Early Childhood Interventions: Proven Results, Future Promise*, Santa Monica, Calif.: RAND Corporation, MG-341-PNC, 2005, Table 4.1.

In Michigan...

A recent study by the Wilder Research show cost savings and revenues realized in 2009 due to the investments in school readiness over the past 25 years are an estimated \$1.15 billion.

- \$136 million in reduced spending because fewer K-12 students repeated a grade
- \$69 million in reduced special education for disabilities that have been prevented or ameliorated through early intervention
- \$33 million increased income tax and sales tax revenue from more productive and higher earning workers
- \$106 million savings in substantiated child abuse and neglect, including costs of out-of-home placement
- \$214 million savings in juvenile corrections

In Muskegon County...

- \$6 million savings in special education and grade retention
- \$1.9 million savings in substantiated child abuse and neglect, including costs of out-of-home placement

Muskegon County has a track record investing in children. The Great Start Collaborative of Muskegon County, formed in 2006, has membership of over forty schools, agencies and individuals. The Great Start Parent Coalition includes more than 400 individuals – all working diligently to preserve and increase the resources available to our children in order to assure that every child in Muskegon County is safe, healthy and eager to succeed in school and life. A lot has happened economically in our community and state since the publication of our long term strategic plan and call to action, ***Creating Young Stars***. But the premise of our passionate and dedicated work is the same – for Muskegon County to prosper on a long-term basis, our youngest generation needs to develop the essential cognitive and social skills necessary to compete in an increasingly complex world and this begins at birth.

For more information about the Great Start Collaborative of Muskegon County, please contact Ms. Jane Clingman-Scott, Great Start Coordinator at 231-767-7285, Jclingma@muskegonisd.org.