Best Practices for Solutions

Early childhood interventions can improve the well-being of Memphis and Shelby County.

Children’s early brain development occurs through a process of interaction between children and their environments. The quality of those environments and relationships shape the degree to which children’s brains will develop effectively. Children’s early developmental experiences build the foundations for their subsequent success in school and life.

Memphis is currently rated as one of America’s most dangerous, least healthy, and least educated cities. What steps could we take today, as a community, to respond to these problems and their implications for the future of our city and county? Decades of research have demonstrated a strong relationship between a lack of fundamental resources in early childhood and long-term consequences such as teen pregnancy, school failure, unemployment, and crime (Gormley, Gayer, Phillips, & Dawson, 2005; Sampson, Sharkey, & Raudenbush, 2008; Olds et al., 1998.) Too often, children born to undereducated, unemployed, or incarcerated parents will themselves become parents at an early age, run afoul of the law, or fail to complete school.

More than half of the children born in Shelby County every year are raised in families lacking access to resources that children need for healthy development. If as a community we understand that many of our problems stem directly from the earliest experiences of our children, then perhaps we will be better positioned to make crucial decisions that can re-direct our city’s future.

Now is the time to invest wisely in the well-being of young children and families in order to reach the future we prefer for our community.
As a community, we must choose to do the right thing.

First steps are critical. We must make economic and social decisions now to improve the well-being of the next generation.

Building an effective early childhood investment plan is a key part of reaching our goals for Memphis and Shelby County. Economists identify a number of “currencies” that we need to consider in deciding on a plan of action:

- How much are we willing to invest to provide our children with the access they need to resources and environments that will lead to the best outcomes for our community?

- How long are we willing to wait to realize the full return on our investment? (Many of the gains realized by investments in early childhood grow over time).

- We must make decisions about our goals, and in turn about the specific and measurable objectives that we expect to achieve.

Through this process, we will be able to translate our vision into policy initiatives and strategies.

Figure 1 shows a model created by the University of Chicago economist and Nobel laureate James Heckman for the projected return on investments made at selected periods during childhood.
Studies show that investments in early childhood interventions are among the best that a society can make.

Decades of careful evaluations of early childhood interventions support the model created in Figure 1 which suggests that the greatest return on investment occurs for those investments made early in life. Studies of the highest-quality pre-kindergarten programs, for example, have shown a $17 return for every $1 invested in the program (Isaacs, 2007).

Armed with reliable data about best practices and interventions that benefit children and families, we have the capacity to assess:

- The scope of effective investments in early childhood, and their potential effects in Memphis and Shelby County.
- The expected returns to society that should be realized from such an investment. These include reduced crime rates, higher educational levels, increased human capital, and, in consequence, lower rates of unemployment and reliance on public assistance.
- The likely time frame for realizing these social and financial gains.
- The degree to which different strategic choices align with our priorities.

We can determine where we will achieve the greatest return on investment, both socially and economically, by focusing on the children and families most in need and implementing interventions that we know to be successful.

Figure 1: Returns to a Unit Dollar Invested at Different Ages, Assuming One Dollar Initially Invested at Each Age

Before entering kindergarten, the experiences of young children vary widely according to their family’s resources. These differences matter for the adults they will become, and for the community we will become.

Children born into poverty are:

- five times more likely to grow up with a single parent (McLanahan & Sandefur, 2004).

- half as likely to attend a high quality pre-kindergarten program (American Community Survey, 2007).

- a third less likely to be read to regularly (Memphis Literacy Council, 2006).

By the time they reach school, children born into poverty:

- will have moved much more often (Jackson & Mare, 2006).

- are much more likely to have had turbulent home lives (Schnitzer & Ewigman, 2005).

- are more likely to have lived in a high crime neighborhood (Popkin, Gwiasda, Olson, Rosenbaum, & Buron, 2000).

When they enter school, poor children are much more likely to attend high-poverty schools, where children are more likely to be suspended, to be held back, to become a parent before graduation, and to drop out. These children will have a much more difficult time making a living wage, securing health insurance, and avoiding crime (Gormley, Gayer, Phillips, & Dawson, 2005; Sampson, Sharkey, & Raudenbush, 2008; Olds et al., 1998).

As a result of different early childhood experiences, affluent children reach kindergarten with cognitive scores 60 percent above those of poor children (Hart & Risley, 1995). Families with more resources have an easier time providing for their children’s safety, security, and other needs.

Young children’s needs include communication: hearing rich vocabularies and receiving positive affirmations in daily conversation (Hart & Risley, 1995). Children do best when they have a stable home life in a safe and trusting neighborhood (Sampson, Sharkey, & Raudenbush, 2008) and when they receive high-quality child care (Rolnick & Grunewald, 2003). A stable and living wage also affords parents more time to focus on their children. Affluent parents find it easier to build healthy relationships with their children and guide them into positive and healthy relationships and activities outside the home.
Unfortunately, too many children in Shelby County can’t count on a healthy start in life.

In 2007, there were 15,234 children born in Shelby County (Tennessee Department of Health, 2007a).

- Typically, more than half (nearly 7,800) of children in Shelby County are born into poverty¹, distanced from the basic resources that would give them the best chance to thrive in school and life (Tennessee Department of Health, 2006).

- In 2007, 58.8% (8,954) were born to single mothers (Tennessee Department of Health, 2007b).

- 15 percent (2,352) were born to teen mothers (Tennessee Department of Health, 2007c,d,e).

- More than one in three (5,716) will be raised by single mothers whose education stopped in high school (Tennessee Department of Health, 2006). In 2007, these families tried to make ends meet on less than $19,000 a year (U.S. Census Bureau, 2007).

- Children in poverty will hear fewer words spoken at home and will have smaller vocabularies when they begin school (Hart & Risley, 1995).

- Their families are likely to move much more frequently than their middle-income peers (Pribesh & Downey, 1999). Many poor children will move more than five times before they enter kindergarten (Do & Lewis, 2006).

By the time low income and poor children in Shelby County enter school, their performance and well-being will reflect the experiences they had early in life²:

- Countywide, 62 percent of low income kids (about 9,500) will attend schools where most kids are poor or low-income. In the City of Memphis the number is much higher, with three out of four children attending high-minority, high-poverty schools.

- One in ten (1,696) will be placed in special education classes.

- Nearly one in five (2,620) will fail a grade.

- By fourth grade 13 percent will not be able to read at grade level.

- Girls from poor families are five times more likely to become mothers before they turn 18 than girls from families above the poverty line.

- Children from poor families are ten times more likely to drop out of school.

¹ The number of children born into poverty in 2006 is based on the self-reported income of the parent(s) at time of birth.

² The following figures are the independent estimates created by the Center for Urban Child Policy utilizing 2006 State Health Department birth certificate data, the Annie E. Casey Foundation’s Kids Count and Right Start Census Data Online, 2007 American Community Survey data, and information from the Tennessee Department of Education. The Annie E. Casey Foundation’s Kids Count Data Book can be found at http://www.kidscount.org/datacenter or http://www.kidscount.org/cgi-bin/cliks.cgi. American Community Survey data can be found at factfinder.census.gov and the Tennessee Department of Education Report Card can be accessed at www.k-12.state.tn.us.
Intervention 1: Nurse Family Partnership
Statistics are not destiny.

Thankfully, we all know of children and families who beat these odds. However, the fact remains that a child growing up in poverty lacks access to fundamental resources that can be taken for granted by middle-class and affluent families. The result is that too many children are set on a path to an outcome far different from the future we would choose for our community.

Making the right policy choices as a community can improve not only the well-being of children and families who are distanced from opportunities to thrive, but also our own shared future. On this front, there is good news: 50 years of study give us a broad range of research-based insights into the difference that informed early childhood interventions would make in Shelby County.

In last year’s Data Book, we presented an analysis of the implications of a full-scale nurse-based home visiting program in Shelby County. In other words, what would be the most likely outcomes – for both children and families – if every first-time single mother living in poverty in Shelby County received regular home visits from a trained nurse? Based on an analysis of the evaluation results of the Nurse Family Partnership (NFP) program, we projected that making the program available to just one year’s cohort of eligible mothers in Shelby County would result in significant benefits to the community. The projected return on each dollar invested is $2.88 (Karoly, Kilburn, & Cannon, 2005), meaning that a $20 million dollar investment, which would serve the 1,970 eligible women in Memphis, would result in a $57.6 million total savings to the public in the following areas:

- Smaller families and longer intervals between pregnancies, leading to stronger developmental experiences for children and greater incomes for families.
- Reduced reliance on welfare assistance and increase in maternal employment.
- A reduction in crime (based on program outcomes, we would anticipate 394 arrests would occur with the program vs. 887 arrests without the program).
- Fewer health care encounters for injuries or toxic ingestions among children under two.
- Lower incidence of severe behavioral problems (including anxiety, aggression, and depression) among children six and under.
Intervention 2: Chicago Child Parent Center Model
School-based interventions can make all the difference.

A second proven early childhood intervention that is worth considering is the Chicago Child Parent Center (CCP) model. The CCP is a school-based program that is centered on high-quality early childhood care and education. Centers are located in public schools in high poverty neighborhoods in Chicago. Low-income children as young as three years of age enter the program’s pre-schools, and stay with the program an average of one and a half years until they enter kindergarten. Ideally, children continue with the after-care component of the program through age nine.

The Chicago Centers also have high expectations for parents, including regular participation in class-room activities, along with attendance in parenting classes that provide skills training and mentoring. Like the Nurse Family Partnership program, the CCP has been the subject of scientific evaluation for several decades. This research has linked the CCP intervention to a number of significant improvements in the well-being of children and families served by the program. These include reductions in spending on school remedial services, reductions in criminal justice system expenditures for both juvenile and adult arrest and treatment, reductions in child welfare system expenditures associated with child abuse and neglect, averted tangible costs to crime victims, and increases in adult earnings and tax revenues as a product of increased educational attainment (Reynolds, Temple, Robertson, & Mann, 2001).

Yale University Professor Edward Zigler, one of the founders of the Head Start Program, recently praised the Chicago Child Parent program for understanding that when it comes to effective programming for children, our guiding philosophy should be “the younger the better” (Zigler, 2009). At the same time, Zigler argues, the Chicago program has demonstrated an ability to make powerful gains because it understands that children move through stages in life, and that “each stage requires appropriate environmental nutrients” (Zigler, 2009, p. 2). The CCP program is also a worthy candidate for consideration in Shelby County because it is funded through Title 1 funds, which received a significant boost in the recently passed federal Stimulus Bill.

If we envision growing a program comparable to the Chicago Child Parent Centers in Shelby County, it would make sense to begin by enrolling the cohort of approximately 7,500 three year olds in the County whose families are living in poverty. Subsequently, we could expand the program by adding a new cohort of three year olds each year, while also adding the subsequent stages of the program for the initial cohort of children admitted into the program until they reach age nine.

The cost of the CCP program is $5,219 per child for the preschool years and $1,874 per child for the after school program (in 2005 dollars) (Promising Practices Network, 2009). The pre-school component of the program alone has shown a rate of return on investment of $7.14 for each dollar invested in the program. For each three and four year old enrolled (at a cost for 1.5 years of $7,829), we would anticipate gains to individual families and to society approaching $55,896. We would expect a similar gain for each of the 7,500 children enrolled in the program in a given year.

3 The number of children born into poverty in 2006 is based on the self-reported income of the parent(s) at time of birth.
Chicago Child Parent Center shows a dramatic return on investment.

Figure 2: Gains Realized by Sample in Chicago Child Parent Assessment

The aggregate return on investment would be realized through savings in the following areas:

- Fewer crimes (based on program outcomes, we would anticipate 8,909 arrests would occur with the program vs. 13,231 without the program).
- Reduced grade retention rates.
- Reduced need for special education classes.
- Reduced rates of child maltreatment.
- Over 1,600 fewer high school dropouts.
- Increased lifetime earnings resulting higher tax revenue.

As these figures suggest, the gains offered by a high-quality early intervention effort are both tangible and significant. Rather than continuing with business as usual, we need to ask what decisions we could make today in order to arrive at the future we would prefer for our community. The practices outlined in this chapter provide a promising blueprint for our preferred future.
Interventions like the Nurse Family Partnership and the Chicago Child Parent Centers are key components of a comprehensive early childhood development initiative. Following the example of efforts underway in New York City (e.g. the Harlem Children’s Zone), as well as in other cities around the country (including St. Paul and Denver), Memphis and Shelby County should create an investment fund to finance early childhood interventions. The Investment Fund would be designed to:

- build a shared understanding of the current scope of public, private and nonprofit programs devoted to early childhood well-being.
- work to ensure that these initiatives are aligned with our understanding of best practices when it comes to early childhood development.
- prioritize investments on early childhood so that they best meet the needs of our children.
- be constantly reviewed and held to the highest standards of accountability to ensure that it is meeting predetermined benchmarks for both social and financial returns.

Building an Early Childhood Investment Fund represents a comprehensive strategy of prevention and resource-building designed to improve the quality of life for children in Memphis and Shelby County with the capacity to improve the future of the city and county.


References, continued


References, continued


Data

Chart data can be downloaded at http://theurbanchildinstitute.org/databook