



University of Pennsylvania
ScholarlyCommons

Master of Applied Positive Psychology (MAPP) Capstone Projects Master of Applied Positive Psychology (MAPP) Capstones

4-13-2010

Heart Start: A paradigm shift in early childhood education

Elizabeth Gragg Elizardi
lizelizardi@gmail.com

Follow this and additional works at: https://repository.upenn.edu/mapp_capstone



Part of the [Child Psychology Commons](#), [Developmental Psychology Commons](#), [Education Commons](#), and the [School Psychology Commons](#)

Elizardi, Elizabeth Gragg, "Heart Start: A paradigm shift in early childhood education" (2010). *Master of Applied Positive Psychology (MAPP) Capstone Projects*. 24.
https://repository.upenn.edu/mapp_capstone/24

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/mapp_capstone/24
For more information, please contact repository@pobox.upenn.edu.

Heart Start: A paradigm shift in early childhood education

Abstract

Children are born in potential as strong and powerful human beings. Their strengths and gifts of character are nurtured by the environment in which they are raised and the caring adults who surround them in their early years. Research demonstrates that the cornerstones of child well-being are positive relationships, nurturing environments, and the image of the child as a capable citizen, thus leading to flourishing adults and communities. However, these relationships and environments need not be limited to the home, but rather should include schools, neighborhoods and organizations where children and parents participate and contribute to building social capital within a community. Statistics indicate that states with higher scores on the Social Capital Index are the same states whose children are flourishing. Therefore, the current research implies that quality early childhood development should inclusively: 1) build on positive relationships 2) incorporate environments that cultivate the strengths of the heart 3) recognize the strengths of children from the moment they are born. By doing so, early childhood development in America will be not only be giving our youngest citizens a head start, but also a heart start.

Keywords

early childhood education, character strengths in young children, heart strengths, teaching character, character development, head start, engaging environment, early childhood development, brain development, preschool education

Disciplines

Child Psychology | Developmental Psychology | Education | Psychology | School Psychology

Heart Start: A paradigm shift in early childhood education

Elizabeth Elizardi

University of Pennsylvania

A Capstone Project Submitted

In Partial Fulfillment of the Requirements for the Degree of

Master of Applied Positive Psychology

Advisor: Judy Saltzberg

August 1, 2010

Heart Start: A paradigm shift in early childhood education

Elizabeth Elizardi

eelizardi@lcm.org

Capstone Project

Master of Applied Positive Psychology

University of Pennsylvania

Advisor: Judy Saltzberg

August 1, 2010

Abstract

Children are born in potential as strong and powerful human beings. Their strengths and gifts of character are nurtured by the environment in which they are raised and the caring adults who surround them in their early years. Research demonstrates that the cornerstones of child well-being are positive relationships, nurturing environments, and the image of the child as a capable citizen, thus leading to flourishing adults and communities. However, these relationships and environments need not be limited to the home, but rather should include schools, neighborhoods and organizations where children and parents participate and contribute to building social capital within a community. Statistics indicate that states with higher scores on the Social Capital Index are the same states whose children are flourishing. Therefore, the current research implies that quality early childhood development should inclusively: 1) build on positive relationships 2) incorporate environments that cultivate the strengths of the heart 3) recognize the strengths of children from the moment they are born. By doing so, early childhood development in America will be not only be giving our youngest citizens a head start, but also a heart start.

Children are the living messages we send to a time we will not see. ~Neil Postman

Foreword

Time Travelers

It was a Saturday morning in the fall on Meurilee Lane. As I walked into my kitchen and felt the cold slate on my feet I stammered toward the counter where my coffee maker lived. Always a little bleary-eyed before the first cup of morning coffee, the dogs begged for my attention and I willingly offered a pat of acknowledgement as the list of the day's tasks began circulating in my head. I pressed the button on the machine and listened to the glorious sound of the beans grinding in my all-in-one coffee machine. Eliminating a step between personally grinding the beans and having a machine do it for me was one thing I could cross off of my growing to-do list.

With cup in hand I walked over to the window overlooking the backyard and breathed heavily as I thought about the massive amounts of yard work and the seemingly insurmountable piles of leaves. Four mature trees meant at least four hours of raking. My husband and I had actually kept track one weekend, perhaps to prove to everyone in our family who employs gardeners that we actually toiled over our yard every weekend. In addition to the back-bending ritual of raking and piling up lawn bags, the dust and dirt from the debris circulated into our sinuses and left us sneezing, coughing and wheezing for a good portion of the weekend. As I walked away I caught a glimpse from the kitchen door window of a woman raking her lawn two houses away. When you live in a neighborhood like ours, you could piece together stories of people's lives by watching them in their backyards, at the dinner table,

getting in and out of their cars and sometimes even overhearing conversations through baby monitors. In fact, when my husband, my daughter Scarlett and I first moved into our house on Meurilee Lane, we spent many evenings watching our neighbors eat dinner from our bay window. We would imagine the conversations they must be having by studying their body language and eventually it became a joke between neighbors as we would call each other on the phone and wave from our expansive front windows. We even learned each other's routines, knowing when their children would awake in the morning based on the height of the shade on the nursery window.

There were other unspoken rituals on our suburban street, like the synergy between the men, where one would initiate the yard work for the day by releasing the sound of his weed wacker or leaf blower and then watch as the other men poked heads out of front doors to acknowledge that "it was time". Seeing this early morning raking was not surprising because of the raking itself, but because the woman was Rona, our ninety-five year old neighbor. The only original owner still on the block, Rona raised ten children in a small three bedroom colonial and had been a widow for thirty years. She lived alone with frequent visits from her children and grandchildren. I watched as she ceremoniously raked her back yard leaf by leaf. On this particular day, she assumed the role of the primitive male on the street and gave me the leverage I needed to convince my husband that it was time to start on the yard.

Seeing Rona in this fashion reminded me that we were time travelers. Our South Four Corners neighborhood was built after World War II and quickly grew into a vibrant community with families raising young children. Neighborhoods then and now were built around children

and social relationships. My daughters spent countless afternoons racing down the street in big wheels and bikes as the mothers gathered together in huddles to talk about work, play, life and child-rearing. On some afternoons, the neighborhood children loved to knock on Rona's storm door and she, of course, welcomed the company. She would take the opportunity to tell us about how the street looked when she was raising her own children. We were humbled to learn that ten children grew to be ten adults in her small house while most of our conversations were about the lack of space for a family of four. It became clear that Rona was sustained by the laughter, playfulness and energy of the young children on the block and frequently commented about the neighborhood resembling what it looked like back in the 1950's. She made us feel like time travelers, reinventing a community that has existed fifty years before. And the regeneration all started with the children.

Good Goodbye

The old adage "You never know what you have till it's gone" became crystal clear one late June afternoon. I was getting my younger daughter ready for her afternoon nap when I heard the knock on the door. From upstairs I could hear that it was Sarah and her daughter Ana, Scarlett's best friend, from across the street. My stomach dropped. I had been avoiding this conversation. The night before Sarah and Jason threw us a barbecue to say goodbye to our neighborhood friends. To this day it sounds odd to call them friends, as the four years raising children together made us seem like family. We had decided to sell our house on Meurilee Lane and move closer to family in New Orleans. Sarah had stopped by because we were leaving the following morning and this was Ana and Scarlett's chance to say goodbye. We

watched as they hugged each other and offered comforting words to each other, “I’m going to miss you!” What seemed like a trivial exchange between a three and four-year old was a period of agony for their mothers. Tears ran down our cheeks as we recalled the afternoons spent outside, the children racing bikes down the street, the impromptu pool parties on the front lawn and the spontaneous dinners at our respective homes. I recalled the night that their second child was born, receiving the phone call while watching their older child, telling Ana that she was a big sister as she and Scarlett played together in the bathtub. The trust that had been built between our families was invaluable and intangible. Sarah and I hugged, promising to stay connected through phone calls and video chatting. Our parting words were about the seminal stages of raising children and how fortunate we both felt to share it with one another. Our relationship was generated by the connection between children. And now our children were summoning us to move on and find new roots. Little did we know how the friendships from Meurilee Lane would reinforce the strings on our parachutes, giving us the support we needed to fly.

The Leap

July 2009. I am a passenger on a rapidly descending airplane. The oxygen masks have been deployed and I breathe the emergency air. The warning signs are a bold, vibrant red, piercing through my eyes so harshly that it hurts to even look. Obnoxious screams invade my ears. We can’t stay here any longer. We need to make a move. With hardly any fuel, the plane threatens to crash and burn unless we figure out another escape. I draw attention to my body realizing that I have a parachute attached to my back. It has always been there. It beckons me

to jump. I turn my head and look out the window, momentarily embracing the openness and freedom of fresh air. I begin to walk slowly towards the exit door. Each step is thoughtful and precise, but the remaining inches I walk toward the brightly illuminated door seem like miles. I finally make it to the precipice. My life depends on jumping and I remember that I am not jumping alone. I take my husband's hand and those of my two children. The clouds are grey and gloomy, but as they move rapidly through the air, I catch a glimmer of sunshine down below. A familiar phrase comes to mind "Leap and the net will appear!" I close my eyes, take a deep breath and with both feet, we jump together from the plane.

November 2009. We leapt. We are still flying in mid-air and have not yet landed. We are supported by parachutes and hover above the surface waiting to land with grace and dignity. We are not together. Somewhere in the descent, my husband broke away. With a trusting fatherly grip he interlocked my hands with our daughters' fragile fingers and was torn away by a strong wind. I can hear him in the distance, laughing and crying. We feel each other's pain and sacrifice. I hear a whisper through the breeze reminding me that the winds will shift and we will land together. I have to trust.

Reality. Life is not a metaphor. Change is real and change is painful. Leaping means falling and the plunge can be quick or it can be prolonged by unexpected obstacles. Landing is inevitable, so make it stick. My family and I leapt from our life on Meurilee Lane in June 2009 with idealism and enthusiasm anchored by a deep longing for more meaning and purpose in our lives. Though we realized the risk, we never could have predicted being separated by 1100 miles during this transitional time. Our situation was less than ideal, my husband working full-

time in Washington DC while my daughters and I established a life in New Orleans. We were forced to grow our untapped strengths. Just as honeybees have five eyes to see the world, we used a larger field of vision to broaden our horizons, stay the course and relish the possibilities. We discovered that our colony can migrate between cities and our cells stay connected for two reasons: our hive is amply pollinated with love and energy from our supportive family and we know our mission.

The bonding ties on Meurilee Lane greatly sustained our family during the ten months of separation. Family dinners with Jason and Sarah and playing with their daughters gave my husband helpful reminders that soon we would all be together again.

May 2010. We finally landed together, as promised, and take a deep breath. We don't look up from where we came; the light would blind us and cause too much pain. We don't look down at the gaping hole of soil beneath our bodies; the indentation is deep and filled with a puddle of tears. We stand up together, brush off the dirt and unhook our parachutes; they are torn and faded. We hold hands and walk away from the wreckage of a hard fall, knowing that our roots will grow here. Like so many other resurrected post-Katrina families, we hear a soulful rhythm in our hearts, a call to help a city in need and a hard-fought mantra repeating "Mission Accomplished." And like the relationships generated through our children on Meurilee Lane, the infancy of New Orleans, still in its rebirth, is now connecting us to new neighborhoods, friends and family.

Introduction

Children can serve as the backbone of generativity within a community, cultivating positive relationships, supportive environments and creating networks of value. At the 2009 World Congress on Positive Psychology Martin Seligman issued a challenge to practitioners and scholars that 51% of the world's population will be flourishing by the year 2051. I posit that in order to make this number a reality, a focus on early childhood development is critical. By restructuring the framework of early childhood development and education to include a stronger emphasis on positive relationships, supportive environments and positive images of the child, children will be made more visible and valued as citizens of the world from the moment they are born. Armed with this new framework, it is my hope to create an early learning community development initiative in the city of New Orleans, Heart Start, with an emphasis on the aforementioned tenets. Within the scope of this research I will consequently highlight the economic advantages of employing an innovative approach and the implications of this paradigm shift.

We worry about what a child will become tomorrow, yet we forget that he is someone today.

~Stacia Tauscher

Section Two: Positive Relationships and Networks of Value

Positive relationships is one of the four pillars of well-being outlined by Martin Seligman (2009). The relationships surrounding a child are extensive. Nuclear family, extended family, caregivers, pediatricians, and social workers are just a few of the individuals who contribute to a child's expanding world. When a child's relationships are strongly rooted in a social network, then his/her environment is rich in social capital. These networks of value, or connections

among individuals, produce reciprocity and trustworthiness, a social intercourse which affects various indicators of individual, group and organizational well-being. Robert Putnam (2000) classifies social capital into two categories; bonding social capital and bridging social capital. While the former denotes social connections that are inclusive and rely on specific reciprocity, the latter is fueled by general reciprocity and inclusiveness. Both bonding and bridging social capital are buoyed by the trustworthiness of the individuals within the network. The protective factors of reciprocity and trust germinate the seeds of social capital in a community.

Trustworthiness within a community undergirds the reciprocity that is eventually established. It is the vessel that protects the transaction costs, the costs of everyday business of life, between people. Whether worrying about whether you got the right change at the grocery store or considering whether or not you locked your front door at night, those costs are reduced when trust is established in thin and thick ripples throughout a community. The thick trust of knowing that my neighbor Sarah would keep an eye on my children outside while I ran inside to check on the chicken is equally as important as the thin trust embedded in a neighborhood, enabling me to give the people in the coffee shop the benefit of the doubt when I get up from my laptop to use the restroom.

What is the importance of reciprocity? Jonathan Haidt (2006) posits that reciprocity is a deep instinct; it is the basic currency of social life. Reciprocity grew from the evolutionary model of ultrasociality that we typically observe in insects like ants and bees. In ultra social societies, individuals live together and reap the benefits of an extensive division of labor. Ultrasociality evolved into ultrakinship which grew into ultracooperation. Although kin altruism

may be reserved for those relatives who share similar genes, Haidt notes that human beings have extended the reach by calling non-relatives by names associated with family. Reciprocity is a vital component in building social capital because it reconnects people. It strengthens, lengthens and rejuvenates social ties. The mimicry involved in reciprocity, the “I’ll scratch your back if you scratch mine” mentality unites us and makes us feel as if we are one. Robert Cialdini (2001) studies what he calls the reciprocity reflex, theorizing that people want to repay favors. We will perform certain behaviors when the world presents us with certain patterns of input. Animals reciprocate based on visual stimulation while human beings do so the basis of meaning. Perhaps human beings engage in reciprocity because beyond the automatic reciprocity reflex, there is something else to be gained; meaning, purpose and positive relationships.

Positive Relationships and Positive Psychology

As noted, reciprocity and trustworthiness within an ultrasocial society breed positive relationships through the connections that are forged between individuals and groups; hence, the reason why bonds were so strong on Meurilee Lane. Positive psychology influences this model by studying the importance of social relationships.

“The good life is a social one, so why not understand and promote the good life at the level where it exists?” (Peterson, 2006). Let us consider the importance of positive social relationships as related to child well-being. Our brains work better when we are not feeling lonely or socially isolated. One research study supporting this claim was conducted by Roy Baumeister (2002). He organized three separate groups of adults and told them each three

different statements before completing simple memorization questions involving logical reasoning. The first group was told that they would have close relationships all of their lives. The second group was told the opposite and the third group was told unrelated bad news. The lonely group performed much worse than any of the others in the study. By simulating the feelings of loneliness and deprivation, Baumeister illustrated our need for one another. Social capital, building connections and creating networks of value enable children, adults and communities to flourish.

Section Three: Supportive Environments

The Community Environment

It is easier to build strong children than to repair broken men. ~Frederick Douglass

As previously mentioned, supportive environments for children extend beyond the home and reach into communities, schools, and social service organizations. For purposes of this paper, the environments that will be studied are the neighborhoods and communities with rich networks of value that provide a cradle of support for the emerging child. Capitalizing on what we know about the advantages of bridging and bonding social capital and its effect on positive relationships, how does one begin to effectively build a supportive community environment for children? When looked at through the lens of community well-being, Prilleltensky and Prilleltensky (2006) identify three key determinants of supportive environments: poverty, power and participation. They state that the poor are often marginalized and deprived of opportunities to participate and succeed in life. The amount of poverty in a given area will dramatically influence the level of community well-being.

Power is an amalgam of capacity and opportunity. The power to make a difference is conditioned by the availability of opportunities. People living in poverty may be aware of the opportunities present in their communities, but they lack the resources, or capacities to motivate change. Likewise, the messages that are sent to families in poverty through current federally funded preschool programs is a deficit-based approach, viewing children as empty vessels who are behind and in great need of academic instruction to prepare them for kindergarten.

The marriage of opportunity and capacity breeds power, however this union is further complicated by the fact that the power to make a difference is conditioned by environmental circumstances. Marmot (2004) refers to a study conducted by Dickens and Flynn analyzing the IQ of twenty different countries. Throughout the world there have been sizable gains in IQ since the 1950's, but in the Netherlands, eighteen-year-old men tested in 1982 scored twenty points higher on a standard IQ test than did eighteen-year-olds in 1952. As cited in the study, this dynamic leap cannot simply be explained by genetics; environment plays a role. A community is flourishing when its citizens feel empowered. Access to power is limited when environment factors are obstacles to opportunity and capacity.

The third determinant of community well-being that Prilleltensky & Prilleltensky highlight is participation, the maxim most closely related to social capital. A measurement of participation in a community would include: the amount of meetings citizens attend, the level of social trust, the degree to which they spend time visiting one another at home, voting rates, and time spent volunteering. The collective resources of civic participation, networks, norms of

reciprocity and organizations that foster trust allow for greater participation, which begets bonding and bridging social capital.

Early childhood development is the centrifugal force in cultivating power and participation at the community level, leading to a supportive community environment. Tracy Smyth and Tammy Dewar (2009) posit that in order to support the popular phrase “it takes a village to raise a family”, one must first learn how to raise the village. Early years community development combines short-term outcome with long-range planning that embraces the notion that communities can create their own solutions. An early years community development approach helps facilitate a community’s ability to thrive by empowering both individuals and groups. Building on their strengths, needs and interests, people gain the skills needed to effectively change their communities. Early years community development decreases childhood vulnerabilities by taking advantage of the wide window of opportunity early in children’s lives to provide them with the best start possible. If children truly are the messengers we send to a time we do not see, what do we want to message to say?

In conclusion, supportive environments at the community level create the bonding and bridging social capital, the networks of value that will ease the transaction costs associated with raising young children. By creating the ideal vision of the village, children will grow and prosper in connected neighborhoods, surrounded by adults who cultivate their inner potential.

Section Four: The Image of the Child

Character Strengths and Happiness in Young Children

Current research in positive psychology demonstrates that strengths of the heart – namely zest, gratitude, love and hope are more closely connected with life satisfaction and well-being than more cerebral strengths like love of learning or creativity (Park et al, 2004). Although valid measures of character strengths have been created for youth, such as the VIA Strength Survey for Children, metrics associated with character strengths in young children are lacking. Those that do exist rely heavily upon parent report and what is believed about a child's happiness instead of the actual happiness experienced by a child. Peterson and Park (2006) suggest that reliable measures are unavailable due to the fact that research on children has been dominated by studies of cognitive development instead of their social and emotional development. Although the capacity for character strengths have been observed in children as young as 15 months old they seem to emerge as early as age one, developing into stable traits by the age of three (Hay et al., 1999), furthering the importance of cultivating social and emotional development from an early age.

Peterson and Park (2006) conducted a study in which they obtained descriptions of 680 children whose parents were recruited from toy stores, daycare centers, pediatrician offices, and a parenting list-serve. Respondents were parents of children ages three to nine. After providing answers to demographic information, parents responded to several questions with written descriptions. Two expert judges coded the descriptions for mention of the 24 VIA character strengths and the coding scheme also captured words that are typically associated with character strengths. Conclusions from the research indicate that the three strengths of

character mostly closely related to happiness were love, hope and zest, showing that strengths of the heart are consistently linked to happiness.

The implications from this research study are vast. First, specific interventions that target heart strengths are important for cultivating overall life satisfaction and well-being among young children. Therefore, it is important for parents, caregivers and educators of the very young to consider nurturing heart strengths specifically. By focusing on gratitude, hope, zest and love as opposed to more cognitive approaches of development in the early years, we will be honoring a holistic approach to educating young children, further enabling parents, educators and caregivers to create an image of the child as a moral being, filled with the incredible potential to grow the strengths that will lead to happiness and well-being.

Section Two: Brain Architecture: A Blueprint for a Positive Image of the Child

The enormity of shaping a young child's mind, beginning with the moment of conception, is daunting. Nurturing a child's inner potential begins with the perception one holds regarding the capacities embodied in a young soul. While some view children as weak, dependent on adults, and limited in capacity, an image of strengths and capabilities and innate wisdom will lead to a holistic, positive image of the child.

In today's world, the human performance formula is unbalanced, focused mainly on cognitive abilities assessed through achievement scores. An emphasis on cognitive competencies conjures an image of a child who needs to be filled with knowledge in order to succeed. Therefore, in lieu of creating environments that foster the heart strengths of love, zest, gratitude and hope, early childhood classrooms are overrun with formative activities in

cognitive abilities like reading, writing and math. Instead of cultivating individual character strengths, most of the time we are preparing children, as early as three, for testing. However, research shows that IQ proves to be a weak predictor of how well we relate with others, perform at work and cope with a variety of daily challenges (Sternberg, 1985). The first three to five years of life is a critical time to nurture strengths, character and a positive image of the child. During this time, adults and caregivers have the opportunity to create an interior design that will house the future of our most precious citizens.

The single most important relationship in human nature is the bond between a mother and child and the love that is elicited from this attachment. The extensive research by Harlow and Zimmerman (1959) indicates that secure attachment bonds formed in the early years of an infant's life heavily influence positive adult outcomes due to the relationship between healthy attachment and the autonomic stress response in the nervous system. The heart strength of love is predisposed by a secure relationship between an infant and its caregiver (Bowlby, 1969). And securely attached children are better adjusted throughout life. To demonstrate the capacity towards growth in young children from the moment they are born, we must turn our attention to the vital brain development that occurs between the ages of zero to five. Holding a positive image of the child as a human being filled with endless potential will cultivate the heart strengths that ultimately lead to well-being.

Brain development is activity-dependent and every electrical activity that occurs shapes the way in which the circuit is constructed. A baby's brain is a quarter of the size of an adult brain at birth. The spinal cord and brain stem, located in the lower brain, are fully developed

at birth while the cerebral cortex and the limbic system are still primitive in infancy. A great number of neurons are present at birth. These neurons are structured like trees and brain growth is dependent upon brain cells sprouting hundreds of branches, or dendrites, which serve as the receiving point for synaptic input from other neurons. The synapses are the connecting points between the axon of one neuron and the dendrite of another. Information travels down the length of one neuron as an electrical signal and is transmitted across the synapse through the release of chemicals known as neurotransmitters. The numbers of synapses in the cerebral cortex peaks within the first few years of life, and then declines by approximately one third between early childhood and adolescence. This massive burst of synapse formation is known as the exuberation period and at its peak, the cerebral cortex creates an astonishing two million new synapses every second.

The hippocampus, amygdala and prefrontal cortex are the three major areas of the brain developing during the early years. During the exuberation period mentioned above, pruning and selection of active neural circuits takes place, demonstrating the crucial window of time that is present to positively impact the brain development of a child. Adele Diamond, Canadian Research Chair Professor of Developmental Cognitive Neuroscience at the University of British Columbia notes that as adults, 90% of our circuits are switched off (Diamond, 2006), Our experiences and our reactions to the environment determine which circuits gets switched on or off, further elucidating the need for healthy communities and healthy environments in the early years.

The three core abilities of the prefrontal cortex cited by Diamond are inhibitory control, working memory and cognitive flexibility. Inhibitory control is a person's proclivity towards self-control and impulse regulation. Working memory is the ability to hold information in the mind while mentally working with it and making sense of anything that unfolds over time. Examples include relating one idea to another, understanding cause and effect and following a conversation while keeping in mind what you want to say next. Cognitive flexibility explains the capacity to easily and quickly switch perspectives or the focus of attention, as in the case of adjusting to changing demands, or thinking of alternative ways to react when something happens.

Within the first year of life, significant maturational changes occur in the prefrontal cortex that help make important cognitive advances by the age of one. Growth in this region of the brain is measured in an assessment developed by Jean Piaget (1896), the A-not-B test, in which the three core abilities of the prefrontal cortex, inhibitory control, working memory and cognitive flexibility are visible. This test prompts children to view an object in space A or B, remember where it was placed, and then acknowledge the position during multiple trials. Though prefrontal cortex stimulation is observed at this early age, most development in that area occurs between the ages of three to five years, as typically assessed by the day/night task in which children are shown a card with a dark night and moon and are prompted to say the opposite of what they see.

Prefrontal cortex development not only relates to the development of capacities and potential for social-emotional learning, higher order executive function (EF) impacts a child's

ability to plan, problem solve and reason. Poor executive function is associated with lower productivity and difficulty finding and keeping a job later in life. Diamond expresses that executive functions are more important for school readiness than are IQ or entry-level reading or math. Poor initial EF's enforce negative feedback loops, problems paying attention, and controlling impulsive behavior in school. In the classroom, these behaviors are negatively reinforced when a child is removed, punished or given consequences for behaviors associated with executive function. In fact, teachers report that poor EF is the most difficult challenge in teaching (Rimm-Kaufman et al., 2000). On the contrary, children with better EF's are more likely to be praised for good behavior, enjoy school more and want to spend more time at their lessons, hence, a self-reinforcing positive feedback loop is created.

Research indicates that early deficits in EF's often do not disappear, but can grow larger and that five year olds today are behind in EF's compared to five year olds generations ago (Smirnova & Goudareva, 2004). Looking to adult outcomes, the incidence of social problems reflecting poor EF's such as crime, incarceration, and unemployment, is increasing dramatically at a high economic cost. Early advances in EF can reduce the later occurrence of aggression and anti-social behavior (Nagin & Tremblay, 1999).

The quality of life for a child and the contributions that a child will eventually make to society can be traced to the first few years of life. When early childhood development is infused with an amalgam of social-emotional, motor, language adaptive and cognitive skills, the child is more likely to succeed as an adult and circumvent the channels of generational poverty, including incarceration and dropping out of school (Erickson & Kurz-Riemer, 1999).

In 1994, Herrnstein and Murray published *The Bell Curve*, an academic and political analysis of adult socioeconomic success. In their review, the authors attribute the majority of adult outcomes to cognitive abilities as assessed by achievement test scores in adolescence. The argument that cognitive abilities are mainly determined by genetic expression leaves no room for the role of the environment, personality, or social-emotional determinants in shaping a child's ability to succeed as an adult. Though current practices in education are aimed at developing cognitive abilities, the environment and relationships developed by young children and their parents are just as important in a child's overall brain architecture. Epigenetics, a new field of study, theorizes that environmental effects on gene expression can be inherited. Therefore, high quality early childhood interventions beginning at birth cultivate abilities, enabling inequality to be targeted at its source, which in turn boosts the productivity of the economy (Rutter, 2006).

In summary, cultivating character strengths and implementing positive interventions between the ages of zero to five will influence brain architecture and help parents, caregivers and communities cultivate a positive image of the child. Because educational policy in American relies heavily upon measurement and research, it is important to review the economic implications of investing in children's social and emotional development and supportive environments.

Children are one third of our population and all of our future.

~Author Unknown

Section Five: The Economic Advantage of Investing in Early Childhood

The Social Capital Advantage

In America the issues of poverty are pervasive. The Child and Youth Well-Being Index Project at Duke University released its most recent findings in June 2010. In 2010, 21% of children in the United States will be living below the poverty line (Landau, 2010). From 2007 to 2010, an additional 750,000 children are estimated to live in food insecure households. There have been numerous attempts to circumvent the effects of generational poverty through social programs, education reform, prevention and youth development programs. Half of the inequality in the present value of lifetime earnings is due to factors determined by age eighteen (Heckman, 2008). The economist James Heckman posits that if society intervenes early enough, it can improve cognitive and socioemotional abilities and the health of disadvantaged children. Early interventions promote schooling, reduce crime, foster workplace productivity and reduce teenage pregnancy (Heckman, 2008). Additionally, the longer we wait to intervene in the child's life, the more costly it will be to remediate disadvantage.

Social capital is a community's kryptonite. States that score high on the Social Capital index and whose resident trust others, join organizations, volunteer, vote and socialize with friends are the same states whose children are flourishing. Although socioeconomic and demographic characteristics also impact statistics on child well-being, we must not discount the importance of social capital. States with high social capital have better educational outcomes as well. According to the Social Capital Index, the predominant factor in student scores in standardized tests and the rate at which students stay in school is the degree of social capital present in the state. Another correlate of educational outcomes by state is the amount of

informal social capital, where people connect informally with one another through card games, visiting with friends, etc.

Strong neighborhood cohesion is indicative of lower rate of child abuse, low-rates of working women and single parent homes. Pediatrician Desmond K. Runyan (1998) followed a group of preschool children identified as high-risk. 87% of the children were suffering from behavioral and emotional problems. The greatest predictor of successfully avoiding such problems was the level in which parents were involved in a supportive social network, lived in a supportive neighborhoods and attended church regularly (Putnam, 2000). Similarly, school outcomes are affected most strongly by neighborhoods in which children live, their family life, the schools they attend, and the resources that are available to them personally and through the school (Elias & Haynes, 2008).

The quality and capacity of our future population depends on what we do now to support early childhood development.

~Fraser Mustard, Founder, Council for Early Childhood Development

The Economic Advantage

Many challenges in adult society – mental health problems, obesity, heart disease, criminality, and competency in literacy and numeracy – have their roots in early childhood. Therefore, investment in early childhood is the most powerful investment a country can make, with returns over the life course many times the amount of the original investment.

How is America doing? United States schools graduate nearly 88% of students with an ever-increasing high school dropout rate. The potential annual return from investing in focused, high quality early childhood development programs may be as high as a 16%. In other words, for the everyday taxpayer, every dollar invested in early childhood education yields a \$16 public return from savings in the criminal justice system, healthcare and beyond, compared to the standard rate of return on stock market equity of 5.8%. Most of the research conducted on high quality ECD programs are small-scale programs, so the challenge becomes maintaining quality on a larger scale (Grunewald & Rolnick, 2006).

Funding for education in America relies heavily upon data collected from tests of cognitive abilities in elementary and secondary grade levels. Heckman shows that at age five, the measurable gaps in below average versus average cognitive scores are subsequently present at age eighteen and help to explain negative adult outcomes. However, schooling plays a minor role in closing this gap. Family background and issues of social capital present at birth are greater predictors of adult outcomes than schooling and cognitive abilities.

Investing in early childhood development can compensate for early disadvantage and provide the protective factors for child well-being in diverse socio-economic areas. The two most reliable studies on the economic advantage of investing in children at birth are the Abecedarian and Perry Preschool longitudinal studies . The Abecedarian program studied 111 disadvantaged children born between 1972 and 1977, whose families scored high on a risk index. The mean age upon entry was 4.4 months. The program was a year-round, full-day

intervention that continued through age eight. The children were followed through age twenty one.

The Perry Preschool program, started in 1962, involved 123 high-risk African American students fifty-eight of whom were assigned to the program group. The program implemented an active learning model emphasizing intellectual and social development competencies. Apart from a 2.5 hour school day for two years, teachers visited each child's home for 1.5 hours per week over a two year period. Parents also participated in monthly small group meetings with other parents facilitated by the program staff. The outcomes of the Perry preschool longitudinal study are categorized by social responsibility, scholastic success and socioeconomic success. The cost-benefit analysis indicates that the overall taxpayer return on investing in early childhood education was \$88,433 per child from the following sources: savings in welfare assistance, special education, criminal justice system, crime victims and increased tax revenue from higher earnings (Parks, 2000).

In both the Perry Preschool and Abecedarian programs, there was a consistent pattern of successful outcomes for treatment group members. At the oldest age test, the children scored higher on achievement tests, attained higher levels of education, earned higher wages, and were less likely to be on welfare or to be incarcerated. The studies showed that intervening at an early age with cognitive and noncognitive approaches, specifically addressing issues of social capital, raised the IQ of participants. Both programs employed interventions targeted at building positive relationships, supportive environments and social emotional development. The estimated rate of return to the Perry Program is 10% which is higher than

the returns in stock market equity and suggests that society as a whole can benefit from such wholistic programs. The total benefit cost-ratio is now estimated at \$17 for every dollar invested (Grunewald & Rolnick, 2006). Observations from both longitudinal studies suggest that skills beget skills and capabilities in cognitive, social and emotional competencies at an early age makes learning at later stages in life more efficient and more likely to continue.

“A community of completely independent people is not a community at all.”

~Mary Gordon, Roots of Empathy

Section Six: Heart Start

I began this paper with an illustrative example of positive relationships and networks of value in a neighborhood. The preceding sections have also demonstrated the importance of supportive environments, positive images of the child, as well as an investigation into current practices in early childhood education. From this research and investigation, I will be launching Heart Start, an early years community development initiative through the Louisiana Children’s Museum and its partners. In order to effectively launch this initiative, I will be following the 4-D cycle of Appreciative Inquiry constructed by David Cooperrider; Discover, Dream, Design and Destiny. The first two phases, discover and dream, are outlined below.

Discover: Who makes up our village and what is our collective relevance?

The initial phase in the creation of this collaborative would include an invitation to stakeholders and community members to join the team. Harrison Owen, co-founder of Open Space Technology states “Whoever comes is the right people.” David Cooperrider has posited

that human systems move in the direction of the questions we ask, so starting with the question “Who makes up the New Orleans early childhood community?” will be an influential launching point. Smyth and Dewar (2009) offer many helpful tips for forging relationships. First, be deliberate in finding ways to connect with various stakeholders. A variety of strategies will need to be employed, from open invitation to an initial dialogue, to a fun and positive event that will simply get people to show up. It will be important to exercise patience and flexibility during the process as people weigh their enthusiasm and level of involvement in the process. The initial step of building relationships is indicative of the first phase of Appreciative Inquiry, the process of discovery.

One technique I will utilize to gather people together and build interest in this initiative is to offer a Heart Start Open House for educators and social workers at the Louisiana Children’s Museum. The event will be centered structured around the three core components of the Heart Start Initiative; positive relationships, supportive environments, and positive images of the child in a strengths-based approach. There will be an opening plenary session for participants in which the research on brain development, social capital, positive relationships and strengths-based education will be introduced. Attendees will then select workshops to attend in 1 ½ hour blocks and disperse throughout the museum. From this event, I hope to generate a list of relevant stakeholders who can form the founding Heart Start team and an advisory council for the AI cycle.

Following the open house, the advisory council would meet to begin the Discovery phase of the 4D cycle. There are several techniques that can be employed to build capacity, interest and passion for the Heart Start Initiative:

1. Defining the village – take participants through an appreciative interview where they answer questions pertaining to the neighborhood, community, or village in which they were raised:
 - a. Consider the following questions as you think about your village:
 - i. Positive Relationships:
 1. Who was there?
 2. What extended family, friends or adults embraced you?
 - ii. Supportive Environments:
 1. What were your traditions?
 2. How did you spend time together in your community?
 3. What parts of your neighborhood felt good?
 - iii. Images of the child
 1. Did you have spiritual connections?
 2. What values did your village communicate to you as a child?
 3. How were your strengths nurtured?

Members would share stories with one another and then look for common themes as a larger group. This would create an opportunity map for advancing the dialogue and dreaming about possibilities. The advisory council would create a road map moving forward for the Heart Start Initiative in the key areas of positive relationships, supportive environments and positive images of the child.

Dream: What is possible for early childhood education in New Orleans?

Goal I. To organize and lead a partnership among community leaders and local stakeholders working in the area of early childhood development. The collaborative will include partners from three different domains:

1. Traditional partners such as parents, grandparents, extended family, foster parents, friends and neighbors.
2. Those who develop and run the programs that are offered to families with young children: preschool teachers, child-care providers, nurses, pediatricians, social workers, librarians, spiritual leaders, nutritionists, housing and social assistance workers, counselors at women and men’s shelters, mental health clinicians, family support workers.
3. Organizations that support the bigger infrastructure: parks and recreation, organizations that support families living in poverty, colleges and universities, arts communities, senior organizations, volunteer bureaus, municipal governments, chambers of commerce, major employers, small local businesses, large retail chains.

Goal II. To establish an awareness campaign targeted to at-risk and underserved communities to inform parents, caregivers, educators and community leaders of the importance of early childhood education and its impact on the healthy development of children.

Goal III. To create “Dialogues on Early Childhood Education,” a speakers series to provide quarterly trainings on best practices and models for early childhood education by regional,

national and international thought leaders to provide continuing education opportunities for early childhood educators, parents and policy leaders in New Orleans.

Goal IV. To deepen existing relationships with community-based organizations and to create new partnerships with childcare centers, schools and community organizations by creating and identifying programming in the areas of Parent Education, Professional Development for Child Care Centers; and Brain Development

Goal V. To advance the dialogue on the Reggio Emilia philosophy within the context of urban, high poverty head start programs and understand the value of this approach on overall child-well being and the cultivation of 21st Century skills; life and career, learning and innovation.

Outcomes of Heart Start

Outcome 1: To establish Heart Start, a partnership among traditional and nontraditional partners, as well as organizations that deliver services to families, working in the area of early childhood development that meets regularly to leverage resources to surround the community with support services and programming.

Outcome 2: The establishment of a public awareness campaign on the importance of early childhood education specifically targeted to underserved communities and populations. Materials would include posters, tool kits, book collections to deliver messages on the importance of reading to children, guidance on healthy food and general parenting information. Curriculum would be delivered to childcare centers and schools by leveraging partnerships within the Heart Start team.

Outcome 3: The creation “Dialogues on Early Childhood Education” a quarterly speaker’s series to train local educators or young children to build capacity among educators, community-based organizations and local policy leaders and to provide networking opportunities to strengthen programs and services within underserved communities.

Outcome 4: The establishment of training groups in the following areas:

Parent Education

- Develop a series of weekly, small group discussions for parents and caregivers on effective parenting strategies
- Facilitate a mentorship program for new and expecting mothers.
- Deliver Babysitting courses for teenagers, especially in high-risk environments.

Professional Development for Childcare Providers

- Facilitate bi-monthly workshops and trainings in line with the Louisiana Quality Rating System requirements for childcare providers to receive Continuing Education Credits and Professional Development Credits.
- Providing training for educators at partner sites
- Host teacher open houses at the Louisiana Children’s Museum to demonstrate curriculum available from the LCM and to provide trainings in the areas of cognitive and noncognitive skills.

Outcome 4: Workshops for the business community

- Partner with the local Chambers of Commerce to deliver a workshop for the business community on the advantages of investing in early childhood. Topics would be engaging employees as human partners, family-friendly tourism business practices, and economic arguments to support the role of business in early childhood. Essential questions for the workshop are: How is child development connected to business? Why should business care about the issues of children? What is the business community already doing in their own way to support families?

Conclusion

“Right now somewhere someone’s being born.”

~ Red Grammer

I hopped into the cab on Walnut Street, already late for an early morning class on a Saturday morning. Tony, the cab driver, waved me into the front seat, mentioning that he just had to drop the woman in the backseat at the salon. I agreed to go along for the ride. I listened to his story of growing up as a kid in Philadelphia and how his mother used to yell at him to “go outside and help a neighbor” when he started to get lazy on a Saturday morning. He trailed through his memory bank to pull out the story of being on the junior high football team and the joy that he felt when his mother invited the whole team to his house for peppers and eggs after they had arduously mowed the entire football field. Tony left me with one question, “What has happened to kids today?”

The answer to his question lies in the breakdown of positive relationships, supportive environments and the social and emotional development of our children. As a society we have progressed further and further away from our positive core. The only way to recapture its essence and regenerate the American community is by investing in the children whose hearts beat strongly and innocently with love, gratitude, zest and hope from the moment they are born. By doing so, 51% of our world will be flourishing by 2051.

References

- Bar-on, R. (2007). *Educating people to be emotionally intelligent*. Westport, CT: Praeger.
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83(4), 817-827. doi:10.1037/0022-3514.83.4.817.
- Bowlby, J. (1969). *Attachment and loss. Attachment, 1*. New York, New York, USA: Basic Books.
- Cialdini, R. (2001). *Influence*. New York, NY, US: Harper Books.
- Dewar, T., & Smyth, T. (2009). *Raising the Village*. Toronto, Canada: BPS Books.
- Diamond, A. (2006). The early development of executive functions. In E. Bialystok, & F. I. M. Craik (Eds.), (pp. 70-95). New York, NY, US: Oxford University Press. Retrieved from www.csa.com .
- Elias, M., & Haynes, N. (2008). Social competence, social support, and academic achievement in minority, low-income, urban elementary school children. *School Psychology Quarterly*, 23(4), 474-495.
- Erickson, M. F., & Kurz-Riemer, K. (1999). *Infants, toddlers, and families: A framework for support and intervention*. New York, NY, US: Guilford Press. Retrieved from www.csa.com.

- Gilkerson, L. (2001). Integrating an understanding of brain development into early childhood education. *Infant Mental Health Journal*, 22(1-2), 174-187.
- Grunewald, R., & Rolnick, A. (2006). A proposal for achieving high returns on early childhood development. Prepared for “Building the Economic Case for Investments in Preschool”, Washington D.C., December 3, 2004.
- Haidt, J. (2006). *The Happiness Hypothesis*. New York NY, US: Basic Books.
- Harlow, H.F., & Zimmerman, R. (1959). Affectional responses in the infant monkey. *Science*, 130, 421-432.
- Hays, D.F., Castle, J., Stimson, C.A., & Davies, L. (1999). The social construction of character in toddlerhood, in M. Killen and D. Hart (eds), *Morality in Everyday life: Developmental Perspectives*. New York, NY, USA: Cambridge University Press.
- Heckman, J. (2008). Schools, skills and synapses. *Economic Inquiry*, 46(3), 289-324.
- Hernstein, R.J. & Murray, C.J. (1994). *The Bell Curve: Intelligence and Class Structure in American Life*. New York, NY, USA: Free Press.
- Hewett, V. M. (2001). Examining the reggio emilia approach to early childhood education. *Early Childhood Education Journal*, 29(2), 95-100. doi:10.1023/A:1012520828095.
- Kroeger, J., & Cardy, T. (2006). Documentation: A hard to reach place. *Early Childhood Education Journal*, 33(6), 389-398. doi:10.1007/s10643-006-0062-6.

Landau, E. (2010, June 5). Children's quality of life declining, says report. *CNN*. Retrieved from www.cnn.com.

Marmot, M. (2004). *The status syndrome: How social standing affects our health and longevity*. New York, NY, USA: New Press.

Nagin, D., & Tremblay, R. E. (1999). Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. *Child Development, 70*(5), 1181-1196. doi:10.1111/1467-8624.00086.

Park, N. & Peterson, C. (2006). Character strengths and happiness among young children: Content analysis of parental descriptions. *Journal of Happiness Studies, 7*, 323-341.

Park, N., Peterson, C., Seligman, M.E.P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology, 23*, 603-619.

Parks, G. (2000). The high scope perry preschool project. *Juvenile Justice Bulletin*. October.

Peterson, C., Park, N., & Sweeney, P. (2008). Group well-being: Morale from a positive psychology perspective. *Applied Psychology: An International Review, 57*, 19-36.

Prilleltensky, I., & Prilleltensky, O. (2006). *Promoting Well-Being: Linking personal, organizational and community change*. Hoboken, NJ: Wiley Press.

Putnam, R.D., (2000). *Bowling Alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly, 15*(2), 147-166.

doi:10.1016/S0885-2006(00)00049-1.

Runyan, D.K., Hunter, W.H. et al., (1998). Children who prosper in unfavorable environments: The relationship to social capital. *Pediatrics, 12*-18.

Salmon, A. K. (2008). Promoting a culture of thinking in the young child. *Early Childhood Education Journal, 35*(5), 457-461. doi:10.1007/s10643-007-0227-y.

Seligman, M.E.P. (2009) Chapter One: What is well-being?. Manuscript in preparation.

Smirnova, E. O., & Goudareva, O. V. (2004). Play and arbitrariness in modern schoolchildren.

Voprosy Psichologii, 1, 91-103. Retrieved from www.csa.com.

Sternberg, R.J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York, NY, USA: Cambridge University Press.

Wilkinson, R.G. (2004). *The impact of inequality: How to make sick societies healthier*. New York, NY, USA: New Press.