

Schools are back in sessions everywhere and if you're the parent of a high school child you may be wondering if he/she will be ready to face life's larger challenges after graduation. At home and in school are our children being prepared to be successful in their personal lives, perhaps in college, and eventually in the work force? If you are the parent of a preschooler, the ability to attain and retain a good job may be the furthest thing from your mind. However, neuroscience and economic research have begun to connect these two dots in a compelling manner. The economy, and unemployment numbers in particular, have been front and center since the recent 'great recession'. So, as an early childhood educator it is particularly fascinating to study the research of Nobel Laureate James Heckman PhD. Dr. Heckman, a professor and researcher at the University of Chicago, believes that an excellent preschool education is the best job-training tool available. In fact in his "Heckman Equation" he formulates that high quality comprehensive early childhood programs (for families and schools) are the best economic investment we can make for our children and for our country, for a whole host of reasons.

Heckman did extensive research on job training programs and sifted out a collection of skills he believes adults must possess in order to obtain and retain a job. He found that people often don't benefit from job training because they don't have what he calls "soft skills" or 'life skills' that allow them to access new knowledge. Essentially these are the emotional and social skills that enable a person to function successfully in all areas of life, including; attentiveness, persistence, impulse control, sociability (including the ability to collaborate with others), motivation, etc. Above all the ability to learn new things, which draws on all these other skills, is critical if we are to grow and flourish throughout our lives. What makes Heckman's research particularly compelling for educators and political leaders, on all levels of government, is his assertion that the foundational teaching of these critical life skills must start, not in kindergarten, as a well known book so nobly asserts, but during the early childhood years. Additionally, Dr. Heckman maintains that if children do not build these skills at an early age, it becomes more difficult to attain them with each passing year. He concludes that for every dollar we invest in young children we, as a country, get a return of \$7.00 to \$10.00 dollars. You don't have to be an economics professor to know that's a great 'ROI'.

There is a growing body of research into the development of young children's brains that backs up Dr. Heckman's theories and informs his advocacy for investing in high quality early childhood programs. A brief from "The Center on the Developing Child at Harvard" posits that; "The science of early brain development can inform investments in early childhood. These basic concepts, established over decades of neuroscience and behavioral research, help illustrate why child development, particularly from birth to five years, is the foundation for a

prosperous and sustainable society. Early experiences affect the quality of (the brain's) architecture by establishing either a sturdy or fragile foundation for all of the learning, health, and behavior that follows. In the first few years of life, 700 neural connections are formed every second. Early plasticity means it's easier and more effective to rewire a young child's brain than to rewire parts of it's circuitry in the adult years. Scientists know that a major ingredient in this developmental process is found in the supportive relationships between children and their parents and other caregivers and educators. Emotional well-being and social competence provide a strong foundation for emerging cognitive abilities, and together they are the bricks and mortar that comprise the foundation of human development. The emotional and physical health, and cognitive-linguistic abilities that emerge in the early years are all important prerequisites for success in school and later in the workplace."

The policy implications locally and nationally are huge. The implications for parents and educators are profound. We must strive to provide access, for all children (and families), to excellent early childhood programs staffed by well educated and well compensated professionals. This requires programs that are developmental and personalized, and where children can grow emotionally, socially, and cognitively. Leaving out any area is like a three-legged stool trying to stand on two legs, incomplete and not able to support anything new. When 'academic' (cognitive) learning outweighs all other critical learning, then children become adults who, as Dr. Heckman discovered, are unable to access new learning successfully. One can extrapolate strong advocacy for sustained investment in teaching 'life skills' to include such a balanced curriculum throughout a child's education. As the saying goes; "Bigger kids, Bigger problems", implying the importance of continually helping children develop, broaden, and hone the bigger 'life skills' they'll need to be successful in all aspects of life. An obvious analogy is a medical one. If we invest in preventative medicine, eat well, exercise, avoid smoking, etc., we can avoid major medical costs, like open-heart surgery, down the road. What's more, we can attain a healthier and more fulfilling life. A great start is not only real good common sense, it's real economics and real science "sense'.

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