Free To Read

Growing a nation of readers by investing in families and communities

FREE TO GROW

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For too many children in our nation, the road to reading is not yet straightforward and predictable. Their **family and community environments** don't provide the supports that all children need to be successful readers. To ensure that these children are on the **right path**, simply doing more of the same is not enough. Doing more means thinking more **broadly and boldly** about reading readiness. It means **thinking more systematically** about the wide range of factors and conditions that can be roadblocks to reading, as well as those that foster **healthy learning**. Doing more challenges policymakers to **use resources differently**, in a more integrated way, to engage people from all walks of life to **work together** to improve reading. And doing more means **advocating** for a significant public **investment** in all of the settings in which children learn and grow—in **families**, **schools** and **communities**.


Arely
Chavez

FOREWORD

In 2003, responding to the early childhood field's intense policy focus on reading readiness, the Free To Grow National Program Office asked Rima Shore, a noted writer in the field, to help us explore the relationship between Free To Grow's efforts in family and community strengthening and literacy outcomes. At the time, it seemed a relatively straightforward task—a compilation of recent research on what it takes to "grow" good readers and the family and community contexts in which young children grow up.

But why were we, a public health focused prevention initiative, interested in contributing to the ongoing national conversation about reading readiness? Our work with Head Start was not directly focused on classroom outcomes, but rather on the family and community environments that make young children vulnerable to substance abuse and other high-risk behaviors as they grow up. What did this work have to do with helping children become successful readers? A brief account of Free To Grow's history and efforts to inform Head Start's work over the past decade can provide some context.

DEVELOPING FREE TO GROW

Nearly 13 years ago, I was approached by the Robert Wood Johnson Foundation and asked to head a new prevention initiative they sought to pilot. To pursue this innovative work, the Foundation hoped to partner with Head Start, the nation's premier early childhood program serving low-income children and their families. As a member of the Shalala Quality Committee for the Improvement of Head Start, which was at that time crafting revised Performance Standards for the program, I sensed an opportunity to test models that had the potential to broadly influence how we support young children's overall development nationally.

The program that emerged from those early conversations was called Free To Grow. Its premise was simple. Built on the growing body of research showing that family and community contexts matter in young children's healthy development, it assumed that in order to support successful child outcomes, especially for children living in our nation's most economically vulnerable families and communities, we must strengthen the overall environment in which those children grow up—in particular, their families and neighborhoods. Moreover, the program approach required that diverse partners, many of whom had never collaborated before, come together to develop sustainable solutions that both engaged families and fostered environmental policy changes on their behalf. These relationships included unlikely early childhood partners like law enforcement, code enforcement, and community development groups, as well as substance abuse and mental health treatment programs, schools, and a broad base of community residents.

A growing body of **research** suggests that **widening** rather than narrowing our lens will be necessary to **achieve** our national literacy **goals**.

BREAKING NEW GROUND

Free To Grow was built upon a public health approach to working in communities. It called upon Head Start to begin to acknowledge that many of the challenges faced by families embodied both individual and systems components—and to seek out partners committed to implementing interventions designed to influence both sides of this equation. It sought not only to help Head Start program leaders bolster their efforts on behalf of individual families participating in their programs, but also to work with them toward solutions that addressed community conditions and therefore could strengthen outcomes for multiple families.

Applying a public health model of prevention within an early childhood environment broke new ground. Agencies found the work challenging. Yet Free To Grow's approach resonated deeply among the families, communities, Head Start staff and partners who participated in the model development phase. Neither local Head Start leaders nor their partners were steeped in public health theory, but the initiative's focus on families *and* communities made intuitive sense, and there was growing interest in testing the model more broadly. Thus, in fall 2000, the RWJF, now joined by the Doris Duke Charitable Foundation and the Office of Juvenile Justice and Delinquency Prevention, launched a 15-site national evaluation and demonstration program.

WIDENING THE LENS

In 1994, when Free To Grow came into being, Head Start was poised to implement revised Performance Standards emphasizing family and community partnerships as a critical component of its comprehensive approach to supporting early childhood development. By the time we launched the national demonstration program, the political and policy context had changed. The landscape was altered by passage of the No Child Left Behind Act of 2001 and a growing focus on school readiness at the state and national levels. At Free To Grow, we began to wonder whether our emphasis on family and community environments was out of sync with emerging policy trends.

But was it? Those of us who had drawn our framework from the work of child development experts like Urie Bronfenbrenner, who focused on the ecological development of the child, were increasingly worried that the narrowing focus on early literacy would ultimately not get us where we wanted to be–with all children ready to learn and capable of school success. Indeed, a growing body of research suggests that widening—rather than narrowing the lens—would be needed to achieve our national goals.

Even Head Start's own research pointed to the link between family and community environments and successful school outcomes. Data from the 2002 FACES report showed a clear relationship between cumulative risk and children's cognitive outcomes. Within the family domain, Head Start children living in families with four or more risk factors (nearly 20% of the sample) were reported to have more behavior problems and to score significantly lower on a broad range of early literacy outcomes.



Children whose mothers were depressed (nearly a quarter of the sample) performed worse on cognitive and socio-emotional scales. Within communities, families living in more violent neighborhoods reported more aggressive, withdrawn or hyperactive child behavior and less positive social behavior. These findings were highly correlated with maternal depression, suggesting that women suffering from depression were unable to mitigate the negative effects of their violent surroundings on their children (Vaden-Kiernan, D'Elio, Hailey, O'Brien, June 2002).

UNDERSTANDING THE RELATIONSHIP BETWEEN FAMILY AND COMMUNITY ENVIRONMENTS AND READING READINESS

These data and other emerging research trends underscore the need for a deeper understanding of the relationship between family and community environments and reading readiness. This literature is quickly growing and each day brings new contributions to our body of knowledge. The pages that follow summarize key trends, mindful that for years to come, researchers will continue to grapple with the complex challenges of understanding the effects of family and community contexts on child outcomes.

To be sure, future studies will increase our understanding of these issues. But even now, a growing body of evidence suggests that Free To Grow, and the public health foundation on which its rests, may hold important lessons for policymakers seeking to strengthen reading readiness. In particular, the research calls for a broader approach—one that moves beyond the classroom and addresses the family and neighborhood contexts in which children grow and learn. It highlights the need to work toward settings where all children will truly be "Free To Read."

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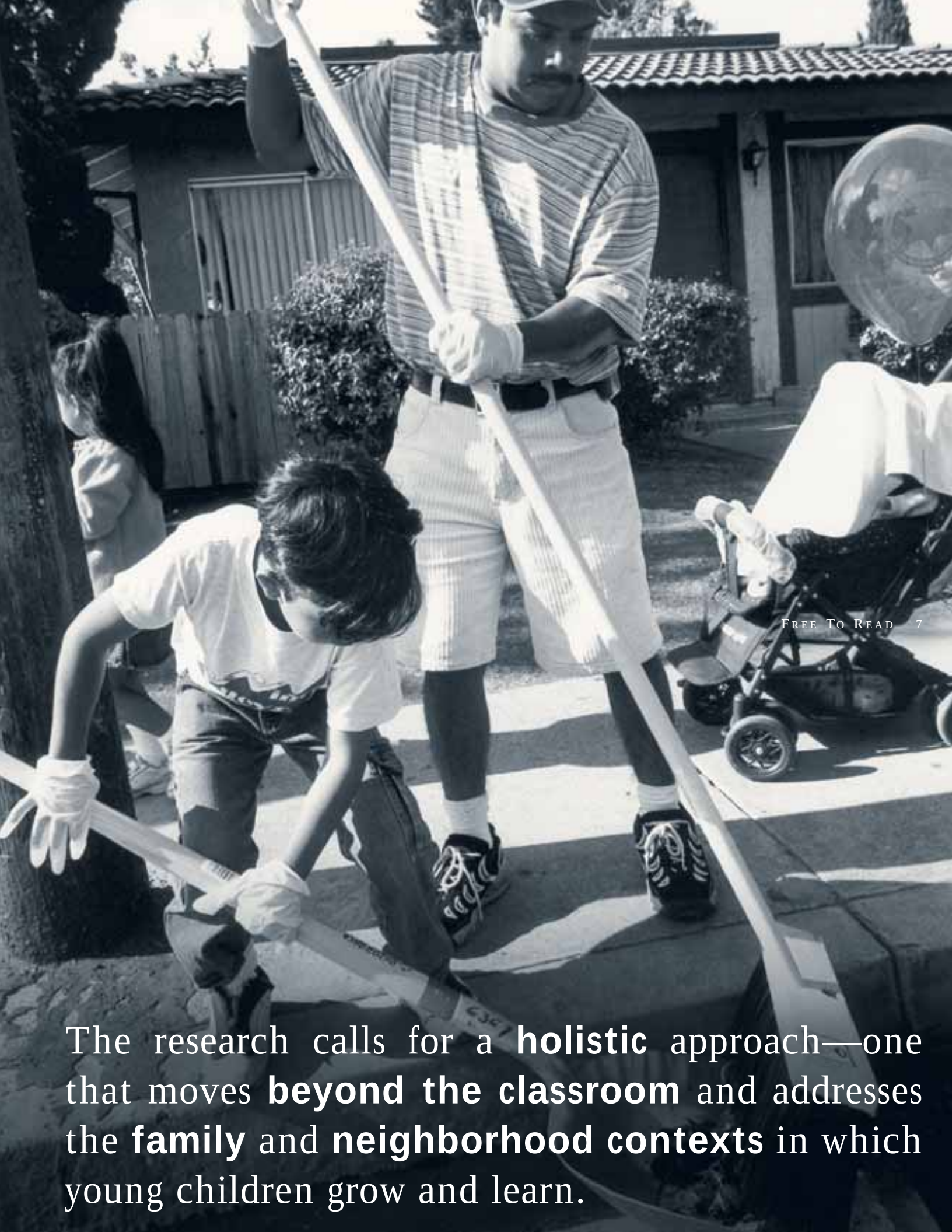


The research calls for a **holistic** approach—one that moves **beyond the classroom** and addresses the **family** and **neighborhood contexts** in which young children grow and learn.

A child and a book don't exist in a **vacuum**. They are situated in a **set of contexts**: school, home, community. Each one has an **impact** on the child's **relationship** to the book, and to the letters, images and ideas that fill its pages.

A Broader Strategy For Improving Reading Achievement

STANDING ON TIPTOES, A SMALL CHILD REACHES FOR A STORYBOOK

The book is on a shelf, in a room, in a home, in a neighborhood. In that home, in that neighborhood, people may be attentive or distracted, patient or frustrated, frantic or calm. They may speak warmly, harshly, or not at all. Close adults may keep an eye on the child while mopping the floor, surfing the net, or watching TV. They may share the storybook experience, divert her attention to something else, or ignore her altogether. The adults may read easily, with difficulty, or have no reading skills at all.

Out the window, the child may see fields, a cul-de-sac, or tenements and boarded-up stores. The community may be desolate, with few services, parks, or other public spaces, or it may offer playgrounds, libraries, museums, bookstores, and cafes. Family members may take the child on frequent outings, chatting all the while about the sights and sounds around them. Or they may avoid contact with the outside world, hoping to insulate her from its dangers. The neighborhood may be home mostly to working people or to many jobless residents. Neighbors may speak one language, or two, or more.

Wherever they may be, that child and that book do not exist in a vacuum. They are situated in a context—or more precisely, a set of contexts: school, home, community. Each one has an impact on the child's relationship to the book, and to the letters, words, images, and ideas that fill its pages.

THIS REPORT ENVISIONS A NATION WHERE ALL CHILDREN ARE FREE TO READ

It envisions homes, schools, and communities where progress toward literacy begins early and is free of the stumbling blocks that have impeded achievement for millions of students.

Getting children off to a good start as readers has always been an important aim of elementary education. Today, there is an even stronger emphasis at the federal and state levels on reading as the key challenge of elementary schools, and on getting children ready to read as the major goal of kindergartens and preschool programs. In part, this emphasis reflects concern about disappointing reading achievement. As the National Research Council has reported, large numbers of students in American schools, including children from all social classes and economic circumstances, face significant difficulties in learning to read.[1]

But today's emphasis on reading readiness also reflects new insights into how children learn to read—the specific pre-reading skills that prepare children for elementary school instruction and the competencies that underlie those skills. This research has produced three key findings that have significant implications for policymakers.

- *First, learning to read is a developmental process.* It begins with newborns' first exchanges with important adults, with their earliest experiences with sound, gesture, and meaning, with mimicked nonsense syllables, songs, rhymes, and picture books. It proceeds gradually, taking different forms at different stages.

What is needed is a **commitment** to **"total surround"** literacy.

- *Second, high-quality preschools and schools can make a difference*. Competence in reading is not just a matter of innate ability or intelligence, as some believe. It can be taught—beginning in the early years. Children who master the reading readiness skills described in this report learn to sound out words more easily—even when researchers control for other factors such as intelligence.
- *And third, schools alone cannot raise reading achievement*. Children's mastery of reading readiness skills hinges on their overall development—the physical, cognitive, and socio-emotional competencies that underlie those skills. And those competencies are significantly affected by the contexts in which children grow up—including both homes and neighborhoods. Boosting achievement will therefore require a broader strategy—one that focuses not only on instructional strategies, but also on approaches that strengthen families and communities.

THE STAKES ARE HIGH

This report makes a case for public investment in a wide range of supports—in schools, homes, and communities—aimed at ensuring that all of our children become eager, able readers in the primary grades. The stakes are high. Boosting reading achievement can potentially improve the lives and prospects of millions of children and sustain the vitality of the nation they will inherit. Solid reading skills not only help children succeed in school; they also play a role in disrupting the pattern of poor achievement and low morale that afflicts many families and communities.

But if we fail to act, we place our children and our nation in jeopardy. Weak readers do not fare well in the information-based economy of the new century. As things stand, say the scholars of the National Research Council, "A devastatingly large number of people in America cannot read as well as they need to for success in life."[2]

Bold action is needed to address this challenge. Very few children with serious reading difficulties ever graduate from college. They are ill-prepared to meet the needs and expectations of prospective employers. As they move toward adulthood, they suffer disproportionately from social ills such as delinquency and drug abuse. This interferes with positive parenting and civic participation, fraying the social fabric and creating a vicious cycle of failure and despair.[3]

The research presented in the pages that follow shows what it takes to "grow" good readers and why we must act now to ensure that young children are ready to profit from reading instruction when they reach the primary grades. It shows that policymakers' best efforts to lay the groundwork for literacy will fully succeed only if they support and strengthen all of the settings in which children learn.

NO READER IS AN ISLAND

Is a broader reading-readiness strategy really necessary? Does it really take a village to get kids to read? What about the preschoolers and primary grade children who seem to pick up reading skills all by themselves?

No reader is an island. Even those who seem to pick up reading skills on their own have benefited from years of exposure to myriad sounds, sights, sensations, and ideas that foster literacy. Whether consciously or not, the adults in their lives have engaged them in many reading readiness activities, mimicking their trills and

gurgles in the early months, conversing and singing with them each day, playing rhyming games, and reading to them. Many young children who seem to learn to read on their own have had thousands of hours of "lap time."

All of these early experiences form an invisible springboard that allows the developmental leaps needed to make sense of text. Moreover, children who learn to read easily have had the kinds of early care and experiences that allow them gradually to gain self-control, pay attention, and keep trying even when success does not come quickly. These children are free to read.

But judging by elementary school reading scores, millions of other children face stumbling blocks on the path to literacy. This is not surprising. Learning to read is not easy. It is challenging, in part, because it is not natural. It is based on a code known as the alphabetic principle, which maps minimal units of written language onto minimal units of spoken language. It is not just an artificial code; it is an irregular code. And it makes a considerable demand on a child's memory. There is nothing obvious about the idea that marks on a surface stand for sounds, or that such marks can be lined up and marched across the page to convey information or express ideas. These concepts eluded humans for most of our history. If they were self-evident, reading and writing would probably have appeared much earlier.[4]

When children have trouble learning to read, it is important to focus on schools and to examine the methods and curricula their teachers are using. But that is not enough. We must also consider the kinds of experiences available to them in their homes and neighborhoods. Are children getting the kind of care and attention that build a solid foundation for reading, fostering the basic competencies that underlie reading skills?

TOWARD "TOTAL-SURROUND" LITERACY

Most children learn to read in school. Improving teacher preparation and classroom practice can therefore help to raise reading achievement. But strengthening literacy is a broader problem, analogous to many challenges faced in the public health field. Given a zip code, chances are that researchers can predict with fair accuracy not only the rate of low birth weight or asthma, but also the rate of poor literacy outcomes. Public health strategists know that problems like low birth weight or asthma cannot be solved by focusing solely on medical education or hospital protocols. A broader, more systemic approach is needed—one that takes into account families and communities as well as individuals, policy as well as practice. The same is true in the realm of literacy. Focusing on teacher education and instructional strategies is part of the answer, but only a broader approach can ensure the healthy development that allows children to benefit from qualified teachers and state-of-the-art instruction.

Leading education researchers agree. They say that reading readiness hinges, to a great extent, on family and community factors. The research presented in this report shows that, as things stand, our nation is not doing enough to get children ready to read. We are not doing enough to impart specific pre-reading skills, and we are not doing enough to ensure that children have the basic competencies that underlie those skills. What is needed is a commitment to "total-surround literacy"—coordinated efforts by teachers, parents, community organizations, human service providers and policymakers to provide the kinds of experiences that support reading at school, at home, and in the community.

Reading readiness skills can be **taught**; they are not just a matter of **innate ability**.

What Does It Take to "Grow" Good Readers?

We began with a small child reaching for a storybook

Today, educators and researchers are taking a hard look at that child and that book. They are examining the precise skills children need to become good readers. At the same time, they are paying close attention to the settings that surround and shape pre-reading experiences. Studies are linking specific pre-reading skills with the characteristics of the families and neighborhoods in which they are embedded.

Of course, positive settings are not enough. In the realm of aviation, effective air-traffic control, strong security, and well designed airports cannot assure flight safety. Pilots need to know how to operate the plane. They need state-of-the-art instruction and a great deal of practice. But without supportive environments, pilots would be hard pressed to do their jobs. If policymakers ignored the context, few among us would risk flying.

By the same token, responsive families and supportive communities by themselves cannot assure that children will become eager, able readers in the primary grades. Skilled teachers and proven methods are crucial. But favorable settings contribute to success, and hostile settings can impede progress. Teachers know that homes or communities characterized by substance abuse or violence can come between children and books. Less dramatic home or community problems—the kind that cause persistent stress, friction, or chaos—can also impede progress in reading. And small problems that are not solved, such as broken eyeglasses that are not replaced, can trip children up on the path to literacy.

This chapter explores the concept of reading readiness, outlining the specific skills and competencies it encompasses. It then summarizes research on the impact of children's overall development on their path to reading.

Learning to read begins long before kindergarten

Learning to read is a developmental process that begins early, takes place over time, and takes many forms along the way. Before they enter school, children have many experiences that help them grasp basic concepts about reading, writing, and print. Some insights result from children's own everyday observation and experimentation: Jamil notices that when dad reads, he always turns the page the same way. Maddy realizes that there is something funny about an upside-down book. Others insights are planned and directed by adults: "Look, that's a J for Jamil." "Goodnight moon. Goodnight red balloon. Goodnight loon. What else can we say goodnight to? Spoon? Yes! Goodnight spoon."

Over time, diverse, repeated, enjoyable experiences with oral and written language lay a foundation for literacy, imparting the knowledge, skills, and attitudes that children need to become able readers. And in fact, children who enter school with this foundation tend to encounter fewer problems as they learn to read.[5]

Teachers know that **homes** or communities characterized by **substance abuse** or **violence** can come between children and books.

WHAT DO KINDERGARTEN TEACHERS SAY ABOUT SOCIAL AND EMOTIONAL DEVELOPMENT?

Researchers say that kindergarten teachers are less concerned about kids who don't know their ABC's than they are about kids who are "bouncing off the walls." They say that children are more likely to succeed in school when they enter kindergarten ready to listen, take turns, and get along with other children—at least most of the time.

When the U.S. Department of Education surveyed thousands of kindergarten teachers across the nation about their most pressing concerns about the children in their classrooms, the most common answer was the ability to pay attention. When researchers put the same question to kindergarten teachers across the state of North Carolina, the three top answers related to children's emotional and social readiness: "listens and pays attention"; "has good social skills such as sharing and taking turns"; and "follows directions and instructions." Having basic knowledge, like being able to name colors and provide their own address and phone number, was fourth on the list.

Do the readiness skills most prized by kindergarten teachers actually result in better achievement? Yes, researchers say. In a large-scale study conducted by the U.S. Department of Education, children who are rated by teachers as able to complete tasks and follow directions tend to also be rated higher in academic achievement in general and in reading and math in particular. And research confirms that children who are able to work undisturbed, persist at tasks, and sustain their attention, go on to better achievement in reading and mathematics and have an easier adjustment to school.

Sources: West, Denton, and Germino-Hausken, op. cit.; Frank Porter Graham-University of North Carolina Smart Start Evaluation Team, *Kindergartners' Skills in Smart Start Counties in 1995: A Baseline from Which to Measure Change*. Chapel Hill: Author, July 1997. www.fpg.unc.edu/~smartstart/KTC-REPweb.htm. Clark et al., 1985, cited in J. West, K. Denton, and E. Germino-Hausken, *America's Kindergartners*. Findings from the *Early Childhood Longitudinal Study, Kindergarten Class of 1998-99*, Fall 1998 (Washington, D.C.: U.S. Department of Education, NCES, 2000), 44.

CHILDREN NEED A RANGE OF READING READINESS SKILLS

Each type of skill is important. When all are in place, children can benefit from the reading instruction they receive in the primary grades and the road to reading is generally smooth and predictable.

ORAL LANGUAGE SKILLS

Oral language has a great deal in common with written language, and many of the skills mastered in one sphere can be transferred to the other. To become good readers, children need to know more than how to speak and understand. They need to have a sense of what spoken language is, how it works, and how it can be used. (For children with hearing impairments, good signing skills serve the same purpose). In the preschool years, children gain insight into the social uses of language. They learn about the utility of different speech acts (such as making a request) and the conventions of conversation (such as taking turns).[6] Children who have strong oral language skills have a good chance of mastering reading with little difficulty. On the other hand, children whose oral language skills are less developed in the first five years of life tend to struggle with reading in the primary grades.[7]

KNOWLEDGE OF LETTERS AND THE SOUNDS ASSOCIATED WITH THEM

Reading experts say that preschoolers should be encouraged to learn the letters of the alphabet, discriminate among them, write or draw letters, and gradually to attempt to spell words they hear.[8] They say that children learn to read more easily when they enter school with some knowledge of letters and the sounds associated with them. But the alphabetic principle — that letters stand for sounds, which in turn make up words—is not an easy concept. Early in their preschool years, children begin to grasp that a symbol can stand for a product or experience. Long before they can read, American children recognize the logos that stand for their favorite toys, foods, or restaurants. Researchers say that "reading" logos is consistent with a theory that most young children share—that a letter is like a picture or logo that stands for a whole word or idea. Before they can learn that letters stand for sounds, young children have to give up this belief. They can only begin to sound out or recognize words when they realize that written words are made up of letters that, in turn, correspond to speech sounds.[9]

FAMILIARITY WITH THE CONVENTIONS OF PRINT

For preschoolers, familiarity with print means not only recognizing at least some letters of the alphabet, but also knowing that writing goes from left to right and from top to bottom. Preschoolers who pretend to read are more likely to become successful readers later, because as they turn pages and recite familiar stories, they are becoming familiar with the format of books. They may also begin to notice how words are grouped into sentences and paragraphs, and how punctuation marks appear throughout the book.

CONTEXTUAL KNOWLEDGE GAINED FROM A RICH VARIETY OF EXPERIENCES

The skills that help children sound out and recognize words are not the same ones that allow them to understand and integrate what they read. To mature as readers and succeed as students, children also need strong conceptual understanding and contextual knowledge. They need to be able to attach meaning to words. These skills may not affect reading scores until well into elementary school, but need to be developed much sooner.[10] [Some of the knowledge good readers have can come from books, and from discussions that spring from shared reading.] Experts say it is the talk that surrounds

Knowledge of the world and its complexities begins in the **family**—around the **dinner table**, at get-togethers with **friends and neighbors**, or during **visits** to interesting places near and far.

storybook reading that gives it power, helping children to bridge what is in the story and their own lives. But familiarity with books is not sufficient. Much of the knowledge that good readers have comes from a wide experience of real life. Knowledge of the world and its complexities begins in the family—around the dinner table, at get-togethers with friends and neighbors, or during visits to interesting places near and far.

CHILDREN'S MASTERY OF THESE SKILLS HINGES ON THEIR OVERALL DEVELOPMENT

It depends on their growth across the developmental spectrum—especially physical and motor development, cognitive development, and socio-emotional development.

Physical and motor development

A child's physical development and health affect their chances of avoiding reading difficulties. Access to good health care, including preventive care, can prevent the kinds of nutritional problems that make it hard for children to think clearly, remember, or pay attention. Health care providers can spot the kinds of hearing, vision, or dental problems that may impede language development and reading readiness.

Learning to read requires physical dexterity. In particular, children need the visual motor skills needed to coordinate their eye and hand movements. These motor skills are among the best predictors of children's reading achievement in the primary grades.[11] That is why drilling children in the ABCs is no guarantee of early reading.

For all of these reasons, family health conditions affect outcomes for children. When mothers have good pregnancy outcomes, babies are more likely to succeed at school, including in the area of reading achievement. Low birth weight has been associated with cognitive deficits, including somewhat poorer reading achievement. We do not know all the reasons that babies are born too small or too soon, but we do know that when mothers have access to prenatal care, good nutrition, and substance abuse prevention and treatment, they are less likely to give birth to low-weight babies.

Cognitive development

Good readers must first be good thinkers. As they get ready to read, young children have to think about and grasp some very difficult concepts. For example, they need to understand that one object or event may stand for another.[12] This basic concept is key to their understanding of the alphabet as a symbolic system.

Reading challenges children to process information, drawing upon cognitive skills associated with focusing attention, planning, and remembering. In particular, researchers say that verbal memory is a key factor in reading readiness. They have found, for example, that kindergartners' ability to repeat sentences or to recall a brief story soon after it is read aloud to them strongly predicts their future reading achievement.[13]

A good verbal memory can help readers retrieve the meaning of familiar words, but since the meaning and even the pronunciation of words often depend on the context, other cognitive skills come into play. To get ready for

Teachers alone cannot provide all of the experiences and **supports** needed to get **children** off to a **good start** as readers.

reading, children must develop the kind of thinking skills that allow them to grasp whether, in a particular context, "orange" refers to a color or a fruit, or whether "read" is a present- or past-tense verb. They need the kind of conceptual and analytic abilities that allow them to associate the people, events, and ideas they encounter in texts to their own prior experience, either in other books, in the media, or in real life.

In all of these ways, and many more, reading readiness skills depend on cognitive development. This is consistent with the finding that low IQ in the first five years of life is associated with later reading problems.[14] Based on decades of observational studies, researchers say that children who lag behind lack experience with the kinds of specific adult-child interactions that foster cognitive development in the early years.[15] These interactions have been identified by researchers (see "How Do Parents Foster Cognitive Development?").[16]

Socio-emotional development

Cognitive skills are very important. But scientists now confirm what many parents and teachers have long suspected: like many kinds of learning, reading readiness calls upon both cognitive development and socio-emotional development. In fact, they can be considered two dimensions of the same process. It is certainly possible to conceptualize cognitive and socio-emotional development as separate processes, just as one can describe exhaling and inhaling as distinct phenomena. But like breathing, learning to read cannot take place without both processes.

Kindergarten teachers stress social and emotional aspects of reading readiness, expressing greatest concern about children's ability to "pay attention." [See Sidebar, p. 13.] For young children, paying attention is not easy to do. Like adults, children have countless impulses all the time. At the very moment that the teacher is reading a story, it may be very tempting to run outside, play with toys that are suddenly available, check the lunchbox for a leftover cookie, see how loud it is possible to whistle, call out for mommy, or tickle a classmate. If children cannot regulate their impulses well enough or long enough to take in what is going on around them, they are less likely to benefit from classroom experiences.

Reading calls upon children to manage all of the impressions, sensations, feelings, and thoughts they may have at a given moment, and to direct their attention to something that may seem less compelling—like recognizing letters or rhyming words. In other words, reading requires children to regulate their attention. This requires not only cognitive skills needed to process information (such as attention and working memory) but also emotional resources.[17] Indeed, it is now thought that attention is a kind of emotion. As psychiatrist Donald Nathanson has commented,

"We didn't really understand that for many years. We thought there was normal attention [a cognitive process], but that distraction from it involved emotions. Now we understand that there

WHAT DO PARENTS SAY ABOUT CHILDREN'S SOCIAL AND EMOTIONAL DEVELOPMENT?

A U.S. government report on child well-being highlighted parents' concerns about children's social and emotional development. It said that in 2003, 5 percent of children ages 4–17 were reported by a parent to have definite or severe difficulties with emotions, concentration, behavior, or being able to get along with other people. Two-thirds of the parents of these children said that they had talked to their doctor or contacted a mental health professional about these difficulties, and/or that the child received special education because of these problems.

is a specific emotion that involves the range from mild interest to sheer excitement. You can see it in the face: the brow, the eyebrows are down, the face is sometimes tilted to the side. If you look at the infant you see the facial attitude we 'know as track, look, listen'. And when the child focuses, pays attention, really gets interested and involved with what's going on, that's what we think is the normal approach to learning in school."[18]

Reading also requires children to use "executive" abilities—the skills needed to carry out goal-directed activity. The simple act of writing his name on a page challenges six-year-old Carlos to choose and grasp a pencil or crayon, find an appropriate surface to write on, choose a starting place for the "C" that will leave room for five more letters, think ahead about the size of the letters, work sequentially, and proceed from left to right. All of this planning and organizing requires not only cognitive abilities (such as memory and reasoning skills), but also the emotional resources needed to inhibit other impulses and sustain motivation.

No wonder kindergarten teachers stress the importance of children's inner controls. Earlier, we noted that IQ is one predictor of reading success. And as children meet academic challenges, intelligence certainly helps. But researchers say that indicators of self-regulation ability are independent—and may be equally powerful—predictors of school adjustment.[19]

SUMMARY

To "grow" good readers, policymakers must ensure that children have opportunities to acquire the wide range of knowledge, skills, and attitudes described in this chapter. Policymakers need to focus not only on specific reading skills, but also on underlying competencies in the realms of physical, cognitive, and socio-emotional development. They must start early and think broadly.

As things stand, millions of preschoolers are lagging behind both in the specific skills needed to read and in the key developmental competencies that underlie those skills. This is worrisome, because children who experience early difficulties in learning to read can certainly make progress later, but often have difficulty catching up with their peers.[20] And reading problems can affect children's overall school experience. Most school-age children who are evaluated for special education services are referred because of unsatisfactory progress in reading.[21]

Schools and preschools alone cannot assure that all children are ready to read. Teachers can apply proven methods as they teach pre-reading and reading skills, and for millions of children, evidence-based instruction will produce good results. But for millions of others, instruction is not enough. Teachers alone cannot provide all of the experiences and supports needed to get them off to a good start as readers. Families and communities must have the capacity to support reading readiness as well.

How Families Foster Reading Readiness

Many forces influence children's development and learning, but none is more important than the family. In fact, many educators now view the family as a powerful learning system—a context for intellectual development that is so effective that many early childhood programs and elementary schools are trying to mimic its main features.[22] The important adults in children's lives provide scaffolds for their efforts—interesting children in learning activities; simplifying problems; motivating, directing, and critiquing their efforts; helping them control frustration; and modeling performance.[23]

Knowledgeable parents and effective families can begin making good decisions and working toward reading readiness even before a baby is conceived. In their daily interactions with children, they can take simple steps to sustain the curiosity and enrich the learning agendas that babies bring with them into the world. By talking, reading, and singing to children, they can prepare the way for literacy. And they can access community services when problems arise.

HOW FAMILIES FOSTER READING READINESS SKILLS

Judging by data collected by the U.S. Department of Information, a majority of children master most basic pre-reading skills by the time they reach the age of school entry. But the same statistics show that a significant percentage of kindergarteners lack a solid foundation for reading instruction. The achievement gap begins even before children begin school. Research shows that children entering kindergarten with many risk factors lag behind in assessments of early reading and mathematics skills as well general knowledge. Children from minority households are more likely to experience such risk factors.[24] Over time, the gap widens. By the time they reach grade 4, many children cannot attain the proficiency level for reading set by the National Assessment of Educational Progress (NAEP); 60% of African American and 56% of Hispanic fourth graders score below the basic level in reading, compared with 25% of white fourth graders.[25]

Which children are most likely to lack reading readiness skills when they enter school? Data collected by Child Trends suggest that family characteristics matter a great deal:[26]

- Preschoolers (ages 3 to 5) living in poverty are much less likely than non-poor children to be able to recognize the letters of the alphabet, write their name, or read or pretend to read.
- Preschoolers whose mothers' home language is not English are much less likely than other children to have these three skills.
- Preschoolers whose mothers did not finish high school are much less likely than other children to have these skills.
- Black and white preschoolers are equally likely to know all their letters, but Hispanic children are lagging behind.
- Preschoolers who live with one or no parents are much less likely than children in two-parent families to have these skills.

HOW WELL ARE PRESCHOOLERS MASTERING PRE-READING SKILLS?

A study by the U.S. Department of Education's National Center for Education Statistics in November 1999 reported on home literacy activities and provided data on children's emerging literacy. The data were based on the National Household Education Surveys of 1993 and 1999.

This study reported on the percentage of preschoolers, ages 3, 4, and 5, who recognize all of their letters, can write their names, and read or pretend to read. (By pretending to read, children show that they have grasped basic concepts about what reading is, how it is done, and how print works.) It found that:

- 24% of preschoolers know all their letters. By age five, 44% have mastered this skill.
- 51% of preschoolers can write their names. By age five, 87% have mastered this skill.
- 74% of preschoolers either read or pretend to read. By age five, 77% have mastered this skill.
- 39% of preschoolers have mastered more than one of these skills. By age five, this is true for 69% of the children.

Why should family characteristics make such a difference? Teachers provide the formal instruction and opportunities for practice that children need to acquire good reading skills, but parents and other caregivers play a crucial role in getting children ready to read.

FAMILIES FOSTER LANGUAGE DEVELOPMENT

From the very start, parents structure children's experiences in ways that foster language development. They naturally speak to their children in a slow, melodic style that has been called "parentese"—a style that is precisely attuned to babies' needs and, over time, helps them discern the sounds and sense of their parents' speech. Parents exchange glances, expressions, gestures, and sounds with babies, and later play simple turn-taking games like peekaboo, preparing the way for the give and take of conversation. By teaching children rhymes and songs and playing word games with them, parents help children think about and manipulate sounds and words—gaining phonological and phonemic awareness.

Parents also actively help babies and toddlers learn new words through a collaboration that researchers call "joint attention." To learn a new word, a child must, on at least one occasion, associate that word with the very object, event, or action that it represents. This is not easy, because even an uncluttered environment contains many possible referents for the new word. How can a baby figure out which one mom means when she says "soap"? The answer is: joint attention. This happens naturally if mom and baby happen to be focused on the same thing when the new word is said. And researchers say that parents (at least the Western middle-class parents observed in their study) are very good at this. By the time babies are about nine months old, mothers frequently follow their babies' line of vision or their pointing gesture, naming the object that has drawn attention. This practice helps babies learn new words: mothers of babies who learned new words at the expected rate practiced joint attention more frequently than mothers of slower language learners. And the more time babies spend in joint attention with their mothers, the bigger their vocabularies. But parents are not always able to follow an infant's focus of attention. In one study, moms' labels failed to correspond with objects kids were looking at about half the time.[27] This is a skill that can be taught—a small change in parents' interactions with young children that can potentially have a significant benefit.

Young children's vocabularies are also affected by family dynamics. Studies that involve regular observation in children's homes say that mothers' verbal exchanges with young children (both quantity and quality) are closely linked to young children's vocabulary development, which in turn is closely linked to later school success.[28] One study, which documented mother-child interactions every month for the first two years of children's lives, found differences among socio-economic groups both in the frequency and complexity of verbal exchanges.

Many forces influence children's **development** and learning, but none is **more important** than the **family**.

Children who are **exposed** to reading materials **before** they begin kindergarten and are **read to** on a **regular basis** by adults are more likely to become **good readers** in the primary grades.

This study found, for example, that the average three-year-old from a family receiving public assistance has an active vocabulary of about 500 words, whereas a three-year-old from a professional family demonstrates a vocabulary of over 1000 words. The researchers found that on average, professional parents talked to their toddlers more than three times as much as parents who were recipients of public assistance.[29]

FAMILIES SHARE STORIES AND BOOKS

Children who live in homes where reading and writing are common and valued tend to experience more success with reading as they begin school.[30] The single most important activity for building the foundations of literacy may be reading aloud. Children who are exposed to reading materials before they begin kindergarten and are read to on a regular basis by adults are more likely to become good readers in the primary grades.[31] Parents can introduce children to books while they are still babies, associating book-reading from the start with cozy, warm moments. Toward the end of their first year of life, babies who are read to by their parents usually show growing awareness of and interest in simple books. They may progress from grabbing and biting the books to bending back the covers to turning the pages. They may imitate their parents by accompanying their page turning with babbling.

As they grow, young children begin to realize that each time a book is read, it evokes the same words and phrases. They begin to associate book-reading in general, as well as particular books, with distinctive kinds of wording and intonation. Eventually, they anticipate words or phrases or recite parts of the text. In the process, they are getting to know the conventions of print: for example, that words and pages go in a certain direction; that text is grouped in certain ways; that pages contain marks like periods and commas as well as letters.

Reading aloud is most helpful when the children are active participants. Adults can ask questions about what has happened in the story, and what may happen next. Children may talk about the pictures, retell the story, discuss their favorite parts, and hear favorite passages over and over again. Adults can help children develop higher-level thinking by moving experiences in stories from what the children may see in front of them to what they can imagine. They can help children retell the story from the viewpoint of a particular character or object.

Researchers say that children experience books and other print materials in all kinds of homes, including those of low-income and economically stressed families. However, the quantity and variety of these materials does depend on family income.[32] Parents' availability to read to children hinges as well on their work schedules, level of stress, and their own literacy and comfort with books. Many experts stress the importance of parents' awareness and involvement, and especially time spent reading to young children at home. As parents and children share the experience of books, preschoolers' language development gains complexity and subtlety. In the beginning, children may simply look at the pictures; they may ask parents to name objects or characters. Over time, children and parents may begin asking questions about the pictures or the text. These discussions may become more speculative and abstract. In short, sharing books fosters oral language development; this in turn helps children get ready to read. Low-income households often face challenges, financial and otherwise, in exposing their children to books and reading.[33]

2.2 million of the nation's 3.9 million kindergarten **children lag behind** in at least one area of development underlying **reading readiness**.

FAMILIES INTRODUCE A WIDE VARIETY OF EXPERIENCES

Parents foster reading readiness by introducing children to a wide variety of experiences, both in the home and in the neighborhood. Whether visiting a library or a laundromat, they may chat with children about their impressions, thoughts, and plans. At a hardware store, they notice the objects that draw their children's attention, name them and show how they are used.

These kind of experiences are quite ordinary, but many parents find them hard to arrange. Some live in unsafe neighborhoods, and nurture children by insulating them from the world rather than exposing them to it. Some aren't sure how to explain abstract ideas to small children, or how to talk about daily life in ways that will expand their knowledge of the world. Others work long hours or shoulder many responsibilities and have little relaxed time with their children.

As one first-grade teacher said, "My biggest obstacle in teaching reading is the lack of experiences that some children are bringing to school—lack of language experiences involving reading, print, and concepts. Experiences like having your mother explain the types of fruit at the grocery store or playing with funnels in the bathtub. Experiences that come with having been talked to and read to."[34]

HOW FAMILIES FOSTER THE BASIC COMPETENCIES THAT UNDERLIE READING READINESS SKILLS

When children arrive in elementary school with good reading-readiness skills, they usually make good progress. Which obstacles impede progress? According to the NRC researchers, "Children from poor neighborhoods, children with limited proficiency in English, children with hearing impairments, children with preschool language impairments, and children whose parents had difficulty learning to read are particularly at risk of arriving at school with weaknesses in these areas and hence of falling behind from the outset."[35]

A 2003 study by Child Trends provided a comprehensive picture of young children attending kindergarten as of 1998-99 who were lagging behind their peers. The study analyzed data from a nationally representative survey of kindergarteners, the Early Childhood Longitudinal Study-Kindergarten Class of 1998-99.

Child Trends looked at all three key areas of development highlighted in this report because they underlie reading readiness skills: physical development and health; cognitive development; and socio-emotional development. More than half of the kindergartners (56%) in the sample lagged behind in one or more areas. This means that 2.2 million of the nation's 3.9 million kindergarten children lagged behind in at least one area of development. About five percent lagged behind in all three areas.

- *Physical development*. Nearly one-third of our nation's kindergarten children (31%) have at least one health challenge. This means that they were either behind in their motor skills development; had fair or poor health or a disability; or were significantly overweight.[36]
- *Cognitive development*. About one-fifth lagged behind in cognitive development. This means that they were behind in key areas of learning, including language and literacy, mathematics, and general knowledge of the social and physical worlds.[37]
- *Socio-emotional development*. Nearly one-third of kindergarten children (31%) lagged behind in this area. This means they were behind in several behaviors or social skills, according to their parents and/or teachers.

The study also found that several groups are over-represented among kindergartners who lag behind their peers: boys; non-Hispanic blacks; children from educationally disadvantaged, low-income, or single-parent families; and children living in troubled neighborhoods. (The study noted that there was substantial overlap among these groups.)

HOW DO PARENTS FOSTER COGNITIVE DEVELOPMENT?

Researchers Craig and Sharon Ramey say that parents (and other trusted adults) foster positive cognitive development in young children by:

- Encouraging exploration: helping children gather information about their environments.
- Mentoring in basic skills: modeling and supporting basic cognitive skills, such as labeling, sorting, sequencing, comparing, and noting means-ends relationships
- Celebrating developmental advances: praising and reinforcing real leaps in skills or understanding.
- Guiding rehearsal and extension of new skills: helping children practice and elaborate upon newly acquired skills.
- Protecting from inappropriate disapproval, teasing, or punishment: guiding children and instilling values, but at the same time allowing them to learn through trial and error.
- Providing a rich, responsive language environment: creating a setting in which communication is predictable, useful, and interesting.

Adapted from Ramey, C.T. & Ramey, S.L. (2002). *Early childhood education: From efficacy research to improved practice*. Presented April 30, 3002 at A Summit on Early Childhood Cognitive Development Ready to Read, Ready to Learn: A Call to Leadership, Little Rock, Arkansas.

HOW DO FAMILIES INFLUENCE THESE UNDERLYING COMPETENCIES?

The Child Trends data show that reading readiness hinges, in part, on children's development of underlying physical, cognitive, and socio-emotional competencies. How do parents influence the learning and development that support reading readiness? In recent years, the National Research Council undertook an exhaustive study of the science of early childhood development, entitled *From Neurons to Neighborhoods*. A key finding was that many factors influence how children "turn out": the conditions in which they grow up; the times they are born into; their early care providers, school teachers, and peers. But no influence is more important than that of families.

"What young children learn, how they react to events and people around them, and what they expect from themselves and others are deeply affected by their relationships with parents, the behavior of parents, and the environment of the homes in which they live."[38] The way parents respond to young children affects their sense of security and competence. A strong early attachment to parents or other primary caregivers scaffolds many kinds of learning.

Many factors affect young children's lives, but parents "influence the influences." Other relatives and friends can make a difference, and child care providers can certainly help to foster healthy development and learning. Peers help to shape children's attitudes and behavior. But it is early relationships with parents that lay the foundation on which social competency and peer relationships are built.

CHILDREN ARE INFLUENCED BY WHO FAMILIES ARE

Scholars have shown clear links between family characteristics and children's development. For example, when families are better off economically and when mothers have higher levels of education, and when they grow up in harmonious, two-partner families, children have better developmental outcomes.[39] Children whose families live near or below the poverty line are subject to the well documented effects of economic hardship, including health problems and developmental delays. Studies that control for other family characteristics have found that the effect of family income on intelligence and verbal test scores at ages two, three, and five are quite large. Other studies show that mothers in families whose incomes fail to cover basic needs are more likely to report behavior problems for five-year-olds, including aggression, tantrums, anxiety, and moodiness.[40]

Sometimes the relationship between family characteristics and child outcomes are more complex than they seem at first glance. For example, when researchers took a close look at the effects of poverty, they found that family income has a substantial impact on child and adolescent well-being. But they also found that family income is more strongly related to achievement-related outcomes than to emotional outcomes. Moreover, while economic deprivation clearly influences achievement, the intensity and duration of poverty matter. The adverse effects of poverty are especially pronounced for children who live below the poverty line for several years and for those who live in extreme poverty.[41]

The kinds of jobs parents hold can make a difference as well. Researchers have shown that when working mothers hold jobs that are challenging and interesting, children appear to do better; when jobs are tedious and repetitive, children can be adversely affected.[42]

CHILDREN ARE INFLUENCED BY HOW FAMILIES ARE

The influence of family is not just a matter of demographics. Children are also affected by how families are—by adults' responsiveness to them and by the social and emotional climate in a household.

Researchers have found that a key to good outcomes is a positive home environment. In fact, studies show that the home environment accounts for one-third to one-half of the cognitive disadvantages of children from chronically poor families.[43]

The kinds of learning experiences provided at home proved to have an especially strong impact on children's cognitive outcomes. Differences in the home environment also accounted for some of the effect of income on children's behavioral patterns. In particular, behavioral problems associated with poverty appeared to be linked to lower-quality parent-child interactions and to increased use of harsh punishment.[44] The well-being of children and adolescents can be undermined by a climate that is conflictual and angry, especially when anger fuels violence and abuse; by parent-child relationships that lack warmth and emotional support; and by parenting styles that are either overly controlling, allowing little autonomy, or overly lax, providing little structure.[45]

Researchers say that highly nurturing parenting can help to foster school achievement, as measured at age six by math and reading achievement, conversation, vocabulary skill, and block design. Parents who provide this kind of care adjust their own behavior in accordance with their developing child's needs.[46] They interact with children affectionately; show consideration for their feelings, desires, and needs; express interest in their daily activities; respect their viewpoints; express pride in their accomplishments; and provide encouragement and support during times of stress.[47]

Responsive parenting has a particularly strong impact in the early years. A recent study tracked the cognitive and social development of young children who experienced different patterns of parent responsiveness. For young children (birth to 4 1/2 years), consistent responsiveness by parents predicted faster rates of cognitive and social growth than did inconsistent or minimal responsiveness. This was particularly true for preterm children. Patterns of parenting did not have the same impact on children ages six and eight. This suggests parenting that, in the early years, plays a unique role in getting children ready for school.[48]

Researchers have developed a useful vocabulary for talking about how families are. They distinguish between family processes and family management strategies. By family processes, they mean "internal affairs": the quality of family life within the home, the emotional climate, the sense of order or disorder, the parents' effectiveness in setting limits. By family management strategies, they mean "external affairs": the ways parents try to affect children's experiences outside the home, such as the care or schooling they arrange, and their involvement in outside activities and organizations.

These researchers say that when families are more effective—that is, when they are able to create more positive family processes and more positive family management strategies, children do better academically, have fewer behavior problems, and are more involved in outside activities. This is true even for children who live in high-risk environments.[49]

HOW MUCH DIFFERENCE DOES EMOTIONAL SUPPORT MAKE?

Recent research from the perspective of neuroscience adds to the mounting evidence that children's reading achievement is influenced by how families are. A 2005 article in *The Future of Children* stated:

Differences in emotional support in the home account for a significant portion of the variance in children's verbal, reading and math skills, even when maternal education, family structure, prenatal care, infant health, nutrition and mother's age are taken into account…

Source: The Future of Children, Volume 15, Number 1, Spring 2005, Neuroscience Perspectives on Disparities in School Readiness and Cognitive Achievement by Kimberly Noble, Nim Tottenham and B.J. Casey

Highly nurturing **parenting** can help foster school **achievement**.

The single strongest **predictor of achievement** scores and rates of behavioral problems is the amount of **home-based** family **meal** time.

AND CHILDREN ARE INFLUENCED BY WHAT FAMILIES DO TOGETHER

Earlier, we cited a study showing that from the standpoint of language development, children benefit when parents and children have more verbal exchanges. The influence of families reflects not just who they are and how they are, but also what they do together. Researchers studying school success say that the single strongest predictor of achievement scores and rates of behavioral problems is the amount of home-based family meal time. Meal time proved to be a more powerful predictor than time spent in school, studying, attending religious services, or taking part in sports. The result held even when controlled for race, gender, parents' age or education, income and family size.[50]

It is not just the fact of sitting down together that benefits children. New studies are delving into the quality of family dinnertime conversation to better understand the emotional "meat and potatoes" of family life. They found that a shared family identity based on common history, lore, and traditions buffers children from external stressors and helps them develop inner controls.[51]

Researchers confirm what parents have long suspected: families' television viewing habits affect children's educational paths.[52] While most American children watch television, those living in poverty are more likely to watch large amounts of television. Television viewing among middle class children tends to involve more educational programs under the guidance of parents or other adults.[53]

CHILDREN ARE INFLUENCED BY PARENTS' MENTAL HEALTH

Research consistently shows that more responsive parenting in the early years predicts greater success in reading and higher overall achievement in school. Mental health problems impede parents' capacity to pay attention to their children, read their children's cues and signals, and provide responsive care.

Maternal depression is a particularly pressing problem. Since it often affects children early in their lives, maternal depression may place children at risk of insecure attachment and prolonged exposure to stress. As researchers from UCLA have noted, "A mother who suffers from clinical depression has difficulty responding appropriately to her infant, is often 'out of sync' with her developing child, and frequently fails to respond adaptively to the infant's emotional signals…. Observations of depressed mothers with their children can be quite dramatic: The infant smiles, the mother does not respond, and the child becomes agitated, looks away and appears distraught."[54]

We might expect children with clinically depressed mothers to have difficulty with self-regulation, given the insights into early development summarized in the previous chapter. And in fact, this is the case. Researchers have used EEG or electroencephalographic (brain wave) recordings to show the children of depressed mothers process emotions differently than the children of non-depressed mothers. Specifically, they show more activity in the frontal brain region when expressing negative emotions. This increased activity shows that the usual level of energy needed to regulate these emotions is not sufficient, and that more strenuous effort is required. These laboratory findings match child development professionals' observation that, compared with other children, children of depressed mothers tend to be more irritable and express more anger and sadness.[55]

But when circumstances improve, the risk lessens. When maternal depression is treated, children can do very well. If the condition is treated before the baby is six months old, it usually has no lasting effect on the child's development. But even later, as the mother's mental health improves, the child's developmental status can improve quickly as well.

THEY ARE INFLUENCED BY PARENTS' SUBSTANCE ABUSE PROBLEMS

Parents who are addicted to alcohol or drugs are less likely to provide good nutrition and responsive care to young children. This affects many children. A 2003 report by the federal Substance Abuse and Mental Health Services Administration showed that in 2001, nine percent of children lived with at least one parent who abused or was dependent on alcohol or an illicit drug during the past year. Of these six million children, more than four million lived with parents who abused or were dependent on alcohol; almost one million lived with a parent who abused or was dependent on an illicit drug; and more than half a million had a parent who abused or was dependent on both alcohol and an illicit drug.[56]

Smoking, drinking, and drug abuse by mothers can affect babies even before birth. Many studies show that smoking and heavy alcohol use during pregnancy have detrimental effects on the growth, health, development and behavior of newborns and children.[57]

Cigarette smoking during pregnancy is the single most important known cause of low birth weight, which has been associated with developmental delays (especially when birth weights are very low). Research consistently shows that, even after controlling other factors, smokers are about twice as likely to deliver a low birth weight baby as non-smokers.[58] Studies of the long-term impact of prenatal cocaine exposure on children's development have produced inconsistent findings. Some studies report negative effects on cognitive functioning, including language development.[59] Others find less consistent negative effects. However, researchers say that concern about pregnant women's use of drugs (both legal and illicit) is always warranted. Even if the adverse effects of a specific substance have not been clearly documented, a range of maternal and fetal health problems and psycho-social risks can accompany severe addictions to alcohol, cocaine, tobacco, and other drugs.[60]

Babies need not be exposed to drugs before birth to feel the effects of substance abuse in their homes or communities. For example, continuing substance abuse may impair parents' ability to read babies' cues and signals, whether or not the baby has been prenatally exposed to drugs.[61]

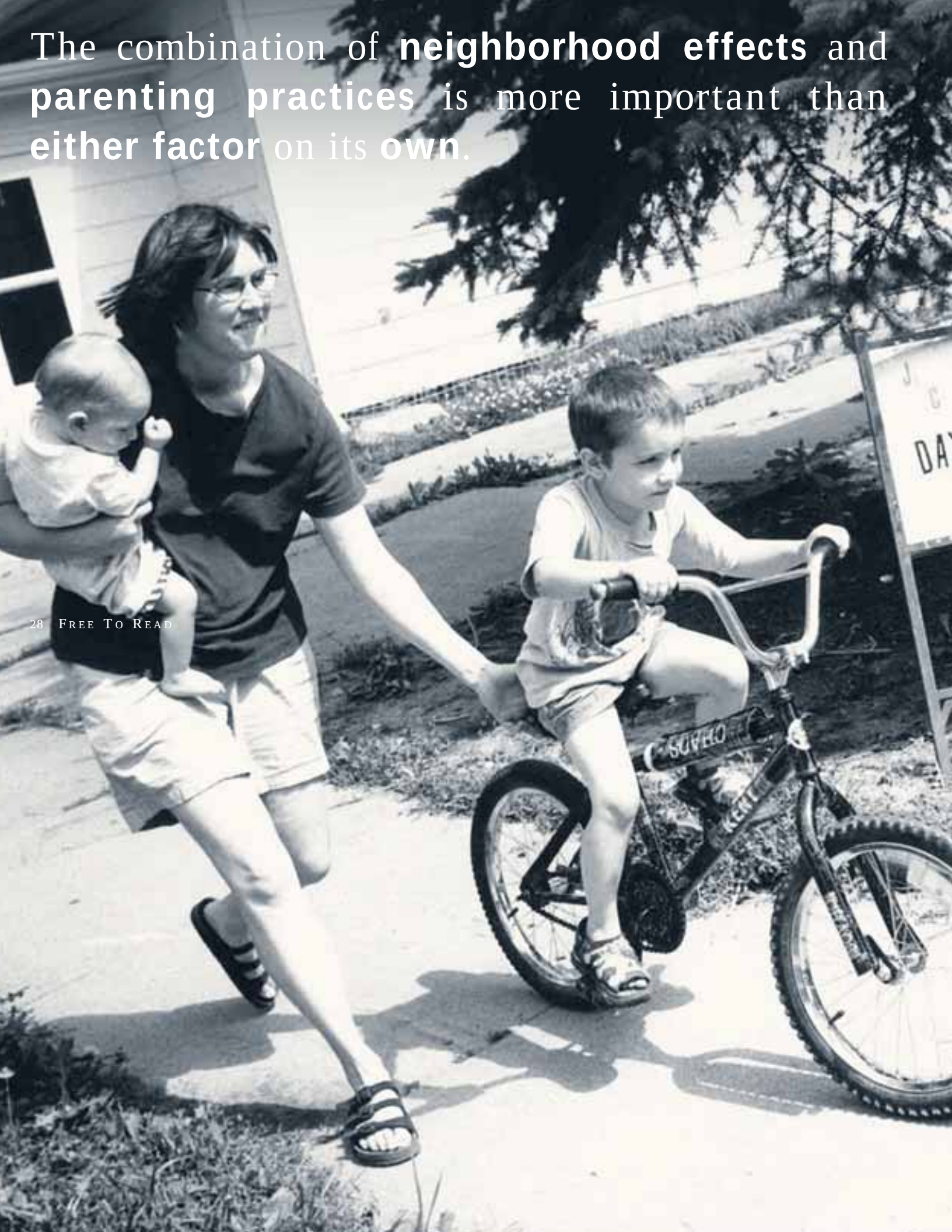
In extreme cases, children may suffer abuse or neglect. According to the U.S. Department of Health & Human Services, an estimated 50-80% percent of all child abuse and neglect cases involve some degree of substance abuse by the child's parents.[62] The maltreatment often takes the form of neglect rather than physical abuse. In such cases, children's nutrition may suffer.[63]

In all of these ways, children's reading readiness can be influenced by family characteristics and conditions in their homes. But as the following pages will show, community characteristics matter as well.

SUMMARY

This chapter has shown that families have an impact on children's mastery of virtually every aspect of reading readiness. They influence both specific pre-reading skills and the competencies that underlie them. This is true for all families, including those who do not speak English at home.

The combination of **neighborhood effects** and **parenting practices** is more important than **either factor** on its **own**.



How Communities Foster Reading Readiness

The benefits of strong families are so numerous and powerful that it is difficult to overstate their importance. To be sure, the influence of communities is more modest. This is not surprising, given that parents and other family members are so all-important precisely during the period when young children are most impressionable and vulnerable to influence. But the influence of communities should not be discounted.

Communities affect the capacity of families to be effective on behalf of their children. At the same time, there is evidence that communities affect child outcomes, over and above family characteristics, and that this influence matters. Researchers say that even modest neighborhood effects are meaningful and present opportunities to improve results for children and families. After all, public policy has considerably less capacity to alter family traits and parental behavior than it does to affect the characteristics of neighborhoods and the quality of community institutions. As one recent study concluded, "the impact of neighborhood-based action may still be large enough to be consistent with cost-effective, neighborhood based interventions"[64]

In addition, the fact that neighborhood effects are smaller than family effects may be misleading since the two are so closely related. For example, concentrated poverty—an attribute of the neighborhood—can have a dramatic impact on families' socioeconomic status. It can also affect families' ability to provide preschoolers with learning experiences at home. In this way, concentrated poverty can indirectly influence children's outcomes. But studies that try to isolate neighborhood effects by controlling for family income would not capture this indirect effect. Moreover, residence in a poor and dangerous neighborhood can affect parents' attitudes, mental health, and parenting practices. That is why some researchers contend that the combination of neighborhood effects and parenting practices is more important than either factor on its own.[65]

Children attending school in high-poverty districts are at especially high risk for poor pre-reading skills and reading achievement. According to one researcher, "Typical children in some urban public schools enter kindergarten at the 5th percentile in vocabulary knowledge, and do not know words such as chicken, leaf, and triangle."[66]

A recent Rand study of children in Los Angeles County looked at the impact of families and neighborhoods on specific aspects of school readiness, including literacy-related activities and acquisition of reading readiness skills. Its most consistent finding was that children who live in the county's poorest neighborhoods have the lowest levels of school readiness on multiple dimensions.

The report stressed that parents in every neighborhood they studied have at least a few children's books at home. Many parents in poor neighborhoods read to their children on a regular basis and take them to the public library. However, despite the best efforts of parents, many children in high-poverty neighborhoods have limited access to books or to adults who read to them. The researchers found that compared with parents in more advantaged places, parents in high-poverty neighborhoods are not only less likely to read to their children but also wait longer to begin reading to them—beginning only when they are three to five years old. The report concluded that, "Children in very poor neighborhoods are at particularly high risk of entering school without adequate language or math skills."[67]

Give researchers a **zip code**, and chances are that they will be able to **predict** trends in children's **development** and **learning** with some **accuracy**.

HOW NEIGHBORHOODS FOSTER THE BASIC COMPETENCIES THAT UNDERLIE READING READINESS SKILLS

The findings of the Child Trends report on the neighborhood environment cited earlier in this report were particularly salient. Among children lagging behind in all three areas of development, physical, cognitive, and socio-emotional:

- 7% lived in neighborhoods in which violent crime was problematic, compared with 4% of other children;
- 20% lived in neighborhoods in which selling or using drugs was a problem, compared with 10% of other children;
- 22% lived in neighborhoods in which garbage was a problem, compared with 12% of other children;
- 41% lived in neighborhoods in which it is only somewhat safe or not at all safe to play outside, compared with 29% of other children.

In recent years, researchers have started to study the pathways by which neighborhoods influence outcomes for children. Give researchers a zip code, and chances are that they will be able to predict trends in children's development and learning with some accuracy. Children in different neighborhoods tend to have different developmental outcomes. Risks to healthy early development appear to be concentrated in certain cities and in certain neighborhoods within those cities.

For example, right from the start, children who live in the nation's 50 largest cities are less likely to be considered "healthy" than other children nationwide, based on birth weight, APGAR scores, weeks of gestation, and prenatal care in the first trimester.[68] And as they grow up, children in central cities have a greater chance of experiencing risks that jeopardize their health and development. There are also important variations within cities. For example, studies in Baltimore and Cleveland show that negative birth outcomes such as low birth weight are concentrated in high-poverty neighborhoods. Indeed, an infant's chances of surviving the first year of life are lower in these neighborhoods.[69]

The recent Rand study of Los Angeles County found substantial variation in emotional well-being by neighborhood. The researchers focused on two types of behavior problems that are common among young children: depressive behaviors such as sadness or anxiety, and aggressive behaviors such as lying and disobeying. The study found that children in very poor neighborhoods are more likely than children in more advantaged neighborhoods to have high levels of both depressive and aggressive behaviors.[70]

But a thorny problem remains: Do these findings reflect the characteristics of families living in those neighborhoods? Or can neighborhoods be independent forces that affect children's outcomes? Researchers have devised good methods for addressing this question, and they report that communities influence child outcomes above and beyond family characteristics. For example, the study of Los Angeles County linked residence in a very poor neighborhood with behavior problems, but family factors like the mother's educational

HOW DOES A COMMUNITY AFFECT A FAMILY?

Researchers Jeanne Brooks-Gunn and Tama Levanthal say that communities influence residents in four ways:

- AS PLACE: As geographic locales and bureaucratic units, different communities offer different programs and services, as well as different delivery systems.
- AS FACE: As social networks, different communities have different kinds of psychological associations for residents and offer different kinds of affiliation, support, and information.
- AS SPACE: As physical settings, different communities offer different kinds of environments, public facilities, and housing, and offer different degrees of comfort and safety for living, working, visiting, and political organizing.
- AS A COMBINATION OF PLACE, FACE, AND SPACE: Different communities integrate all of these factors in different ways.

Source: Jeanne Brooks-Gunn and Tama Levanthal, Summary of research project: "The neighborhoods they live in: Community approaches to the provision of services," undated, available at www.ccf.tc.columbia.edu/neighborhoods.htm.

attainment and whether the child was born in the U.S. were not strongly associated with behavior problems.[71]

When family characteristics such as income, family structure, and parents' educational attainment are held constant, the impact of neighborhoods is not as strong—but it is still significant. And when experimental programs actually move groups of low-income families into more prosperous neighborhoods, the children fare better than children who stay in the same neighborhood. Some groups of relocated children have shown improved scores on tests of cognitive abilities. The studies have also observed significant differences in behavior problems and juvenile arrests.[72]

CHILDREN ARE INFLUENCED BY "WHO" COMMUNITIES ARE

Demographics make a difference. Outcomes for children are certainly affected by their own families' economic circumstances. But it turns out that neighbors' circumstances can make a difference as well. Researchers have found higher IQ scores among low-income preschoolers (at ages three and five) who live in close proximity with more economically secure neighbors (families earning more than $30,000 a year). It would make sense that older children and teens would be influenced by community residents, since they may be navigating the neighborhood on their own and interacting with neighbors. But, in fact, the presence of more prosperous neighbors appears to have the greatest impact on preschoolers and on teens.

These findings suggest that in tough neighborhoods, children's development and learning are jeopardized not just by the concentration of low-income residents, but also by the absence of people with good jobs.[73] And indeed, other studies have found that when adults in the neighborhood have steady work, children are better off.[74]

CHILDREN ARE ALSO AFFECTED BY HOW COMMUNITIES ARE

Just as the atmosphere of a household makes a difference, the climate of a community can influence child outcomes. Is the neighborhood well organized and safe? Are public spaces well lit and well maintained? Is garbage picked up on a regular basis? Can residents get safely to jobs, schools, shopping, and other services? These factors can make a difference. But other aspects of neighborhoods can matter just as much, even though they are harder to see—like the ties of commitment and caring that hold people together.

In recent years, a great deal has been written about social capital—the connections, trust, and sense of shared destiny that bring communities together and motivate people to help each other and work together. The key finding

Communities are independent forces for social well-being.

is that, as with other kinds of capital, it is good to have a lot of it. Families are more likely to thrive when they have many social ties, keep in touch with an extended network of family and friends, and take part in shared activities. Scientists who study social epidemiology say that social networks can be a powerful buffer against stress. When people experience strong social support, they enjoy better physical and emotional health, recover faster from illness, and live longer. When children living in tough neighborhoods have sturdy connections with supportive adults in their communities, they are more resilient—better able to survive and thrive despite conditions that adversely affect many other children.[75]

AND CHILDREN ARE AFFECTED BY WHAT PEOPLE IN COMMUNITIES DO TOGETHER

Children and families benefit from lively social networks, but so do whole communities. Neighborhood social organization and interaction are important because they foster collective efficacy. That is, they make it easier for residents to establish social networks, agree on values needed to exercise social control, and work together on common goals. In contrast, socially disorganized neighborhoods are more difficult, dangerous, and stressful places to live.

In neighborhoods with higher collective efficacy, residents are more likely to watch out for each other's children. In fact, researchers say that the single most important characteristic of collective efficacy is adults' willingness to intervene in the lives of other people's children—to take notice and to step in when children need help, miss school, or deface property.[76] In these neighborhoods, residents are more likely to work together on neighborhood problems and to build and maintain strong institutions. And they are more likely to maintain connections with the world outside the neighborhood.

By studying more than 300 Chicago neighborhoods, a research team from the Harvard School of Public Health found that collective efficacy was the best predictor of low crime rates. In the realm of crime prevention, this factor turned out to be more important than other factors such as race/ethnicity, poverty, and residential instability. In particular, the researchers documented lower rates of violence in neighborhoods where adults share basic values, a vision of community life, a willingness to engage with others, and a sense of ownership of public space.

This finding underscores that communities are independent forces for social well-being. But collective efficacy does not just happen. It hinges not only on residents' trust and cooperation, but also on the external supports that enable trust and cooperation to flourish.[77]

Social cohesion also exposes children to shared social norms. For example, observers have reported that people in immigrant communities often support each other to aspire to and work toward social mobility. Neighborhoods may also affect parenting behaviors and family dynamics. Of course, shared norms may be good or bad. In a neighborhood that has a high degree of vandalism, substance abuse, or child maltreatment, epidemics of social problems can occur.

Theorists say that outcomes for children are affected by the availability and quality of neighborhood institutions such as schools, child care, public libraries, recreational programs and activities, parks, religious institutions, and social services. These institutions play a key role in socialization, but may also impart useful skills and provide important services. Here again, collective efficacy plays a role. In better organized communities, residents can demand better institutions through collective action and the political process (even if income and educational levels are low). Poorer neighborhoods may be worse off than others, not only because they have weaker institutions, but also because the greater needs of families are likely to overtax existing institutions.[78]

Because neighborhoods matter, children may be affected by forces that do not originate (or may not even exist) in their own homes. At the same time, neighborhood factors can affect the family environment. Economic and social disorganization in the neighborhood may lead to family disequilibrium, impeding parents' ability to provide responsive care and build secure relationships with young children. On the other hand, a neighborhood with vibrant social networks and strong supports can help children thrive despite stress at home.

SUMMARY

This chapter has documented the impact of communities, summarizing research that links children's reading readiness—again, both specific pre-reading skills and the competencies that underlie them—with a wide range of neighborhood characteristics. It emphasizes that the combination of family and neighborhood effects matters more than either factor on its own.

A neighborhood with **vibrant social networks** and **strong supports** can help children **thrive** despite stress at home.

Free To Read: A Framework for Action

For many children, the road to reading is straightforward and predictable. Their home and community environments provide the supports that all children need to be successful learners. For these children, efforts to improve reading achievement can focus primarily on their classroom experience—that is, on instructional methods and curricula.

But the research presented in this report shows that what we want for all children is not yet a reality for too many. A significant number of our nation's children face multiple family and community risk factors, and need more intensive supports to become able and enthusiastic readers. Simply doing more of the same is not enough.

To ensure that these children are on the right path, doing more means thinking more broadly and boldly about reading readiness. It means thinking more systematically about the wide range of factors and conditions that can be roadblocks to reading, as well as those that foster healthy learning. Doing more challenges policymakers and early educators to use existing resources differently, in a more integrated way, to engage people from all walks of life to work together to improve reading. And doing more means advocating for significant public investment in *all* of the settings in which children learn and grow—in families, schools and communities.

The research presented in this report suggests a broad framework for action moving forward. This framework urges us to take the following steps to secure the investments that will make it possible for all children to be truly "free to read":

- Move beyond the classroom
- Assess school readiness in the context of family *and* community
- Engage families as members of communities
- Build diverse partnerships to support reading readiness
- Move beyond "project" thinking to a more integrated approach

MOVE BEYOND THE CLASSROOM

Educators are trained to diagnose the reading difficulties of individual children. Does Carla have a decoding problem? Is Martin supposed to be wearing glasses? Program directors and school leaders are trained to support teachers and strengthen practice. Is Ms. Stone using proven strategies to get her preschoolers ready to read? Is Mr. Santos focusing on the skills that need the most practice, based on the most recent assessment of his students' reading achievement?

While improving teacher preparation can help many children, approaches that focus exclusively on classroom practice may not get at the larger conditions and policies that affect progress in reading. Does Carla's mother lack literacy skills? Are the adults responsible for her affected by substance abuse or depression? Is Carla one of the many children in her neighborhood whose parent works two jobs to make ends meet? Research shows that all of these issues, and many more, can affect children's progress toward literacy.

Moving beyond the classroom also means involving teachers and other school staff in more family- and community-focused initiatives. While schools cannot address all of the issues beyond their walls that affect achievement, they can do a better job helping children transition from home or early education programs to kindergarten. They can help primary-grade teachers better understand resources and problems in households and communities that can affect reading readiness and achievement. They can help parents and guardians better understand how to support children's classroom learning and, when appropriate, they can point them toward adult literacy or English as a second language programs.

! One way to move beyond the classroom is to engage people from all walks of life in the challenge of improving reading. *Reach Out and Read* is a national initiative with over 2000 sites throughout the nation developed by the Boston Medical Center to engage health providers in reading readiness. When parents bring young children for pediatric visits, they receive developmentally appropriate books along with guidance about communicating and reading with young children in ways that are pleasurable and educational. Because research has shown that the talk that surrounds the storybook is as important as the reading, volunteers are available in pediatric waiting rooms to model strategies for reading with young children, talking about the pictures and stories, and asking and answering questions.

ASSESS SCHOOL READINESS IN THE CONTEXT OF FAMILY AND COMMUNITY

States all over the country are setting school readiness indicators to guide program and resource decisions. Unfortunately, too many of these indicators relate only to children, resulting in program interventions and funding priorities that are too narrowly focused to address the broader barriers to school readiness raised in this report. Experts say that a comprehensive assessment of school readiness must consider not only the characteristics and abilities of children, but also the conditions supporting children's development. The assumption is that what children know, what they can do, and what attitudes and inclinations they have "are a function of the families they have lived in, the neighborhoods in which they have played, the many (or few) caring adults who have nurtured them (or not) and the programs and activities they have participated in (or not)."[79]

Researchers say that assessments of school readiness need to consider whether families are thriving, safe, or in danger across a number of dimensions of well-being.[80] Such assessments should also consider community conditions, including the quality and accessibility of health services, neighborhood safety, parenting education, child care and early education services, and the "readiness" of the schools.

Doing more means **advocating** for **significant** public **investment** in all of the settings in which children grow and learn—in **families**, **schools** and **communities**.

The continuity of services available to young children is another key factor. Does the community lend stability to young children's lives through continuity of program experiences such as child care, Early Head Start, Head Start, pre-kindergarten programs, and other services? Does the community's service infrastructure allow efficacy and efficiency? All of these are factors in creating environments that support reading readiness.

! Yardsticks of school readiness have not always taken into account the conditions in which children grow up. *Getting Ready: The National School Readiness Indicators Initiative* is a multi-state initiative that supports state and community efforts to devise realistic, meaningful measures of school readiness and use them to build a school readiness agenda. The school readiness indicators that were developed are comprehensive and practical—broad enough to offer a picture of the whole child, as well as the school, family and neighborhood factors that support their school readiness.

ENGAGE FAMILIES AS MEMBERS OF COMMUNITIES

Engaging families as members of communities requires a finely tuned understanding of the factors that contribute to a family's capacity to foster healthy child development and school readiness. Educators and social service providers tend to focus on one family at a time. Looking through this "one-family" lens, they may miss opportunities to craft systemic solutions that could benefit many families within the community.

Systemic solutions begin with a "both and" perspective that views children in the context of their families and communities. They also typically require the participation of multiple agencies and organizations that interact with families. By working together, policymakers from different organizations or fields can pursue an integrated approach to improving outcomes for children and create more seamless ways of providing ongoing support to families in need.

While policymakers and early educators often acknowledge the critical role that families play in children's development and school success, they often do too little to support families in this role. They do too little to support the knowledge and skills as well as the physical and mental health parents need if they are to provide the kinds of experiences that have been shown to lead to reading readiness and achievement. Their pivotal role in their children's educational success is often undermined by policies that leave them out of the educational equation.

Systemic solutions begin with a "both and" perspective that views children in the **context** of their **families** and **communities**.

Supporting **families** in children's learning also means creating **opportunities** for **parents** to improve their own **skills** in fostering **healthy child development**.

How can policymakers and early educators support families in their efforts to foster children's learning? They can begin by taking a close look at programs and practices aimed at improving reading readiness. Are parents an integral part of these interventions? Do literacy activities have an explicit role for parents? Are adult literacy strategies incorporated into child literacy interventions?

Supporting families in children's learning also means creating opportunities for parents to improve their own skills in fostering healthy child development. Research-based parent education should be an integral part of educational institution's repertoire of support for children's learning and development.

Just as the life of the child is embedded within the life of the family, the life of the family is shaped by the life of the community. Local early childhood centers and neighborhood schools are often the primary institutions linking the parents of young children to each other and the larger community. Centers and schools can therefore play a crucial role in creating and sustaining the networks that support families and build social capital. Even relatively small additions to the budgets of centers and schools can strengthen community and family engagement, thereby helping to strengthen the social fabric that is so often frayed, even within our country's more affluent neighborhoods.

! Families engaged in leadership roles within their communities on behalf of their children can play a critical role in shaping a community's educational climate. The Connecticut Commission on Children's highly successful *Parent Leadership Training Institute* brings together diverse parents within Connecticut's communities and trains them as advocates for children's issues. Now being adapted in other states around the country, the Institute's approach is based on the belief that parents who understand the tools of democracy will become active participants in their communities, fostering change, enhancing accountability, and ultimately improving outcomes for children.

VULNERABLE FAMILIES, VULNERABLE CHILDREN

Researchers say that parental depression and other mental health problems may adversely affect the socio-emotional learning that underlies reading readiness. They say that children's mental health needs cannot be adequately addressed without taking into account the family context. These findings suggest that efforts to address family mental health issues—and other challenging life situations—can be considered reading readiness strategies.

Early identification of vulnerable families is crucial. Nurse-home visiting programs and other early-intervention programs reach a

portion of families experiencing challenges. However, many others are not identified until their children begin to experience problems in school. With training, early education staff can help identify families experiencing substance abuse, domestic violence, or other high risk behaviors so that appropriate referrals can be made. The trusting relationships that often exist within early childhood environments can be leveraged to motivate families to seek assistance.

To level the playing field, early childhood programs and schools must partner with substance abuse, mental health and other counseling organizations to support families affected by high risk behaviors. Such collaboration requires professionals to "think outside the box" in order to address conditions and stressors that jeopardize young children's development and learning.

Proactive rather than reactive approaches to addressing family and community risk factors can help avert the kinds of problems that get in the way of school readiness and reading readiness. Focusing resources to support prevention is a sound investment for all children, families and communities, but the return on that investment is even greater for children living in vulnerable families and communities. Programs such as drop-in community centers, multidisciplinary pediatric practices, home visiting initiatives, and adult literacy programs can all help vulnerable families promote the health development and early learning that underlie reading achievement.

! Vulnerable families can benefit from intensive, preventive supports. The *Nurse Family Partnership Program* is a nurse home visiting program designed to promote the well-being of low-income first-time mothers and their children. Mothers are enrolled during pregnancy and remain in the program through their child's second birthday. Home visits, which seek to promote healthy behaviors before the child's birth, and foster healthy parenting practices after, are also used to encourage participants to pursue education and work goals. Now implemented in 23 different states, and serving nearly 10,000 families, this intensive and broad-based intervention has been shown to significantly improve outcomes for both mothers and their children.

BUILD DIVERSE PARTNERSHIPS TO SUPPORT READING READINESS

Increasingly, individuals and organizations representing diverse community stakeholders have been sought out as champions of the early childhood agenda. Organizations like Fight Crime: Invest in Kids, a national network of law enforcement officers, have become leading advocates locally, in their states, and nationally for enhanced funding for high quality early education. Economists and business leaders have proven to be strong allies as well, highlighting the potential of comprehensive early childhood development programs to improve social and educational outcomes for our youngest citizens.[81]

The role of these partners as champions of public investment in early childhood programs can serve as a foundation for engaging these groups more broadly—as active participants in

community collaborations to improve reading readiness. Communities should seek to bring these diverse partners to the table to help develop community-based strategies designed to address conditions that can improve or undermine outcomes for children. Economic and housing development groups, code enforcement, alcohol control entities, neighborhood watch groups, and many others, all have roles to play in creating safe, positive environments for young children.

Collaborations between early education programs and law enforcement can be particularly powerful relationships. These partnerships have the potential to strengthen relationships between families of young children and officers assigned to their neighborhoods – breaking down barriers, building trust, and establishing strategies to work together to improve neighborhood safety. Similarly, relationships between early childhood programs and code enforcement officials provide mutual benefit, giving families access to institutional authority to address unsafe housing conditions while providing enforcement officials with allies in their efforts to improve deteriorating rental properties.

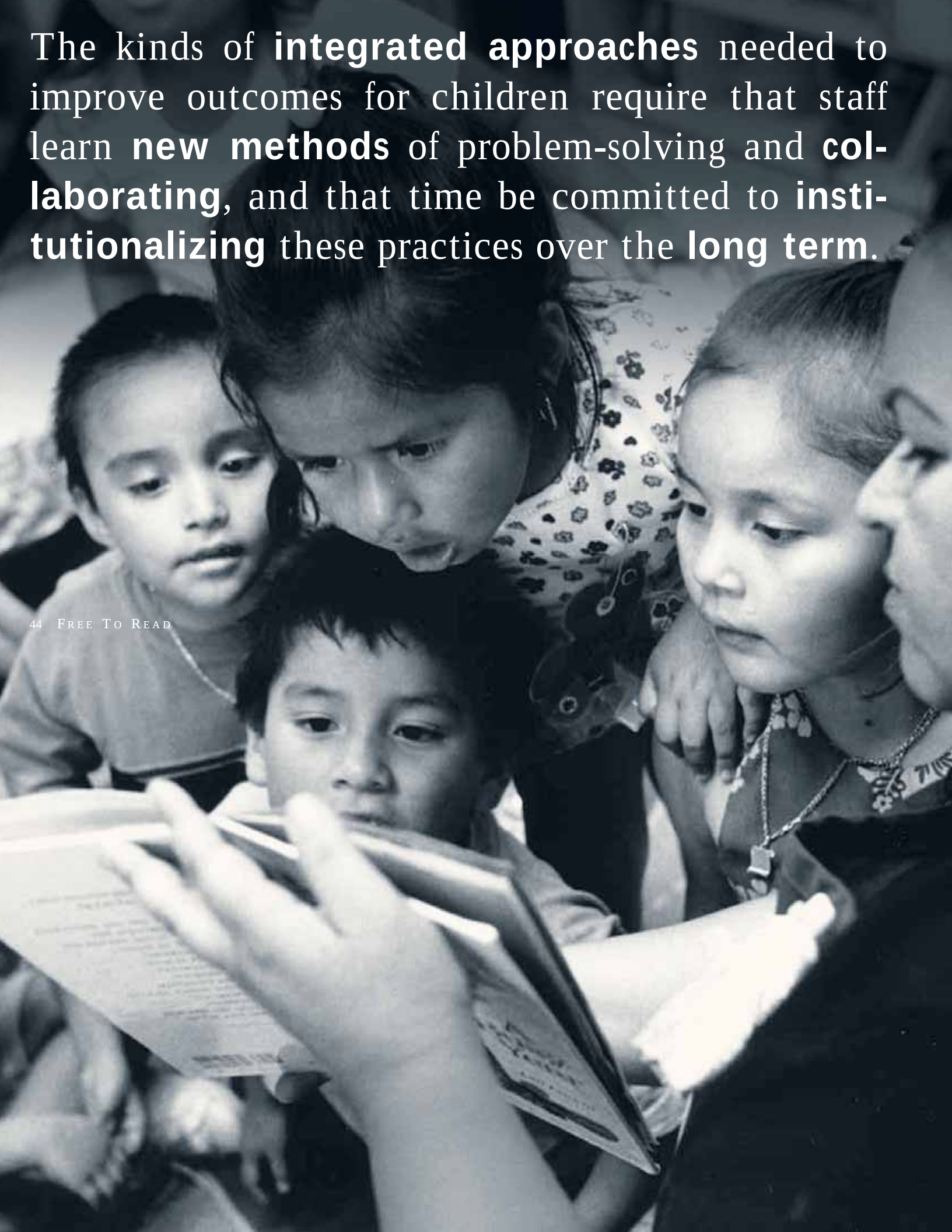
The diverse programs serving families and young children within a neighborhood also have the capacity to throw a broader net, reaching families beyond the usual boundaries of their programs. Too often, such programs separate residents into "client groups," disrupting rather than enhancing families' social ties. By working together, early childhood programs, schools, community centers and others located in the same neighborhoods can help forge relationships between neighbors who might not know one another, enhancing the social connections that foster neighborhood health.

! Free To Grow is a national demonstration program testing an innovative approach to two closely related public health problems—substance abuse and child abuse. Free To Grow brings together Head Start programs with broad based community partners to support locally tailored, integrated approaches to strengthening families and communities. Program strategies target the young child's overall environment, not the child. The program emphasizes diverse partnerships for early childhood programs, including relationships with law enforcement, community development groups and municipal officials. These relationships are emerging as the first step towards systems change at the local level that encourages more holistic strategies to address the impact of high risk behaviors on both families and communities.

MOVE BEYOND "PROJECT THINKING" TOWARD A MORE INTEGRATED APPROACH

Each wave of educational policy brings a flurry of new interventions, program models and demonstration projects, many of which vanish as funding cycles shift. A decade of experience with Free To Grow suggests the need to move beyond "project thinking" toward a more integrated approach—one that infuses into the agendas of existing organizations consideration of family and community effects on young children's development and school readiness.

Focusing resources to support prevention is a sound **investment** for all children, but the **return** on that investment is even **greater** for children living in **vulnerable families** and **communities**.



The kinds of **integrated approaches** needed to improve outcomes for children require that staff learn **new methods** of problem-solving and **collaborating**, and that time be committed to **institutionalizing** these practices over the **long term**.

The tendency to think in "field silos" is reinforced by the way that funding decisions are made. Too often, categorical funding streams for education, mental health, substance abuse treatment, community development and law enforcement act as a barrier for integrated work. Unlike the business sector, which builds research and development costs into its operating budgets, financially squeezed public institutions and non-profit organizations tend to choose service provision over infrastructure development Yet the kinds of integrated approaches needed to improve outcomes for children require that staff learn new methods of problem-solving and collaborating, and that time be committed to institutionalizing these practices over the long term.

The public health model provides one model of the way an integrated approach to reading readiness might work. It takes both an individual and population-wide approach to looking at and solving problems in a community. It requires looking beyond any given project in pursuit of answers to a set of broad questions about the nature—and the family and community contexts—of the problem at hand. What is the problem? How is it perceived? Who is affected? What is going on in households and in neighborhoods to cause or aggravate the problem or prevent its solution? Which policies are related to the problem? Which cultural beliefs? Which media messages?

The public health model requires double vision—the capacity to look simultaneously at individual and environmental aspects of the problem as well as individual and environmental approaches to its solution. A teacher can remind a student to wear his glasses. She can write notes home to suggest that his parents check his backpack each morning, or buy an extra pair that can be kept in school. But schools may not be aware of underlying problems such as a health insurance policy that covers on only one pair of eyeglasses per year and makes no exceptions for those lost or broken by children. Writing a note to parents or keeping an extra pair of glasses in school is an individual strategy. Taking action to improve health insurance coverage for children is an environmental strategy. In efforts to strengthen literacy, both approaches are important.

! Building new interventions onto existing community platforms is one way to move towards a more integrated approach. Illinois' *CRIB program (Coordination Rewards Illinois Babies)* is one of a number of emerging approaches nationally utilizing federal programs as a springboard for other services. CRIB fully integrates the WIC supplemental nutrition program with the state's family case management program targeting pregnant women and infants. The initiative required no additional funding, relying instead on pooling and reallocation of existing funding streams. The process has resulted in cost savings by eliminating duplication of effort, as well as a more seamless system of client-centered support.

FREE TO CHANGE

Children learn to read one at a time. For each boy or girl, the "aha" moment—the realization that letters represent sounds and that sounds can link up into words—comes at a different time. While learning to read might appear to be an individual challenge, involving many, many small, quiet "ahas," the research presented in this report shows that learning to read is a process that begins in the earliest days and weeks of life and is shaped by children's experiences in both their homes and neighborhoods. The research also sheds light on the significant number of our nation's children who face multiple family and community risk factors and need more intensive supports to succeed in school.

The challenge—ensuring that children's early experiences and supports get them off to a good start as readers—is both clear and compelling. And recent research findings are equally unambiguous. Studies show that families have a profound impact on children's reading readiness and that children from different neighborhoods are likely to have different developmental outcomes. If families and neighborhoods play major roles in children's development, both are key to promoting reading readiness. However, focusing on family and community contributions to strengthening literacy in an "equal but separate" fashion is not enough. Growing strong readers demands an approach that brings all partners in the process to the table—the same table—to craft a common vision, a common vocabulary and a common message.

Over the past twelve years, the lessons learned through programs like Free To Grow and the public health model on which it is based have underscored the potential of a more integrated, holistic approach to promoting reading readiness. To be sure, continuing to develop and refine a more integrated approach will take time and resources. Historically, there has not been a natural constituency for solving problems in a holistic way. Policymakers from different fields often have different assumptions about what children and families need and how change can be created and sustained. A more integrated approach may call for educators to advocate for environmental and systems change strategies that are not usually part of their repertoire or expertise. By the same token, law enforcement and community development professionals may also have to stretch to see their role in this larger picture. Yet it is these broad-based efforts that will support the partnerships at the local level which are needed as the first step in systems change on behalf of a better future for all of our nation's children.

Growing **strong readers** demands an approach that brings **all partners** in the process to the table — **the same table** — to craft a common **vision**, a common **vocabulary** and a common **message**.

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NOTES

[1] Burns, M.S., Griffin, P., & Snow, C.E. (Eds.). (1999). *Starting Out Right: A Guide to Promoting Children's Reading Success*. Washington, D.C.: National Academy Press.

[2] Burns et al., (1994).

[3] Whitehurst, G.J. & Storch, S.A. (2001). The role of family and home in the literacy development of children from low-income backgrounds. *New Directions for Child and Adolescent Development, 92*, 53-71.

[4] See David Boulton interview with Terrence Deacon, author of *The Symbolic Species: The Co-Evolution of Language and the Brain*, September 5, 2003. The interview is available at www.childrenofthecode.org/interviews/deacon.htm. According to Deacon, "Writing and reading occurred recently. Therefore, whatever we use to do this was a kluge, that is, an engineering patchwork that just sort of barely gets by. We are not well designed to do so and as a result a lot of people have difficulty acquiring reading and writing."

[5] Gunn, B.K., Simmons, D.C., & Kameenui, E.J. (1995). *Emergent Literacy: Synthesis of the Research*. Eugene, OR: National Center to Improve the Tools of Educators.

[6] Rayner, K., Foorman, B.R., Perfetti, C.A., Pesetsky, D., & Seidenberg, M.S. (2001). How psychological science informs the teaching of reading. *Psychological Science in the Public Interest,2(2),* 35.

[7] Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing Reading Difficulties in Young Children*. Washington, DC: National Academy Press.

[8] Lyon, Reid, Testimony delivered before the House Committee on Education and the Workforce, July 10, 1997.

[9] Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing Reading Difficulties in Young Children*. Washington, D.C.: National Academy Press.

[10] Whitehurst, G.J. & Storch, S.A. (2001). The role of family and home in the literacy development of children from low-income backgrounds. *New Directions for Child and Adolescent Development, 92*, 53-71.

[11] Tramontana et al. (1988). Other studies show that although cognitive measures are more effective predictors of reading vocabulary, perceptual measures are better predictors of reading comprehension (Wallbrown et al. 1975, cited in West, Denton, and Germino-Hausken, *America's Kindergartners*, 25).

[12] Marzolf, D. & DeLoache, J. (1994). Transfer in young children's understanding of spatial representations. *Child Development*, 65,1-15.

[13] Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing Reading Difficulties in Young Children*. Washington, DC: National Academy Press.

[14] Snow, C.E. et al. (1998).

[15] Ramey, C.T. & Ramey, S.L. (2002). *Early childhood education: From efficacy research to improved practice*. Presented April 30, 2002 at A Summit on Early Childhood Cognitive Development Ready to Read, Ready to Learn: A Call to Leadership, Little Rock, Arkansas.

[16] Supporting cognitive development in early childhood. Retrieved April, 7, 2005 from http://www.nccic.org/pubs/literacy/cognitivedev.html.

[17] Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of child functioning at school entry. *American Psychologist*, 57(2), 111-127.

[18] David Boulton interview with Donald Nathanson, September 8, 2003. Available at www.childrenofthecode.org/interviews/nathanson.htm.

[19] Boulton interview with Donald Nathanson, September 8, 2003.

[20] Baydar, N., Brooks-Gunn, J., & Furstenberg, F.F. (1993). As cited in Whitehurst, G.J. & Fischel, J.E. (1999). *Reading and Language Impairments in Conditions of Poverty*. Stony Brook, N.Y.: State University of New York at Stony Brook, 7.

[21] Lentz, F.E. (1998). Effective reading interventions in the regular classroom. In Graden, J.L., Zins, E., & Curtis, M.J. (Eds.). *Alternative educational delivery systems: Enhancing instructional options for all students*. Washington DC: National Association of School Psychologists.

[22] Shore, R. (2002). *What Kids Need*. Boston: Beacon.

[23] Bransford, J. D., Brown, A.L.,& Cocking, R.R. (Eds.). (1999). *How People Learn*. Washington, D.C.: National Academy Press, 92.

[24] National Center for Education Statistics. (2000). *Special Analysis 2000: Entering Kindergarten: A Portait of American Children When They Begin School*. Washington, DC: Author.

[25] Donahue, P., Danne, M., & Grigg, W. (2003). The nation's report card: Reading highlights 2003. *National Assessment of Educational Progress*. Washington, D.C.: National Center for Education Statistics.

[26] Child Trends Data Bank. (2003). Early school readiness. Available at http://www.childtrendsdatabank.org/indicators/7EarlySchoolReadiness.cfm.

[27] Baldwin, D.A. (1996). Infants' reliance on a social criterion for establishing word-object relations. *Child Development*, 67(6), 3135-3153.

[28] Lee,V.E. & Burkam, D.T. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute.

[29] Hart, B. & Risley, T. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore: Brookes Publishing Company, Inc.

[30] Child Trends Research Brief. (2001). School Readiness: Helping Communities Get Children Ready for School and School Ready for Children.

[31] Wood, J.J. (2002). Parent-child preschool activities can affect the development of literacy skills. *Journal of Research in Reading*, 25(3), 241-258.

[32] Parker, F.L., Clark, B., Peay, L., Young, S., Fernandez, A., Robinson, R., & Baker, A. (1997). *Parent Involvement: A Training Manual for Head Start Staff*. Alexandria, VA: National Head Start Association.

[33] Hart, B. & Rissley, T.R. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore: Paul H. Brooks.

[34] Parker, E. Fairfax County, VA, cited in *Starting Out Right*, p. 134.

[35] Parker, E., p.3.

[36] Wertheimer, R., Croan, T., Anderson Moore, K.A., & Hair, E.C. (2003). *Attending kindergarten and already behind: A statistical portrait of vulnerable young children*. Child Trends Research Brief. Retrieved April 7, 2005 from http://www.childtrends.org/Files/AttendingKindergartenRB.pdf.

[37] Wertheimer, R. et al. (2003).

[38] Shonkoff, J.P. & Phillips, D.P. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: National Academy Press.

[39] Shonkoff & Phillips (2000).

[40] Brooks-Gunn, J., Duncan, G., & Maritato, N. (1997). Poor families, poor outcomes: The well-being of children and youth. In *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.

[41] Brooks-Gunn, J. & Duncan, G.J. (1997). The effects of poverty on children. *The Future of Children: Children and Poverty*, 7(2), Summer/Fall.

[42] Menaghan, E.G. & Parcel, T.L. (1995). Social sources of change in children's home environments: The effects of parental occupational experiences and family conditions. *Journal of Marriage and the Family*, 57, 69-84; and Moore, K.A. & Driscoll, A.K. (1997). Low-wage maternal employment and outcomes for children: A study. *Future of Children*, 7(1), 122-127.

[43] Korenman, S., Miller, J., & Sjaastad, J. (1994). *Long-Term Poverty and Child Development in the United States*. St. Paul, MN: University of Minnesota.

[44] Brooks-Gunn, J. & Duncan, G.J. (1997).

[45] Taylor, S.E., Repetti, R.L., & Seeman, T.(1997). Health Psychology: What is an unhealthy environment and how does it get under the skin? *Annual Review of Psychology*, 48: 411-447. Cited in Singer, B. & Ryff, C.D. (1999). Hierarchies of life histories and associated health risks. *Annals of the New York Academy of Science*, 896: 96-115.

[46] Huffman, L. C., Mehlinger, S. L. Mehlinger, & Kerivan, A. S. (2000). Risk factors for the academic and behavioral problems at the beginning of school. In *Off to a Good Start*. Chapel Hill, NC: University of North Carolina, University of North Carolina FPG Child Development Center.

[47] Moore, S. G. (1992). *The Role of Parents in the Development of Peer Group Competence*. Urbana, IL: ERIC Digest.

[48] Landry, S.H., Smith, K.E., & Swank, P.R. (2003). The importance of parenting during early childhood for school-age development. *Developmental Neurobiology*, 24(2&3): 559-591.

[49] Furstenberg, F.F., Jr., Cook, T.D., Eccles, J., Elder, G.H., Jr., & Sameroff, A. (1999). *Managing to Make It: Urban Families and Adolescent Success*. Chicago: University of Chicago Press, p.127-138.

[50] Hofferth, S. (1999). Changes in American children's time: 1981-1997. University of Michigan, Institute for Social Research, Center Survey. Also Hofferth, S. (2001) How American children spend their time. *Journal of Marriage and the Family*, 63, 295-308.

[51] Duke, M.P., Fivush, R., Lazarus, A., & Bohanek, J. (2003). *Of Ketchup and Kin: Dinnertime Conversations as a Major Source of Family Knowledge, Family Adjustment, and Family Resilience*. Atlanta, GA: The Emory Center for Myth and Ritual in American Life, Working Paper No. 26.

[52] Hancox, R.J., Milne, B.J., & Poulton, R. (2005). Association of television viewing during childhood with poor educational achievement. *Archives of Pediatric & Adolescent Medicine*, 159: 614-18.

[53] Hancox et al, (2005); Evans, G.W. (2004). The environment of childhood poverty. In *American Psychologist*, 59, 77-92.

[54] Halfon, N., Shulman, E., & Hochstein, M. (2001). Brain development in early childhood. In *Building Community Systems for Young Children*. Los Angeles: UCLA Center for Healthier Children, Families and Communities. Retrieved from the Web at http://www.healthychild.ucla.edu/Publications/Documents/halfon.health.dev.pdf.

[55] Halfon et al., (2001); Dawson, Hessl and Frey, (1994); Dawson et al (1997).

[56] Substance abusing or substance dependent parents, a national household survey on drug abuse report. (2003). Retrieved from the Web. http://www.samhsa.gov.

[57] Zuckerman, B., Frank, D.A., & Mayes, L. (2002). Cocaine-exposed infants and developmental outcomes. *JAMA*, April 17, 2002, Vol 287, No. 15.

[58] Chomitz, V. R., Cheung, L. W. Y., & Lieberman, E. (1995). The role of lifestyle in preventing low birth weight. *The Future of Children*, 5(1), Spring.

[59] Bandstra et al. (2002). Longitudinal influence of prenatal cocaine exposure on child language functioning. *Neurotoxicology and Teratology*, 24(3): 297-308.

[60] Zuckerman, Frank & Mayes. (2002). Discrepancies among similar controlled longitudinal masked studies may relate, in part, to whether the samples studied include premature infants, or whether those infants are excluded from the study.

[61] Suchman, N. E., Altomare, M., Moller, F., Slade, A., & Mayes, L. (2003). Emotionally responsive parenting: A new parenting intervention for drug dependent mothers. Paper presented at Problems of Drug Dependence Annual Meeting, Bal Harbour, FL, June 2003.

[62] U.S. Department of Health & Human Services, National Clearinghouse on Child Abuse and Neglect Information. *Gateways to Information: Protecting children and strengthening families*. Retrieved February 8, 2004. http://nccanch.acf.hhs.gov/publs/usermanuals/subabuse/intro.cfm.

[63] Finkelstein, N. (1994). Treatment issues for alcohol- and drug-dependent pregnant and parenting women. *Health and Social Work*, 19(1): 7-15.

[64] Duncan, G.J. & Raudenbush, S. (2001). Neighborhoods and adolescent development: How can we determine the links? In Booth, A. & Crouter, A.C. (Eds.). (2003). *Does it Take a Village? Community Effects on Children, Adolescents, and Families*: 105-136. State College, PA: Pennsylvania State University Press. p. 132. See also Sastry, N., & Pebley, A.R. (2003). Neighborhood and family effects on children's health in Los Angeles. Paper presented at the Annual Meeting of the Population Association of America, Minneapolis,

MN, May 2003 (RAND Document DRU-2400/11-LAFANS), p. 36.

[65] See, for example, Furstenberg, F. (1999).

[66] Whitehurst, G.J. & Storch. (2001).

[67] Lara-Cinisomo, S. & Pebley, A.R. (2003). *Los Angeles County Young Children's Literacy Experiences, Emotional Well-being and Skills Acquisition: Results from the Los Angeles Family and Neighborhood Survey*. Rand Working Paper Series, 03-19.

[68] Annie E. Casey Foundation. (1999). *The Right Start*. Baltimore, MD: Author.

[69] Annie E. Casey Foundation. (1999).

[70] Lara-Cinisomo & Pebley. (2003), p. 66.

[71] Lara-Cinisomo & Pebley. (2003), p. 66.

[72] Briggs (1997); Currie (1997). In these studies, poor families are given housing vouchers that can be used only in a low-poverty area. Their children's developmental outcomes are then compared to those of children in comparison groups. Studies show a significant differences in behavior problems (as reported by the families) and juvenile arrests. The multi-site Moving To Opportunity program reported that after moving to better neighborhoods, children feel safer and less anxious. The children showed fewer depressive and anxiety-related behaviors. Some groups also showed improved scores on tests of cognitive abilities. In short, these experimental programs have provided important new evidence that a neighborhood's social and physical conditions affect family life and at least some aspects of children's well-being.

[73] Klebanov, P.K., J. Brooks-Gunn, P. L. Chase-Landsdale, & R.A. Gordon. (1997). "Are Neighborhood Effects on Young Children Mediated by Features of the Home Environment?" In *Neighborhood Poverty: Context and Consequences for Children* (Vol. 1). New York: Russell Sage Foundation.

[74] Case, A.C. & L.F. Katz. (1991). *The company you keep: The effects of family and neighborhood on disadvantaged youth*. National Bureau of Economic Research. NBER Working Paper No. W3705. Children learn a great deal about behavior and values from family members and other adults in their community. When the people they encounter day to day organize their lives around work, children learn about managing time and establishing routines. They get the idea that planning ahead and working toward goals can get you somewhere [See Wilson, W.G. (2003). Jobless ghettos: The social implications of the disappearance of work in segregated neighborhoods. *The Social Construction of Difference and Inequality: Race, Class, Gender and Sexuality* (2nd Edition). Ed. Trace E. Ore. New York: McGraw Hill.] But if most adults in a neighborhood move in and out of jobs, or get stuck in low-wage, low-status jobs, young people can get the message that responsible behavior doesn't pay off. They may underestimate the importance of education. If the only people they see moving up a career ladder are of a different race, young people may conclude that education pays off for some groups, but not for others.

[75] Berkman L.F. & Kawachi, I. (2000). *Social Epidemiology*. New York: Oxford University Press.

[76] Sampson, R.J., Raudenbush, S., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277:918-24.

[77] Sampson & Raudenbush. (1997).

[78] Sastry, N., & Pebley, A.R. (2003). "Neighborhood and family effects on children's health in Los Angeles." Paper presented at the Annual Meeting of the Population Association of America, Minneapolis, MN, May 2003 (RAND Document DRU-2400/11-LAFANS).

[79] Love, J.M., Aber, J.L., and Brooks-Gunn, J. (1994). *Assessing Community Progress Toward Achieving the First National Educational Goal*. Princeton, NJ: Mathematica Policy Research, Inc., p. 12.

[80] Love et al. (1994).

[81] Heckman, J.J. & Masterov, D.V. (2004). The productivity argument for investing in young children. Working Paper 5, Invest in Kids Working Group, Committee for Economic Development.

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