Best Practices for Solutions

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Memphis is at the 'tipping point.'

Memphis and Shelby County have lost population for the first time since the Yellow Fever epidemics almost a century and a half ago. From 2000 to 2007 Shelby County lost 43,012 inhabitants, most from the City of Memphis, according to U.S. Census Bureau estimates. The eight-county Memphis Metropolitan Statistical Area (MSA) gained 16,485 residents primarily due to foreign immigration and the fact that most who left the city and county remained in the MSA.

In the meantime, though, Nashville's MSA gained 96,725, Atlanta 369,760, Birmingham 20,628, Little Rock 25,220, Louisville 24,698, Charlotte 190,631, Jacksonville 118,813 and Dallas 229,749.

"The ability of Memphis to serve as an economic magnet for people of this region . . . is clearly in question," Dr. John Gnuschke, director of the Sparks Bureau of Business and Economic Development, was quoted as saying in *The Commercial Appeal*. "Unless we develop high-quality job opportunities in abundance, it is unlikely we will be an attractive place."

Memphis has problems that place it at a disadvantage compared to other cities. Our public schools must educate disproportionately more children per capita – and more poor children – than any other district in the state. Moreover, Memphis is rated one of America's most dangerous, least healthy and least educated cities.

To reach a preferred future for the city we must act now to invest wisely in the well-being of young children and their families.

We know what works.
We just have to commit.

Breaking the poverty cycle begins with education. Education begins at conception.

First steps are critical. To improve Memphis and Shelby County we must start with our children. We must take economic and social steps now to improve the well-being of the next generation and have positive impact on our entire community in the future. We must begin at conception.

We must decide how much money we can and are willing to invest and set measurable and achievable goals. We must decide what kinds of long-term social changes we want and then identify the best strategies to make those changes. We know that investing in very young children pays a tremendous return. Studies estimate a $17 return for every $1 invested.[1]

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

- The up-front investment in very young children to improve Memphis and Shelby County
- The long-term return on investment from reduced crime, better education, lower unemployment and less reliance on public assistance
- A time frame for addressing these problems
- Our priorities for determining which constituencies can provide the greatest return

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

Pre-kindergarten learning
determines a child's direction.

Before entering kindergarten the experiences of young children are markedly different. Decades of research have demonstrated the deleterious relationships between poverty, single parenthood, attending failing schools, social disconnection, and the societal problems of teen pregnancy, school failure, unemployment, and crime.[2]
Children from affluent families reach kinder-

garten with cognitive scores 60 percent above those of children from poor families.[3] Parents with more resources have a greater chance of meeting their own needs of safety and security. Thus, they are able to focus attention on their children's needs.

Those needs include communication. That means hearing multiple words and positive affirmations in conversation daily.[4] They include a stable home life in a healthy, thriving neighborhood[5] and high-quality childcare.[6] Affluence allows parents the luxury of time to focus on their children. They can build healthy relationships with their children and steer their children into positive and healthy relationships and activities outside the home.

Research has shown that targeted interventions for young children, particularly from conception to age 3, can make a real difference in the outcomes of children who grow up in the circumstances that too many Shelby County children face. Targeted interventions can ensure the following:

- Children reach school ready to learn, prepared for academic and lifelong success.[7]
- Children have rich, nurturing and stimulating early childhood educations and social environments where they feel safe, loved and wanted.[8]
- Children live in stable families and are born to parents who are not children themselves,[9] who have finished school,[10] who avoid crime[11] and delay parenting until they are emotionally and financially ready.[12]

This is the current reality for children in Memphis and Shelby County:

- There were 15,324 children born in Shelby County in 2006.[13]
- More than half (8,535, 55.7%) were born to single mothers.[14]
- Fifteen percent (2,299) were born to teen mothers.[15]
- More than one in three (5,716, 37.3%) will be raised by single mothers whose education stopped in high school. These families will live on less than $21,000 a year in 2006 dollars.[16]
- At home these kids will hear fewer words

and have smaller vocabularies when they begin school.[17]
- Their families are likely to move 15 times before the child enters kindergarten.[18]
- Nearly half (6,896, 45%) of the children who will enter first grade in 2012 will be from poor and low-income families.[19] Poverty rates are highest in younger families.

If current trends continue, of these children born in 2006 in Shelby County:

- Two out of three (9,487, 62%) 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 minority, low-income schools.[20]
- One in ten (1,696, 11%) will attend special education classes.[21]
- Nearly one in five (2,620, 17%) will fail a grade.[22]
- By third grade children from poor families will have one-third the vocabulary of children from middle-class families (4,000 v. 12,000 words).[23]
- By fourth grade 13 percent will not be able to read at grade level (TCAP 13% below "proficient" in reading).[24]

To put Memphis and Shelby County onto a positive path for the future we must act now. Low-cost services that have little impact waste money. Responsible investments focus on effective programs that are implemented well and improved continuously.

There is a need for rigorous assessments to ensure that we are on the right track so that we can adjust quickly when necessary. The Center for Urban Child Policy has constructed the following matrix of best practice model programs for early childhood (on next page):

The Memphis Matrix

Identity of best-practice program	Cost to fund fully in Shelby Co.	Eligible population in Shelby County	Human Benefits	Economic Benefits
Chicago Child-Parent Centers	$663.8 million	50,947 between the ages of 3 and 9	• Reduces criminal activity and number of arrests, child abuse rates, grade failure, dropout rates, number who need special education[25]	• Reduces education costs • Improves future earnings of participants • Reduces criminal justice and crime-related expenses and costs associated with child abuse
Perry Pre-School	$180.8 million	9,983 between 3 and 4 years old	• Reduces teen pregnancy rates • Extends length of relationships between unmarried parents • Reduces dropout rates and special education needs • Increases college attendance • Reduces arrest rates • Decreases number on welfare • Increases pre-kindergarten test scores[26]	• Reduces costs of teen pregnancy • Provides families with more economic stability • Reduces education costs • Reduces welfare costs • Increases family incomes
Seattle Social Development	$149.3 million	38,940 between the ages of 6 and 11	• Reduces teen pregnancy and birth rates • Reduces rates of school expulsion[27]	• Reduces costs associated with teen pregnancies • Improves participants income
MIHOW	$20 million	5,074 women between the ages of 15 and 45	• Increases age of mothers at first birth • Reduces future, unplanned pregnancies[28]	• Reduces costs associated with teen pregnancy
Nurse Family Partnerships	$20 million	1,970 women between the ages of 15 and 45	• Reduces significantly behavioral problems of participants' children • Reduces number of future births • Increases time between pregnancies • Reduces welfare and food stamp needs • Reduces number of injuries and trips to the doctor for participants' children[29]	• Fewer babies born to teens ($7 million savings) • Reduced time on welfare ($.5 million savings) • Reduced use of food stamps ($.77 million savings) • Reduces crime ($25.6 million savings)
Teen Outreach Program	$15.6 million	17,434 between the ages of 14 and 18	• Increases age at onset of sexual activity • Reduces unplanned pregnancies[30]	• Reduces costs associated with unplanned pregnancies
Infant Health Development Program	$475 million	8,167 low birth-weight babies	• Creates higher IQ scores • Reduces behavioral problems[31]	• Kids with fewer disciplinary problems are less likely to be held back in school and graduate high school at higher rates[32]
Incredible Years	$434 million	102,831 children between the ages of 2 and 10	• Increases problem-solving and conflict-resolution skills • Reduces behavioral problems[33]	• Kids with behavioral problems are more likely to change schools. by reducing student mobility, we are increasing children's chances of completing high[34] school on time
Heathy Families New York	$16 million	4,666 expectant parents or who have a child under 3 months old	• Reduces number of low birth-weight babies • Decreases incidence of child abuse[35]	• Decreases costs of low birth-weight babies and costs related to child abuse
Early Head Start	$526 million	12,479 expectant parents or parents with children up to 24 months old	• Increases college attendance, reduces criminal activity and number of arrests[36]	• Increases participants' incomes, • Reduces costs associated with crime
Developmentally Supportive Care	$12 million	1,713 low birth-weight babies	• Increases scores of mental and physical indices at 12 and 24 years • Reduces length of hospital stays for premature and low birth-weight babies[37]	• Lower hospital costs for babies
Dare to Be You	$1 million	27,583 low-income children between 2 and 5 years old	• Improves family relationships • Strengthens parent-child relationships • Decreases behavioral problems[38]	• Fewer behavioral problems mean that children are more likely to stay in school and graduate on time.
Carolina Abecedarian Project	$6.8 million	61,574 low-income children between 6 weeks and 7 years old	• Decreases school failures and teen pregnancies[39]	• Reduces costs of education and teen pregnancies • Increases income

Any of these programs could be funded in Memphis. Rather than continuing with business as usual, we need to ask what we might do that would work better and would help us achieve a preferred future. To this end we must consider the more promising practices outlined in this chapter.

The Nurse Family Partnership is an example of best-practice programs. It is estimated to cost $20 million to implement fully in Shelby County. It is an evidence-based, nurse home visiting program that improves the health, well-being and self-sufficiency of low-income, first time parents and their children. Eligibility criteria for the program are as follows:
- The mother must be between 15 and 45 years old.
- Below 100 percent of poverty level
- Have less than 12 years of education
- Be single
- Be less than 29 weeks pregnant with her first child

There were 1,970 women eligible for the Nurse Family Partnership program in Shelby County in 2006. If nurses had visited the homes of all 1,970 during pregnancy and throughout the first two years of their children's lives, we know that we could have expected the following monetary savings and other positive results:
- Reduced costs from fewer future pregnancies and longer spacing between pregnancies would have amounted to $7,070,000
- Reduced time on welfare would have saved $575,733.
- Reduced need for food stamps would have saved $778,197.
- Reduced crime (394 arrests with the program vs. 887 arrests without the program) would have saved $25,697,625 each year.
- By age 2 the children of nurse home visited moms would have had 20 percent fewer health encounters for children's injuries or ingestions.
- By age 2 80 percent fewer injuries or ingestions requiring hospitalization would have occurred.
- By age 6 a much lower percentage of the children would have exhibited severe behavioral problems (anxiety, aggression, depression) as reported by their mothers (1.8% vs. 5.4%).

With this knowledge of 12 specific best-practice strategies and the information that the Memphis Matrix provides on eligibility and costs, what are the recommendations for next steps? How do we begin to move from where we are now to a more solid investment in services for children in the early years of life?

We suggest an early childhood (birth to age five) prevention fund. This means that local and state departments that provide services to treat children when developmental or environmental problems arise would dedicate a specific percentage of their budgets to initiatives that are designed to prevent those problems. Examples of those initiatives are included in the Memphis Matrix. In addition to adding more resources that are preventive and pro-active rather then reactive, this concept represents a shift in thought. That is to provide preventive initiatives as well as corrective programs.

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Smart Talk

by Janie F. Haywood and J. Helen Perkins
Reprinted from *Texas Child Care*

Improving children's oral language

We must continue to create a nation of readers. The skills needed for reading begin to develop in early childhood as children acquire oral language. Oral language refers to talking, listening, taking part in conversation, and understanding stories, for example. Early childhood teachers and caregivers play a critical role in children's language development.

By engaging children in oral language activities, we lay the foundation that will enable children to learn to read and write.

Oral language precedes reading

Children begin to acquire language the day they are born. Their cries, their ability to distinguish sounds, and their coos and babbles are all beginning attempts at language. Their language continues to dramatically develop during their first three years (Savage, 2000).

According to Morrow, Strickland and Woo (1998), children imitate the language of adults and create their own when needed. Children will continue to use language when their attempts are positively reinforced.

During their early years, children need supportive adults who will engage them in conversation, read to them, and provide experiences in which they can learn new words (IRA and NAEYC, 1998).

Children also need adult role models for reading and writing activities–reading the newspaper and writing a note to parents, for example. Children with these experiences will have a tremendous head start when they begin school.

Oral language precedes a child's acquisition of reading skills such as *phonemic awareness* and *comprehension* (Reutzel and Cooter, 2003). *Phonemic awareness* is the ability to recognize the smallest units of speech sounds, and *comprehension* is the ability to understand what is read–identifying the story's main character or retelling a story that was read aloud, for example.

Talking leads to learning

Children must have a receptive (listening) and *expressive* (talking) use of oral language so they can become successful readers (Clay, 1979). Talking to children helps build their vocabulary. *Oral vocabulary* refers to words children recognize in speaking or listening (National Reading Panel, 2000).

Children learn the meanings of most words indirectly; meaningful talk is powerful (CIERA, 2001). Children between the ages of 2 and 6 learn an average of 6 to 10 new words a day (Reutzel and Cooter, 2000). They learn these words through everyday experiences. They learn not only by talking with adults but also talking with other children.

Children also learn words by having books read to them. When 4- to 5-year-old children hear a single book reading, their expressive vocabulary significantly improves (Senechal and Cornell, 1993). Reading the same story several times allows children to hear adults repeat new words and to review words they find intriguing.

The size of children's spoken vocabulary is important. They will use the words from their oral language to make sense of the words they will read in text. In hearing *Little Bear's Friend*, for example, 4-year-old Jacob might recall how he made a new friend on vacation. The more children's oral language mirrors the written
language they encounter, the more successful they will likely be in reading (National Reading Panel, 2000; Bridge, 1978).

When texts relate to oral language experiences, children quickly discover that written and oral language are parallel forms of
language that serve similar purposes for communication (Reutzel and Cooter, 2000).

A sampling of pre-reading skills

- Understands the function of a book.

- Recognizes that print represents spoken language.

- Recognizes that words represent names of people and things.

- Distinguishes letters from words.

- Recognizes that words are separated by spaces.

- Follows words left to right and from top to bottom.

- Understands that the sequence of letters in a written word represent the sequence of sounds (phonemes) in a spoken word (alphabetic principle).

- Demonstrates phonemic awareness by rhyming, clapping syllables, and substituting sounds.

- Matches sounds to alphabetic letters.

- Recognizes and names most uppercase and lowercase letters of the alphabet.

- Uses picture clues to aid understanding of story content.

Rich oral environment serves as a scaffold

Teachers and caregivers can provide a scaffold for improving children's oral language. In simplest terms, a scaffold provides support for children while they are learning.

For example, an 11-month-old child is just beginning to walk but still falls sometimes. Her father reaches out his hand to help her to walk to her destination. She's excited because with his help she is able to walk without falling. She will need her father's hand for only a while; she will be able to walk by herself soon and no longer need the scaffold, or support, from her father.

More specically, scaffolding is an adult-child collaboration that fosters cognitive growth, or learning (Berk and Winsler, 1995). For example, a 2-year-old points at the refrigerator and says, "Juice." While Ms. Haywood is opening the door, she says, "Crystal wants some juice." She takes out the juice and gives it to the child: "Here's some apple juice." The child is happy because she has what she wanted.

In this example, Ms. Haywood has provided a scaffold. She is saying in a complete sentence what the child will eventually say on her own. Ms. Haywood is also using standard English, not baby talk. By providing this support, Ms. Haywood is helping the child develop oral language and eventually become a reader.

Extending or rephrasing a child's attempts at speaking is one aspect of an environment rich in oral-language opportunities. Equally important is actively listening to children. Stopping what you are doing, gaining eye contact, waiting until the child has finished, and occasionally rephrasing what the child has said helps the child feel heard.

Active listening by an adult encourages a child to talk more, to try unfamiliar words, and to experiment with sounds. Another important element of a rich oral-language environment is reading to children. Children love hearing stories and are fascinated with the sounds of words. They will grow up connecting books and reading with warm, pleasant times. They will also imitate the reading habits of adults around them.

Discussing stories will help children understand how meaning is made. It will help them to understand the story and make their own meaning. Discussing stories will also help children to understand story elements such as plot, characters, theme, problem, and solution. (See box on next page for more reading tips.)

Use books to stimulate oral language

- Always have available a variety of books.

- Choose high-quality books about topics such as animals, places, and things that children like.

- Choose books that positively reflect children's identity, home language, and culture.

- Discuss the story before, during, and after reading.

- Discuss the title and what might happen in the story. Encouraging the children to make predictions stretches their thinking and imagination.

- Point to the pictures and talk about them.

- Help children relate words to their prior knowledge and experiences such as taking a bath, eating, or playing outdoors.

- Read in a natural way, as if you were talking. Use expression by changing your voice tone with each character. Use hand and body gestures.

- Pause to explain unfamiliar words.

- Encourage parents to take advantage of times in the doctor's waiting room and at the laundromat by talking and reading to the children.

Offer oral-language activities

A rich environment enhances children's language development indirectly. You can also enhance development directly by providing activities aimed specifically atimproving oral language skills.

Infants and toddlers

- **Read:** Read to infants for at least 30 minutes a day. Read stories or poems. While reading, position your mouth or face where the infant can see it. While reading to toddlers, encourage them to turn the pages.

- **Talk:** Talk to infants about what you are doing. Talk about changing the diaper, washing hands, and putting on shoes, for example. Use short and simple sentences.

- **Name surrounding objects:** Pronounce the names of objects that surround the baby such as bottle, diapers, and table. The baby will begin to connect the sound of the word to the object.

- **Look and listen:** Talk about what you see and hear. When a baby drops a spoon, for example, say, "Did you hear that? Your spoon hit the floor."

- **Give simple directions:** Give a toddler simple directions and recognition for completing the task. "Please go and get your cap." "Yes! You got your cap. Now you can put it on your head."

- **Provide toys:** Have stuffed animals, puppets, and other toys available for children because playing with them will encourage children to talk.

Infants and toddlers (cont.)

- **Play "Follow the Leader":** Encourage children to follow you around the room and name each object you touch.

- **Talk about family pictures:** Ask parents to send a family photograph (one they need not have returned), and encourage children to talk about it.

- **Ask open-ended questions:** Frame questions so they require the child to answer with several words, not yes or no. Ask questions such as "If you wanted to have more fun in this play yard, how would you change it?" and "What did you do at your grandmother's house yesterday?" Be sure to listen while the child talks.

  A rule of thumb is to begin questions with "wh" words. Questions that begin with *who, what, where, when,* and *why* (and how) encourage children to talk and to begin to explain their answers. They will use more words. Sometimes they will use words they didn't know were in their vocabulary

Preschoolers

- **Provide props:** Place props in the dramatic play center or use at circle time. A dentist kit, for example, may encourage children to talk about their experiences in going to the dentist.

- **Discuss art work:** Encourage children to discuss their creations: "Tell me about your painting." "How did you feel while making this collage?"

- **Talk while playing:** Encourage children to talk while playing in the block building and dramatic play centers; these activities are interactive and collaborative. While children are playing and talking, their vocabulary will improve because they hear themselves and remember some of the words they have heard adults use.

- **Play "Objects in a Bag":** Place a few items such as a cap, plastic cup, and spoon into a bag. Have the child pull an object from the bag and talk about it. The child can describe the object and talk about how it's used.

- **Record sounds in nature:** Tape record sounds from outdoors. While playing sounds such as birds, moving vehicles, and dogs barking, encourage children to talk about what they hear. Encourage children to write about or draw pictures representing the sounds they hear.

- **Solve a puzzle:** While working with a child to solve a puzzle, talk about the pieces, colors, and shapes. Encourage conversation.

- **Take field trips:** Expose children to a variety of experiences by visiting the zoo, library, park, and museum. Encourage children to make comments and to ask questions. Encourage children to tell their families about their trip.

- **Read or tell a story every day:** Vary the reading format, using books as well as flannel board and puppets, for example. Have a well-stocked book center that children can use on their own.

- **Tape a story:** Read a story and record it

on tape. Make the tape available for children to play and enjoy as many times as they want.

- **Encourage pantomime:** Encourage a child to retell their favorite story or pretend to be a character from the book in front of a mirror.

- **Play a rhyme game:** Say "Ball rhymes with call." Spell out the words–"Ball, b-a-l-l and *call*, c-a-l-l." Encourage the child to say the words to feel and hear how they rhyme.

- **Sing:** Sing songs and chants. Be ready to sing the same songs over and over.

- **Read labels:** Help children to read the labels on items. Make labels for objects in the classroom, such as "wastebasket," "door," "blocks," and "paint."

- **Provide writing materials:** Encourage children to write by making available materials such as a variety of paper, pencils, non-toxic crayons, paints and brushes, and washable markers. Set up a special place for reading and writing.

- **Dictate a story:** Have the child dictate a story to you while you write what the child says.

- **Write notes:** Write the child a note, such as "Wow! You caught the ball three times today." Read the note to the child in an expressive way.

- **Loan books from your library:** Set up a book lending program so children can take books home to read with their families. Oral language activities lay the foundation for future literacy learning. By providing a rich oral-language environment,

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