

# Promoting School Success

## Closing the Gap Between Research and Practice

*Policy implications of current research on early brain development and findings from longitudinal and cross-site evaluations of early care and education programs*



**Child Development Policy Institute Education Fund**

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the David and Lucile Packard Foundation  
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### **Child Development Policy Institute Education Fund (CDPI Education Fund)**

The CDPI Education Fund was founded in 1993 to ensure that current information and research about California's children are transformed into sound policy and practice. In pursuit of this mission, the Education Fund is involved in two broad areas of activity—sponsoring numerous trainings, workshops, and conferences and developing / disseminating informational materials and issues papers that explore topics of interest to early care and education professionals, policy makers, parents and the general public.

### **Child Development Policy Institute (CDPI)**

The mission of CDPI is to help establish sound public policy that best serves the children of California. CDPI is the leader in the child care and development field on fiscal and public policy matters, and is the principal advocate for children and families in the State budget process.

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# Introduction



*Over the past two decades, researchers have amassed a wide and ever-growing body of information about how young children develop and learn. With the contributions of educators, policy makers, neurobiologists, linguists and medical practitioners—to name a few—we have never had a clearer or more compelling picture of the first years of life.*

*These contributions have informed and influenced an already growing interest in “school readiness” among educators, researchers, early childhood specialists, parents, policy makers, legislators, business people, funders and the interested public. These discussions have sprung up largely in response to widespread concern about how well American schools are preparing students to meet the challenges of the 21<sup>st</sup> century. Such concerns, coupled with the findings of research on early brain development that underscore the importance of the first few years of life, have brought public attention to the local, state and federal levels.*

*This heightened interest in improving educational outcomes for American students has indeed brought about some positive results, including a new and research-driven understanding of the long-term benefits of early care and education for both children and families. However, there remains a significant gap between the research on how children learn and the systems that are currently in place to educate children.*

## Background

# Addressing the Gap Between Research and Practice



## Conference Process

**The Conference** On January 18, 2002 the Child Development Policy Institute Education Fund (CDPI Education Fund) and its sister organization, the Child Development Policy Institute (CDPI), hosted a day-long conference entitled *Promoting School Success: Transforming Research into Policy and Practice*. More than 100 invited leaders and researchers attended.

The diverse group represented the fields of early care and education, health care, social work and K-12 education, and included credentialed teachers, school administrators, health care clinicians, child welfare workers, children’s advocates, university professors, pediatricians, family child care providers, and child development program directors, among others. Representatives were also present from private foundations and the State Legislature.

The conference was divided into two sessions. The morning session featured policy makers and researchers, who addressed key issues affecting young children and families (see sidebar, opposite page). During the afternoon session, conference participants met in smaller groups. Using the morning’s presentations as a framework, the groups brainstormed and responded to the following question:

***Considering the current research, what are the policy implications that should drive educational initiatives and practices over the next five years?***

Each group of conference participants reported back on its discussion and conclusions, and it became evident that a consensus was emerging in several issue areas.

**Review and Analysis** In the following months, the Planning Committee revisited the issues raised at the conference and identified five key themes that arose

during the presentations and subsequent brainstorming sessions. Based on these themes, the Committee drafted a set of strategic questions for evaluating and positioning efforts to improve services for young children. The Committee's analysis was then prepared for review by practitioners in the field.

**Practitioner Focus Groups** In late 2002, the CDPI Education Fund hosted three regional focus groups consisting of community-based early care and education practitioners from a variety of settings, including child care centers, family child care homes, and both public and private schools. These sessions highlighted the research findings and policy implications that emerged during the conference. Practitioners were encouraged to provide input based on their experiences working with young children.

**Promoting School Success Report** The report you hold in your hands is a synthesis of the findings and recommendations that emerged during this year-long policy development process, organized into the following five thematic areas:

*Theme 1: Early Brain Development*

*Theme 2: How Children Learn*

*Theme 3: Long Term Cost Benefits*

*Theme 4: Importance of Caregivers*

*Theme 5: Communication Across Disciplines*

The final section of the report outlines five strategic questions that policy makers can use to assess the effectiveness of policies and practices in promoting school success. Policy makers will also find a list of suggested readings that offer an in-depth look at current research.

## Featured Speakers

*Promoting School Success Conference,  
January 2002*

### **Honorable Kerry Mazzoni**

*California Secretary of Education*

**TOPIC: Current state of policy initiatives relating to early care and education.**

### **Neal Halfon, M.D., M.P.H.**

*Professor of Pediatrics, Professor of Community Health Sciences, UCLA*

**TOPIC: Delivering services to families within a developmental framework.**

### **Marcy Whitebrook, Ph.D.**

*Senior Researcher, Institute of Industrial Relations, UC Berkeley*

### **Eva Marie Shivers**

*Doctoral candidate working with Carolee Howes, Ph.D. UCLA*

**TOPIC: Role of early care and education programs in promoting school success**

### **Ethel Klein, Ph.D.**

*President of EDK Associates, Former professor at Harvard and Columbia Universities*

**TOPIC: Framing an early care and education agenda for the public**

### **Ann Collins**

*Associate Director for Program and Policy Analysis, National Center for Children in Poverty, Joseph P. Mailman School of Public Health, Columbia University*

**TOPIC: Child Care Research Collaboration and Archives**

## Theme 1

# Early Brain Development



As the brain responds to environmental influences — particularly relationships with significant caregivers — it creates and organizes connections among cells that can last throughout life.

## Current Research

### What We Know

**Brain development begins before birth and continues throughout life, but the first five years are critical.**

New research on early brain development has reshaped our understanding of how children grow and learn. We now know that while learning continues throughout life, the first five years are a period of unparalleled growth in every area of a child's development. Early brain research tells us that:

- ✓ The brain is not mature at birth. While brain development and learning begins in utero, there is much work left to be done during the first years of life.
- ✓ In the first year of life, brain development is both more rapid and more extensive than previously thought.
- ✓ As the brain responds to environmental influences—particularly relationships with significant caregivers — it creates and organizes connections among cells that can last throughout life.
- ✓ As children grow, those brain connections that are repeatedly activated through experience are reinforced and tend to become permanent. Those that are not used — or used only rarely — tend to be eliminated.
- ✓ By age three, a child's brain is more than twice as active as that of an adult and remains that way until about age 10.
- ✓ Adverse experiences have a negative and long-lasting effect on brain development. Children who experience early adversity tend to be less attentive, more disengaged, and less motivated to master new tasks.

We have also learned a great deal about what young children need to succeed throughout their school years. Research has shown that:

- ✓ How young children feel is equally important as how they think, especially in terms of preparing them to succeed in school.
- ✓ High-quality early care and education programs—those that provide structured, cognitively enriched learning environments with low adult-child ratios—have a significant and enduring impact on children’s long-term academic achievement.

**“Social-emotional development is strongly linked to mental health and school readiness. Relationships ‘program’ social-emotional development from the earliest days of life.”**

*Dr. Neal Halfon*

## What We Can Do

# Closing the Gap

The new brain research indicates the need for a paradigm shift—a fundamental and far-reaching change in thinking—with regard to services for young children and families.

- ❑ Educational initiatives to promote school success should begin with *parental readiness and the child’s development from birth to age three* rather than waiting until the child is ready to enter kindergarten.
- ❑ Programs and services for young children must attend to the developmental needs of “the whole child,” which includes the child’s need for emotional warmth, physical interaction, mental stimulation, good nutrition, adequate medical care, family stability, and community support.

## Theme 2

# How Children Learn



The ability of adults to tune in to children's cues and interests is key to encouraging the development of language and social skills.

## Current Research

### What We Know

To be effective, early care and education must be designed and delivered to reflect current research on how children develop and learn.

A variety of efforts have been undertaken to translate the new knowledge of early brain development into policies and practices that enhance young children's opportunities to explore and learn. In recent years, brain-based learning and teaching have received widespread attention in articles, books and conferences. These efforts share several key points of understanding, which are summarized below.

- ✓ Learning takes place in the context of significant nurturing relationships.
- ✓ Learning takes place when children are calm and free of excessive stress.
- ✓ The brain is primed to seek out meaning; information is secondary.
- ✓ The ability to perceive patterns is the foundation for effective learning.
- ✓ Since each brain is unique, teaching is never a "one-size-fits-all" proposition. Children — particularly young children — need both individual attention and individualized responses on a regular basis.
- ✓ The ability of adults to tune in to children's cues and interests is key to encouraging the development of language and social skills.
- ✓ Young children learn best when they have the freedom to move about and physically explore their environments.
- ✓ Learning takes place in clusters — and, in young children, typically involves motor skills. For example, cognitive skill development is enhanced when paired with music and motor skills.

- ✓ Brain development takes place in stages, but the pace is not steady. Young children literally learn in leaps and bounds.

## What We Can Do Closing the Gap

Programs for young children need to incorporate design and delivery elements consistent with research on how children learn.

- ❑ Early care and education settings need to maintain low child-to-caregiver ratios and offer children opportunities to develop consistent, responsive, secure and predictable relationships with their caregivers so that learning can be enhanced.
- ❑ Early care and education programs must involve parents as partners to promote a nurturing learning environment and to support healthy development.
- ❑ Caregivers should receive special training and/or mentoring to help them identify and respond to the unique cues and learning styles of individual children.
- ❑ Hands-on learning in a wide range of environments should become the standard for young children.
- ❑ School districts and early care and education programs should incorporate brain development research into their professional development programs.

**“We need to do a better job of tying early learning issues into the education agenda. In other words, we have to make a stronger connection between what happens from three to five and how a pre-K system would help.”**

*Dr. Ethel Klein*

## Theme 3

# Long Term Cost Benefits



While the research on early brain development and the benefits of early care and education are both clear and compelling, the message has not yet reached the American public.

## Current Research

### What We Know

**High-quality early care and education saves money in the long term.**

The research could not be clearer: High-quality early care and education is among the best investments we can make in our children's futures. Several rigorous longitudinal studies have yielded the same results.

- ✓ Well-structured, cognitively enriched early care and education programs can have a long-term effect on children's academic achievement, grade promotions, high school graduation rates, and even their lifetime earnings. These gains are especially significant for poor and minority youngsters.
- ✓ Participation in early care and education programs dramatically reduces crime, special education referrals, and reliance on welfare, all of which come with extremely large price tags.
- ✓ Conversely, *lack of exposure* to early care and education can leave children at risk for grade retention, placement in special education, dropping out of school, troubled relationships, and delinquency.

Unfortunately, a 1995 study on child care costs, quality and outcomes found that more than 65 percent of programs for preschool-aged children were of minimal to mediocre quality and that one in 10 centers were of such poor quality that they may jeopardize children's development. The findings on family-based child care services are similar.

Among the challenges associated with ensuring that young children and their parents have access to quality early care and education is the ongoing debate about the government's role in the lives of families. The American public is divided about whether the government should increase funding for early care and education services or bolster efforts to enable more parents to stay at home with their young children.

While the research on early brain development and the benefits of early care and education are both clear and compelling, the message has not yet reached the American public in a form that is convincing and inspiring.

## What We Can Do Closing the Gap

Raising the quality of early care and education programs begins and ends with the same challenge—promoting the value of early care and education for individuals, families and communities.

- ❑ Greater clarity and consensus is needed *within* the early childhood and education field about the key elements of well-structured, quality programs that promote long-term benefits.
- ❑ Information about early brain development must be more widely disseminated to medical practitioners, parents, early care and education providers, legislators, universities, training programs, and community-service organizations.
- ❑ The findings of longitudinal research study that demonstrate the academic, social and economic benefits of high-quality early care and education must become common knowledge.
- ❑ The long-term cost benefits of high-quality care and education need to be expressed in explicit terms and linked with other commonly held beliefs, values and goals, including reducing crime, lowering the number of families that receive welfare benefits, and curbing expenditures for special education.

**“Studies conclude that early-childhood education makes a difference. Young children exposed to high-quality settings exhibit better language and mathematics skills, better cognitive and social skills, and better relationships with classmates than do children in lower-quality care.”**

*From Quality Counts 2002:  
Building Blocks for Success*

## Theme 4

# Importance of Caregivers



Quality...is largely determined by the presence of well-trained and responsive caregivers who provide children with the three “Ls” — language, love and learning opportunities.

## Current Research

### What We Know

The long-term benefits of early care and education on children’s lives depend in large measure on the quality of their caregivers.

The key factor affecting the impact of early care and education is the quality of the setting, which is largely determined by the presence of well-trained and responsive caregivers who provide children with the three “Ls”—language, love and learning opportunities. Research clearly shows that:

- ✓ Training of early care and education professions is essential to the provision of high-quality services for young children.
- ✓ Effective training can be informal, occurring within the center or school, frequently with the assistance of a particular mentor or a group of supportive colleagues.

The most difficult problem faced by most early care and education programs is finding the means to support and retain caregivers while keeping fees affordable for parents. When caregivers leave to seek better opportunities elsewhere, relationships with children are broken and the children’s ability to learn is interrupted. Extensive research on the child care profession reveals that:

- ✓ There is a nationwide shortage of qualified child care staff and high turnover among providers.
- ✓ Turnover among early care and education providers decreases when staff, including directors, are both more highly skilled and paid well.
- ✓ Child care continues to be among the lowest-paid professions, a fact that contributes to extremely high turnover rates—up to 40 percent by some measures.

- ✓ In California, the average annual salary for a child care worker is \$17,420, which falls below the official federal poverty line for a family of four.

## What We Can Do Closing the Gap

Extensive nationwide cross-site evaluations of child care programs by the Work and Family Institute (correct source?) has led to very specific policy recommendations to support the development of trained, responsive caregivers.

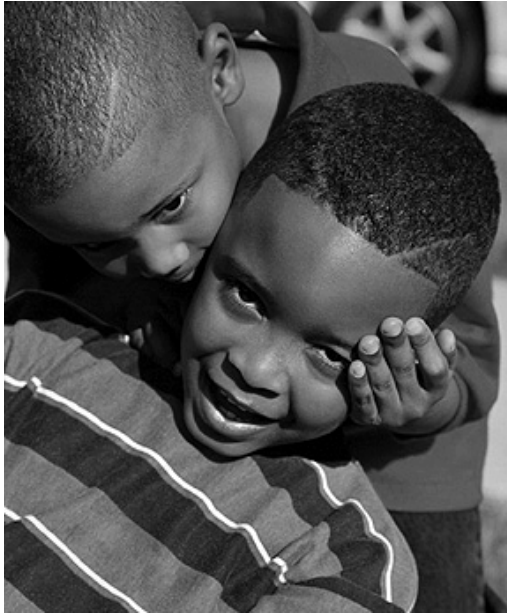
- Alternate pathways to skilled teaching must be both recognized and encouraged through:
  - Licensing and permit requirements that reflect alternate means of acquiring skills.
  - Developing internship, mentoring and collegial-support opportunities for early care and education professionals at all skill levels, with particular attention to entry-level staff.
  - Utilizing traveling resource specialists to visit and mentor early care and education professionals in their workplaces.
  - Making state-sponsored training available to all early care and education professionals.
- The research-based benefits of early care and education to individuals, families and communities should be promoted to improve public willingness to support salaries commensurate with training and longevity.

**“We need to maintain a long-term focus and look at affordability, access, quality and teacher training. Policy is incremental, but we need to think of it in the long term. In other words, we have to take steps, but stay focused on the end result and build on what we have accomplished.”**

*Kerry Mazzone  
California Secretary of Education*

## Theme 5

# Communication Across Disciplines



Human development is not an “either-or” but a “both-and” proposition.

### What We Know

**The needs of children are best met when providers of services to families and children communicate and collaborate on their behalf.**

Among the most important outcomes of the new brain research is the understanding that human development is not an “either-or” but a “both-and” proposition. Young children need both calm nurturing and stimulation; they respond to both their genetic make-up and the influences of their environment; to learn, they need both structure and the freedom to explore; emotional development is not distinct from cognitive development, and so on.

This new, more holistic picture of the conditions that lead to optimal child development has important implications for both policy and practice. As Dr. Neal Halfon unequivocally states: “To meet children’s needs, all services for children must be based on and understood from a developmental framework.”

### What We Can Do

## Closing the Gap

Despite our ever-growing knowledge about early brain development, many children still do not receive what they need to develop into healthy, productive, thriving adults. While the reasons are both varied and complex, one issue stands out from the rest—the need to link the many disparate systems operating on behalf of young children into a coherent whole. To that end, several links must be forged:

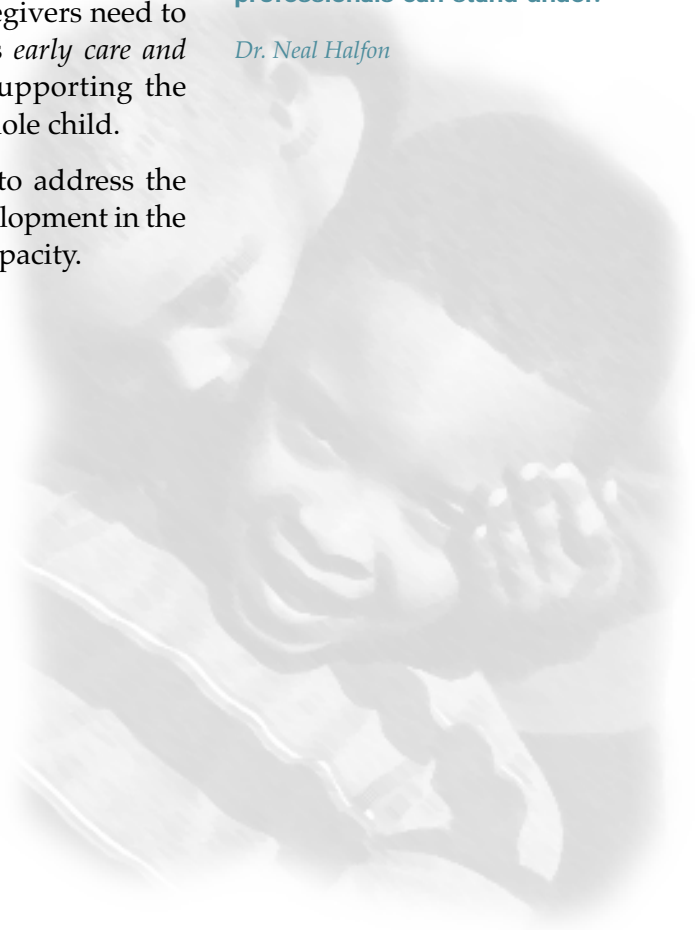
- ❑ Professionals from diverse fields must begin to learn each other’s vocabulary.

Current Research

- ❑ Bridges must be built between early care and education and health care, particularly at the training level. Medical training programs should have a strong child development component, and pediatricians can help educate early care and education providers about early brain development.
- ❑ Pediatricians should conduct regular developmental screenings of all children in their practice to prevent unnecessary learning disabilities or minimize their impact.
- ❑ Child care providers and other caregivers need to rename and reframe their work as *early care and education* and shift the focus to supporting the growth and development of the whole child.
- ❑ All school reform measures need to address the impact of a child's growth and development in the first five years of life on learning capacity.

**“There must be a transition from a focus on education to a focus on child development (which includes social-emotional, language, physical, and cognitive development). This perspective should also be infused into health care. Child development is an ‘umbrella’ that all practitioners and professionals can stand under.”**

*Dr. Neal Halfon*



## Five Strategic Questions:

# A Research-Driven Assessment Tool



A fundamental step in promoting school success is to adopt common criteria for evaluating proposed policies and procedures. The following five questions grew out of the key research findings that are presented in this report.

These five strategic questions are intended to be used as a tool to evaluate and position new efforts to improve services for young children and to move the early care and education field toward a unified voice that is both congruous and convincing.

## Policy Assessment Tool

*Does this policy or practice:*

*1...Recognize that development begins before birth and that the first five years of life are critical?*

*2...Reflect rigorous research about how children develop and learn?*

*3...Save money in the long term?*

*4...Support the development and retention of trained and responsive caregivers?*

*5...Build a network of community services that supports the developmental needs of children and families?*

# Conclusion

Promoting school success is a challenge that cannot be undertaken in isolation. To be effective, programs, services and policies that promote the healthy development of young children must consider the whole child—their social-emotional, language, physical, and cognitive development and their simultaneous roles as members of families, schools, communities and cultures. Meeting these challenges—and closing the gap between research and practice—requires that we define and promote a unified message that is based on sound developmental research and underscores the importance of collaboration among the professions and institutions that serve families with young children.

## Suggested Readings

- Brazelton, T.B. et al. 2000. *America's Child Care Crisis: A Crime Prevention Tragedy*. Washington D.C.: Fight Crime: Invest in Kids.
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