



Early Learning Left Out: Closing the Investment Gap for America's Youngest Children, 2nd Edition

A report by:

Voices for America's Children and the Child and Family Policy Center

in partnership with:

**DC Action for Children
Voices for Illinois Children
Kentucky Youth Advocates
Mississippi Forum on Children & Families
Association For Children of New Jersey
New Mexico Voices for Children
Center for Community Solutions
Oklahoma Partnership for School Readiness
Texans Care For Children
Voices for Virginia's Children**

April 2005

Table of Contents

Executive Summary	1
Introduction	2
The Investment Gap: 2003 Public Investments by Child Age	2
Opportunities for Closing the Achievement Gap	6
Implications for Investment	8
Conclusion	9
Endnotes	11

About the Report – Acknowledgements

This report was made possible through generous funding from the Annie E. Casey Foundation, the Ewing Marion Kauffman Foundation, the Ford Foundation, the Kellogg Foundation, and the David and Lucile Packard Foundation. All findings and conclusions, however, are the responsibility of the authors of the report and not the foundations who provided support.

Charles Bruner, Director of the Child and Family Policy Center, was the lead author of this national report, with support from Debbie Stein, Voices for America’s Children, and the state and DC organization contributors. In addition to the composite information provided in this report, there are individual pages that provide state- or district-specific data, which may be obtained by contacting the Child and Family Policy Center or Voices for America’s Children.

Early Learning Left Out: Closing the Investment Gap for America's Youngest Children, 2nd Edition

This report seeks to answer the simple but important question, "Are we investing enough in our youngest children?"

Executive Summary

Early Learning Left Out: Closing the Investment Gap for America's Youngest Children, 2nd Edition answers a simple but critically important question: *Are we investing enough in our youngest children?* To answer this question, the report first examines public investment in the education and development of children by child age. Next, it identifies the known gaps between what is currently invested and what could be invested, based upon the research on effective early learning and development programs. The conclusions are clear.

First, the level of public investment in early learning, particularly in the critical birth-to-three years, pales in comparison with public investments in school-aged and college-aged youth. In contrasting investments in the education and development of children by child age in nine states and the District of Columbia, *Early Learning Left Out, 2nd Edition* shows that per child investments are smallest in the critical birth-to-three years—where brain growth is most rapid—and remain small in the pre-school years in comparison with the school-aged and college-aged years. The composite picture

from the states shows that, for every \$1.00 invested in a school-aged child, 52.1¢ is invested in a college-aged youth, but only 21.3¢ is invested in a pre-school aged child and 8.9¢ in an infant or toddler. While there are some variations across states, all states examined in the two reports show very similar pictures—no state even begins to invest evenly across the years of child growth and development.

Second, the current level of investment in strategies proven to be effective in improving child growth and development in the early years is small in comparison with the need and opportunity. These include investments in the early identification and treatment of developmental delays; quality early care and education programs; enriched pre-school opportunities; and family-oriented programs for infants and toddlers. Taken together, there is a public "investment gap" nationally in the tens of billions of dollars that needs to be addressed if the nation is to begin to reach the First National Education Goal that "all children start school ready to learn."

Introduction

Learning begins at birth. Brain development is most rapid in the first years of life, as the child's vital neural connections are formed. What happens in these earliest years is a foundation for future learning and establishes the cognitive, social, and emotional base for healthy growth and development. Brain research has established the critical importance of these earliest years of life and knowledge of how a child's environment, and the nurturing the child receives, affects this growth and development.

During these earliest years, children need stimulation, guidance, and interaction as they learn and grow. Young children learn throughout the day and in all types of ways. There is a wealth of knowledge of how young children learn and how to support brain growth and development.¹

There also is a wealth of knowledge showing that children who start school behind, particularly on more than one dimension of school readiness (physical and motor development, language and literacy, social and emotional development, approaches to learning, and cognitive development) have difficulty catching up.² As much as half of school failure may be attributable to gaps in learning and development even before school entry.³ The No Child Left Behind Act sets standards for schools to close the achievement gaps that exist across race and class. Fully achieving these goals ultimately will require effective education and development strategies even before children enter school.⁴ The cost of school "unreadiness" to society itself is great, not only in lost education and productivity costs, but also in increased remediation and compensatory services and public safety costs.⁵

The United States has long had a universal public education system that starts around the time children are six and continues through high school. The United States also has developed a university and community college system that makes post-secondary education available for youth and young adults, with substantial public funding support to make it affordable. While every state has an array of programs and services for pre-school aged children, there is no equivalent overall early learning system, however.⁶ Although states are exploring how to build such systems and developing new planning and governance structures to do so, investments in early learning largely have been made through individual programs and services that are limited in their scope and size. This report seeks to answer the essential

question, "Are we investing enough in our youngest children?"

Organization of Report. First, this report examines the level of public investment (from federal, state, and local school district sources) in children's growth and development by child age. It builds upon an earlier twelve-state report⁷ by examining public investment in nine additional states and the District of Columbia. This part describes overall per child investments in education and development.

Next, the report summarizes the research literature on what has been proven effective in improving children's education and development in the early years of life. Then, the report estimates what it would mean to make investments in these evidenced-based programs to reach the young children who would benefit from them.

The report concludes with a discussion of the implications for making such investments, drawing again from a growing body of economic studies on the cost benefits of such investments.

The Investment Gap: 2003 Public Investments by Child Age

As children grow into adults, they receive support in their education and development from a variety of sources. Parents play the most important role and generally provide the most economic support. They meet children's basic economic needs for nutrition, shelter, clothing, and health care. They also contribute financially to the child's development, from taking their children to cultural and recreational activities, to paying fees for classes, to purchasing toys and books and saving for post-secondary education. Family, friends, neighbors, and community institutions provide additional support.

Government, however, takes the primary role for financing formal education through the primary and secondary grades and contributes substantially to post-secondary educational opportunities as well. Government also provides some limited financing during the early learning years both for programs to help parents in their educational and support roles, and for programs providing educational and developmental supports directly to young children. This government support occurs through federal, state, and local funding.

Methodology. This study worked with selected state organizations to gather information from federal, state, and school district sources to identify the

overall public investments made in the state for children's education and development. State organizations worked closely with state officials to develop these figures and to break them out by child age:

- Infant and toddler years (roughly 0-2)
- Pre-school years (roughly 3-5)
- School-aged years (roughly 6-18)
- College-aged years (roughly 19-23)

The 2003 state fiscal year was used as the basis for gathering fiscal information in all states. Not all information was available by child age in all states, but state organizations worked within their states, and with the national partners, to develop estimates and apportion investments by child age. Investments were apportioned based upon their service to infants and toddlers, pre-schoolers, school-aged children, or college-aged youth, and not specifically by the age of the child. Demographic data on child ages (shown in the parenthesis, above) were used to create the denominators for calculating per child investments in each area.

For the infant and toddler and pre-school years, fiscal information was included on:

- parenting education, home visiting, and family support programs designed to strengthen and support parenting;
- child care subsidies and other early childhood education investments;
- pre-school programs, including Head Start, state pre-school and school district pre-school programs; and
- special education programs and services to provide developmental and educational supports to young children.

For the school-aged years, fiscal information was included on:

- public K-12 education funding, including special education;
- before- and after-school child care subsidies and other school-based care programs; and
- state and federal youth development, recreation, and youth training programs.

For the college-aged years, fiscal information was included on:

- state public university and community college investments as they applied to undergraduate education;
- federal and state tuition assistance and scholarship programs for post-secondary education; and

- federal and state employment and training and youth development programs.

Also included were federal and state tax credits and the value of federal and state tax deductions that supported families in the education and development of their children. These included child and dependent care subsidies for child care and HOPE and other credits and deductions for education primarily focusing upon post-secondary education.

While 85% of the brain's core structure (size, growth, and much of its hard wiring) is developed by age four, less than 9% of public investments in education and development are made by that time.

Findings. The composite results from the nine states and the District of Columbia are shown in Charts One and Two. Chart One tracks cumulative public investments in education and development from birth to age 23, contrasting those with cumulative brain growth and development.

As Chart One shows, while 85% of the brain's core structure (size, growth, and much of its hard wiring) is developed by age four,⁸ less than 9% of public investments in education and development are made by that time.

Chart Two shows actual per capita investments by child age. As Chart Two shows, the infant and toddler years by far receive the smallest public investment.

For both the infant and toddler and pre-school years, the federal government plays the largest role in making financial investments—through Head Start, Parts B and C of the Individuals with Disabilities Education Act (IDEA), Temporary Assistance to Needy Families (TANF), and the Child Care and Development Block Grant (CCDBG).

By comparison, state and school district investments provide the primary funding base for the school-aged years, with the bulk of federal investments targeted for special (IDEA) and compensatory (Title

Chart One

Composite Nine-State & District of Columbia Public Investments Compared to Child Brain Growth

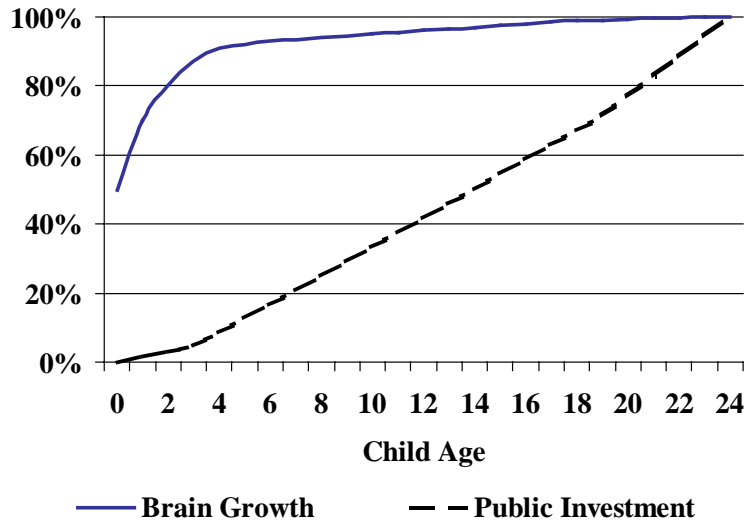
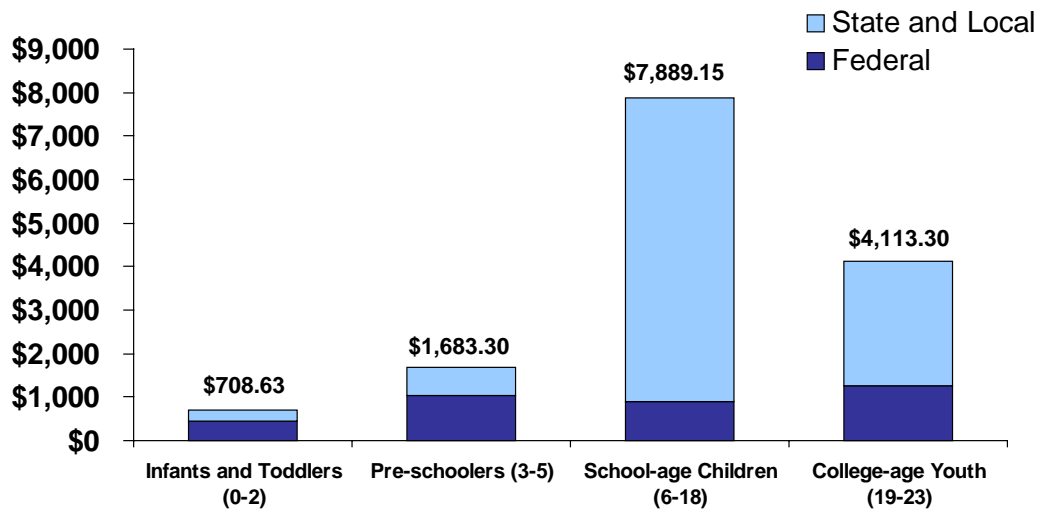


Chart Two

Composite Nine-State & DC Average per Child Investment by Age



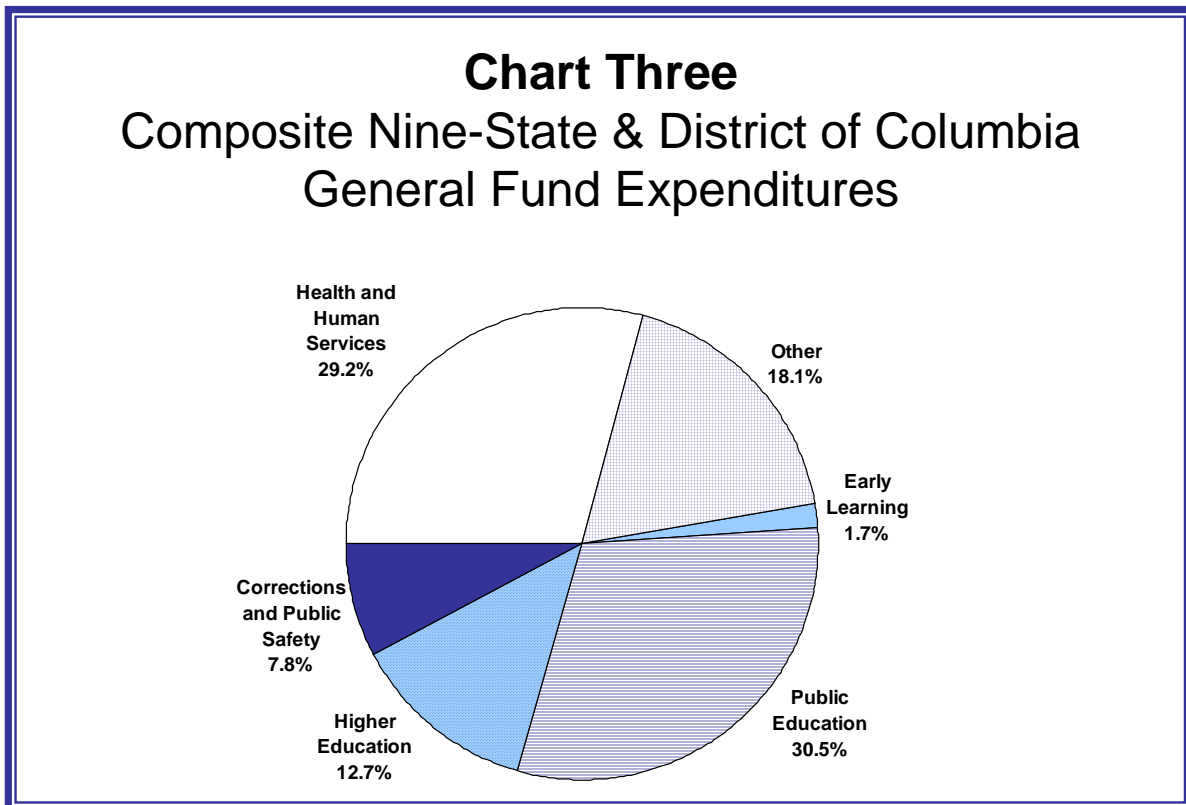
l) education. For the college-aged years, there is a mixture of federal and state investments, including direct appropriations supporting institutions of higher learning, tuition assistance programs such as Pell grants and work study, and tax credits and deductions.

A more detailed examination of the composite state & DC investments in the early learning years shows that the greatest amount of funding is committed to pre-school programs (Head Start and Part B pre-school at the federal level and state pre-school programs at the state level). Child care, including tax credits, represents the next largest share of funding, with a very small proportion of funding going to parenting education and family support programs. On average across the 10 sites, of all early learning funding for both infants and toddlers and pre-schoolers that appears in Chart Two, 52.9% went to pre-school programs. 40.6% went to child care and child care tax subsidies, and only 6.5% went to parenting education and family support.

A second way to examine state investments in early learning is to look at overall state & DC general fund expenditures and to contrast the investments in early learning programs with other state expenditure areas. Chart Three provides a nine-state & DC composite general fund expenditures pie chart. It

represents the average of the percentages identified from each jurisdiction. As Chart Three shows, current state investments in early learning averaged only 1.7% of overall general fund expenditures in the states & DC, compared with 30.5% of expenditures for public education (not including local property taxes), 29.2% for health and human services, and 7.0% for corrections and public safety. Over the last 20 years, corrections and public safety has been one of the fastest growing segments of many state budgets, and expenditures there averaged more than four times greater than investments made in the education and development of young children.

While public financial support for child care is included in this analysis, the primary purpose of most state child care subsidy programs is to make such care affordable to working parents. States have a long way to go in ensuring that such care contributes to children's development. Research is clear that good quality child care improves young children's development, but poor quality care can actually do harm.⁹ Increasingly, states are seeking to improve the quality of the care they finance, particularly through establishing tiered rating and reimbursement systems.¹⁰ At the same time, studies have shown that, overall, the quality of care in the United States needs to be much improved to contribute to children's school readiness.¹¹



Therefore, if anything, the investment figures in the earliest learning years provided here overstate the current public investments in young children's education and development.

Summary. While there is increasing interest and activity among states in making new investments in young children's growth and development, investments in young children currently are tiny in comparison with investments in older children and youth. By way of contrast, the composite picture from the states shows that for every dollar invested in a school-aged child:

- 52.1¢ is invested in a college-aged youth, but only
- 21.3¢ is invested in a pre-school aged child and only
- 8.9¢ is invested in an infant or toddler.

Opportunities for Closing the Investment Gap

Over the last decade, both states and the federal government have focused increasing attention on outcomes or results-based accountability.¹² This has been particularly true in education and human services, with increasing efforts to ensure that new funding is directed toward science-based or research-based programs.¹³

While this field is still developing, there is an increasing research base on what programs and practices are needed to improve children's learning and development in the early years, programs and practices essential to improving school readiness and success. This includes a growing research and evidence base regarding:

- early identification and treatment of developmental delays
- quality early care and education
- pre-school program experiences
- parenting education and family support.

Public investments in each of these areas remains small in comparison with need and opportunity. Both the research base and some indication of unmet need and opportunity in each of these areas are provided below.

Early identification and treatment of developmental delays. Research is clear that early detection and treatment of disabilities and developmental delays (and other special health care needs impeding children's growth and development) is cost effective, reducing the need for subsequent remediation efforts and improving child growth and development.

This includes both cognitive development and social and emotional development.¹⁴ An effective early identification and treatment program requires outreach to parents; trained and skilled professionals involved in both assessment and treatment of disabilities and delays; and significant guidance and support to parents.¹⁵

Part C, or the infant and toddler provisions within IDEA, provides for early intervention to both identify and treat learning disabilities at the earliest possible time. Some states supplement federal Part C funding. Federal funding for Part C in 2003 was \$403 million. Part C, with both federal and state funding, served approximately 2.24% of the nation's infants and children in the federal 2003 fiscal year.¹⁶ At the same time, it is estimated that at least three times that number of all infants and toddlers have detectable developmental or emotional concerns that could be effectively treated during this period.¹⁷ Further, not all the infants and toddlers who are served receive the degree of care and treatment that would best support their development.

Quality early care and education. The majority of working parents must rely upon child care to supervise and instruct their young children while they work. Many young children are in child care arrangements for a large share of the day.¹⁸ Research has shown that the quality of this care matters; good quality care improves children's growth and learning, and poor quality care can do harm.¹⁹ Research has also shown that program quality and effectiveness is related to the skills and training of the caregivers and caregiver to child ratios,²⁰ which ultimately are related to program cost.

At the same time, there is a mismatch between what parents can afford to pay for child care and the amount needed to ensure that children are in quality early care and education settings. This "gap" between what parents can afford to pay for child care and what quality, developmentally appropriate child care would cost has been variously estimated at \$2,500 per 3- and 4-year-old child in full-time care and \$4,500 or more for an infant or toddler in full-time care.²¹

Only been a few estimates of the national costs of financing a high quality, developmentally appropriate, early care and education system exist; but the numbers calculated are in the tens of billions of dollars annually. One recent analysis put the figure at \$50 billion.²²

High quality pre-school programs can benefit all children, but particularly low-income children, although they are not a silver bullet that alone will eliminate the disparities in "what children know and can do" at the time of school entry.

Pre-school experiences. A very well-established literature indicates that high quality, comprehensive pre-school programs for vulnerable pre-school children can reduce, although not eliminate, the risk of school problems, special education use, delinquency, drop-out, early parenting and welfare involvement, and crime and its consequences to society.²³ High quality pre-school programs can benefit all children, but particularly low-income children, although they are not a silver bullet that alone will eliminate the disparities in "what children know and can do" at the time of school entry.²⁴

Led by Pew Charitable Trusts, the Joyce Foundation, and Packard Foundation, there now are concerted efforts to establish universal voluntary pre-school within states. These build upon the work of pioneering efforts in Georgia and Oklahoma. Yet Head Start and other pre-school program efforts currently serve only three in five of the 3- and 4-year-olds eligible for coverage under current poverty standards,²⁵ indicating there is a substantial investment gap simply in reaching those most in need.²⁶ The National Institute for Early Education Research (NIEER), the research and development arm for the Pew Initiative, estimates that the full cost of providing free, high quality, universal pre-school to all 3- and 4-year-olds in the country would be \$68.6 billion annually.²⁷ An estimate of the additional public cost simply of providing low-income 4-year-olds with a pre-school experience equivalent is \$6.5 billion, which would more than double if 3-year-olds were included as well.²⁸

Parenting education and family support. Parents are their child's first and most important teachers. The public, policymakers, and research all point to the quality—or competence and confidence—of parenting as the single most important determinant of healthy growth and development.²⁹ At the same time, there is less agreement on what can be done to strengthen parenting in the early years and what

research-based programs and strategies exist that truly reach struggling parents and help them create a healthier and more developmental environment for their young children. The research on home visiting programs has been mixed, as has the research on family support³⁰—although both show promise *if* the programs are linked to other supports, truly build relationships with the families they serve, and are staffed by trained, competent and passionate workers.³¹ Positive findings on the impacts of Early Head Start are cited as evidence that comprehensive programs that work with families can be very successful.³² Although the overall research on home visiting has been mixed, specific home visiting programs such as the Nurse Parent Partnership and the Infant Health and Development Program (IHDP) have had impressive research results for the specific populations they serve.³³

Different researchers have provided different "take away" messages from the existing research, but it is clear that effective programs require skilled workers who can establish relationships with families, connect families to sources of support, and offer modeling and guidance that enables families to strengthen their parenting capacities.³⁴ When successful, these programs can produce some of the greatest gains for children, but they also require other supports to be in place.

While there often are a large number of different parenting education and home visiting programs operating within states, the overall investment—on a per family and an overall basis—is very small. In fact, it is the smallest among any of the cited education and development investment areas discussed here. Early Head Start, for instance, serves only 3% of the nation's infants and toddlers living in poverty.³⁵

Children do best when all their environments support their learning and development. Research indicates that individual programs have stronger and more enduring impacts when other programs and environments support them.

Comprehensiveness and Scale. The early childhood research base is largely programmatic, based on

evaluations of specific programs designed to address a particular child need or learning opportunity. While each may have its own particular impact, children do best when all their environments support their learning and development. Research indicates that individual programs also have stronger and more enduring impacts when other programs and environments support them. In early childhood, in particular, the whole is greater than the sum of its parts.

As states examine their investment opportunities and gaps, they need to do so in the context of building and supporting an overall early learning system. To achieve optimal results, this requires investments in all the areas discussed above.

A \$25 billion investment would raise the country's per child investments to 23¢ for an infant and toddler and 35¢ for a pre-schooler for every \$1 invested in a school-aged child.

Implications for Investment

On a national scale, the investment opportunity in young children's education and development certainly exceeds \$25 billion annually in new resources. If free, universal pre-school for all children is included, it could be as much \$100 billion annually. An additional \$25 billion figure, when applied to new investments at the state level, itself would constitute 5%–10% of all state general fund expenditures today. If evenly distributed among infants and toddlers and pre-schoolers, a \$25 billion investment would raise the country's per child investments to 23¢ for an infant and toddler and 35¢ for a pre-schooler for every \$1 invested in a school-aged child.

Clearly these are big numbers. Yet failing to invest also has its consequences. The research from a series of seminal programs points to the importance of making such investments—not only from the impact on the success of children and families, but also for their positive economic benefits to society as a whole.

Drawing upon this research, Nobel laureate economist James Heckman, comparing the potential returns on investment from early learning programs with human capital investments in the later years (particularly education and training programs), has concluded that the opportunity for positive returns are greatest in early learning and that society should “invest in the very young.”³⁶ When comparing these investments with those made by government for economic development, Arthur Rolnick, senior researcher for the Minneapolis Federal Reserve Bank, has come to a similar conclusion:

“Early childhood development programs are rarely portrayed as economic development initiatives, and we think that is a mistake. Such programs, if they appear at all, are at the bottom of the economic development lists for state and local governments. They should be at the top.”³⁷

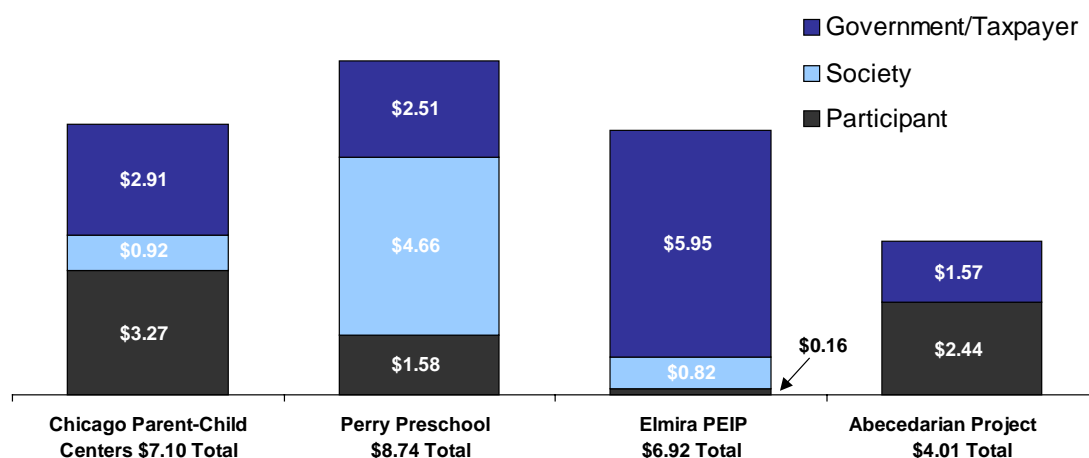
The RAND Corporation, known for its business orientation and defense research, similarly has identified high quality early childhood programs as cost effective in averting future social problems and costs, with positive returns to society as well as the individuals served.³⁸

These conclusions are based upon comprehensive high quality early childhood programs that have tracked their participants over time. Chart Four provides the findings in terms of rates of return from four of the most studied early childhood programs.³⁹ These programs have additional strength in representing diverse strategies (home visits, enriched pre-school programs, programs working with children and families at a very early age, and pre-school programs coupled with transition strategies into school) and operating across several decades.

As Chart Four shows, all four programs have positive returns simply in terms of direct benefits to the taxpayer, in reduced government costs or increased earnings and an expanded tax base. They also have societal benefits that accrue either to the individuals served through improved earnings, or to others, through reduced victimization costs from averted criminal activity. This Chart should not be used to contrast the different approaches, as each examined different subsets of areas for potential long-term cost savings, and some consider them as conservative estimates of overall potential gain. The chart does show that each has a net positive, long-term impact of at least \$4 for every dollar invested.⁴⁰

Chart Four

Benefit Costs Table for Four Early Childhood Programs: Dollars Returned for Each Dollar Invested



Public opinion polling suggests that the timing is right for investments in early learning.

Conclusion

The fiscal analysis in this report was not designed to produce detailed estimates of the overall investment need and opportunity in early learning. It clearly shows, however, that public investments have only touched the surface of possible investments in young children’s learning and development.

America prides itself on providing opportunity for everyone, with much of that opportunity reflected in the country’s educational system. Government makes major investments in assuring universal education through elementary and secondary school. Through a combination of government funding and tax expenditures, government provides substantial support for higher education as well.

At the same time, however, children and their families can take best advantage of these educational opportunities only if they have been prepared in their earlier years. Increasingly, the economy demands that young adults have skills that begin but do not end with a high school diploma. Therefore, it is important not only to look at the impacts of school readiness on successful completion of primary and secondary education, but on preparation for post-secondary education as well. Currently, children from low-income families are much less likely to take advantage of post-secondary educational experiences, although their tax dollars contribute to supporting higher education. Investing in early learning can play a significant role in raising achievement for all and for better realizing the American dream of advancement through education and hard work, particularly for those starting with the fewest resources.

Public opinion polling also suggests that the timing is right for investments in early learning. A recent poll showed that the public has extremely strong support for the most recognized early learning program in the country—Head Start—with over nine in ten

people (92%) supporting retaining Head Start's current structure, and over eight in ten (82%) favoring expansion to reach more children.⁴¹ A 2001 poll conducted by Peter D. Hart Research Associates and Market Strategies Incorporated showed that voters believe state government is not doing enough to make pre-school and child care programs available to parents (58% too little; 5% too much; 25% right amount; and 12% not sure).⁴²

The analysis provided here offers composite information for nine states and the District of Columbia, and shows public under-investment in early learning, which exists for each of the 10 jurisdictions examined. It confirms and builds upon the first *Early Learning Left Out* report.⁴³ Together, the two reports, covering 21 states and DC, show the same pattern of under-investment for every single jurisdiction examined.

Given the consistency of findings across these jurisdictions, these reports can and should be used as a basis for both state and national policy.

Investments in the earliest years of life represent more than simply another children's or human services issue. These investments represent human capital and economic development.

At a national level, the Business Roundtable and Corporate Voices for Working Families, prominent business-led organizations, have made early childhood services a major call to action, from an economic development perspective.⁴⁴ The law enforcement community, through Fight Crime: Invest in Kids, has made early learning a policy priority in terms of crime control and public safety.⁴⁵

This analysis and report on state investments by child age adds essential, additional data on the status of current investments. These should give rise to discussions and action in establishing much greater public financial commitments to education and development in the earliest years of life, where the investment gap is greatest.

Endnotes

- ¹ Shonkoff, J. & Phillips, D. (eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press; and Nelson, C. (2003). Neural development and lifelong plasticity. In Lerner, R., Jacobs, F. & Wertlieb, D. (eds.) *Handbook of applied developmental science*. Vol. 1 Thousand Oaks, CA: Sage Publications; and Shore, R. (1997). *Rethinking the brain: New insights into early development*. New York, NY: Families and Work Institute.
- ² Rothstein, R. (2004). *Class and schools: Using social, economic, and educational reform to close the black-white achievement gap*. Washington, DC: Economic Policy Institute; and Wertheimer, R. & Croan, T. (2003). Attending kindergarten and already behind: A statistical portrait of vulnerable young children. *Child Trends Research Brief*. Washington, DC: Child Trends.
- ³ Lee, V. & Burkham, D. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, DC: Economic Policy Institute; and Rouse, C., Brooks-Gunn, J. & McLanahan, S. (2005). Introducing the issue. *School readiness: Closing racial and ethnic gaps. The Future of Children*. Vol. 15, No. 1. Princeton, University and Brookings Institution.
- ⁴ Rothstein, R. (2004). *Class and schools: Using social, economic, and educational reform to close the black-white achievement gap*. Washington, DC: Economic Policy Institute.
- ⁵ Bruner, C. (2002). *A stitch in time: Calculating the costs of school unreadiness*. Washington, DC: The Finance Project.
- ⁶ Bruner, C. (2004). *Building an early learning system: The ABCs of planning and governance structures*. Des Moines, IA: State Early Childhood Policy Technical Assistance Network and the Build Initiative.
- ⁷ Bruner, C., Elias, V., Stein, D. & Schaefer, S. (2004). *Early learning left out: An examination of public investments in education and development by child age*. Des Moines, IA: Child and Family Policy Center and Voices for America's Children.
- ⁸ Purves, D. (1994). *Neural activity and the growth of the brain*. New York, NY: Cambridge University Press; and Karoly et. al., (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: Rand Corporation.
- ⁹ Vandell, D. & Wolfe, B. (2000). *Child care quality: Does it matter and does it need to be improved?* Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services; and Kagan, S. & Rigby, E. (2003). *Policy matters: Setting and measuring benchmarks for state policies: Improving the readiness of children for school*. Washington, DC: Center for the Study of Social Policy.
- ¹⁰ National Child Care Information Center. (2002). *Overview of tiered strategies: Quality rating, reimbursement, licensing*. Washington, DC: Author. Retrieved December 5, 2004 at <http://nccic.org/poptopics/tieredstrategies.htm>
- ¹¹ Vandell, D. & Wolfe, B. (2000). *Child care quality: Does it matter and does it need to be improved?* Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services; and Kagan, S. & Rigby, E. (2003). *Policy matters: Setting and measuring benchmarks for state policies: Improving the readiness of children for school*. Washington, DC: Center for the Study of Social Policy.
- ¹² Osborne, D., & Hutchinson, P. (2004). *The price of government: Getting the results we need in an age of permanent crisis*. Cambridge, MA: Basic Books; and Friedman, M. (1997). *A guide to developing and using performance measures in results-based budgeting*. Washington, DC: The Finance Project.
- ¹³ Bruner, C., Greenberg, M., Guy, C., Little, M., Schorr, L. & Weiss, H. (2001). *Funding what works: Exploring the role of research on effective programs and practices in government decision-making*. Des Moines, IA: National Center for Service Integration.
- ¹⁴ Ewing Marion Kauffman Foundation. (2002). *Set for success: Building a strong foundation for school based on the social-emotional development of young children*. Kansas City, MO.
- ¹⁵ Knitzer, J. (2001). *Building services and systems to support the healthy emotional development of young children: An action guide for policymakers*. New York: NY: National Center for Children in Poverty; and Wertlieb, D. (2003). Converging trends in family research and pediatrics: Recent findings of the American Academy of Pediatrics Task Force on the family. *Pediatrics*. Vol. 111, No. 6. pp. 1572–1587.
- ¹⁶ Danaher, J. & Armijo, C. (eds.). (2004). *Part C updates*. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, National Early Childhood Technical Assistance Center.
- ¹⁷ Knitzer, J. (2001). *Building services and systems to support the healthy emotional development of young children: An action guide for policymakers*. New York: NY: National Center for Children in Poverty.
- ¹⁸ Tout, K., Zaslow, M., Papillo, A. & Vandivere, S. (2001). *Early care and education: Work support for families and developmental opportunities for young children*. Assessing the New Federalism Occasional Paper 51. Washington, DC: Urban Institute.
- ¹⁹ Wertheimer, R. & Croan, T. (2003). Attending kindergarten and already behind: A statistical portrait of vulnerable young children. *Child Trends Research Brief*. Washington, DC: Child Trends.
- ²⁰ Barnett, W. (2003). Better teachers, better preschools: Student achievement linked to teacher qualifications. *Preschool Policy Matters*. Issue 2. National Institute for Early Education Research; and Barnett, W. (2003). Low wages = low quality: Solving the real preschool teacher crisis. *Preschool Policy Matters*. Issue 3. National Institute for Early Education Research.
- ²¹ Helburn, J. & Howes, S. (1996). Child care cost and quality. *The Future of Children Financing Child Care*. Vol. 6, No. 2. U.S.: Center for the Future of Children: David and Lucile Packard Foundation. pp. 62-82; Helburn, J., Bergmann, R. (2002). *America's child care problem: The way out*. New York: Pelgrove.; and Golin, S., Mitchell, A., & Gault, B. (2004). *The price of school readiness: A tool for estimating the cost of universal preschool in the states*. Washington, DC: Institute for Women's Policy.
- ²² Helburn, J., Bergmann, R. (2002). *America's child care problem: The way out*. New York: Pelgrove
- ²³ Heckman, J. & Masterov, D. (2004). *The productivity argument for investing in young children*. Washington, DC: Committee for Economic Development; Bruner, C. (2004). *Many happy returns: Three economic models that make the case for school readiness*.

- Des Moines, IA: State Early Childhood Policy Technical Assistance Network; and Karoly, L., et. al. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: Rand Corporation.
- ²⁴ Bruner, C. (2002). *A stitch in time: Calculating the costs of school unreadiness*. Washington, DC: The Finance Project.
- ²⁵ Children's Defense Fund. (2003). *Key facts: Essential information about child care, early education, and school-aged care 2003*. Washington, DC: Author.
- ²⁶ Lynch, R. (2004). *Exceptional returns: Economic, fiscal, and social benefits of investments in early childhood development*. Washington, DC: Economic Policy Institute.
- ²⁷ National Institute for Early Education Research. (2005). *Fast facts: Cost of providing quality preschool education to America's 3- and 4-year-olds*. Retrieved at: <http://nieer.org/resources/facts/index.php?FastFactID=5>
- ²⁸ Haskins, R. & Rouse, C. (2005). Closing achievement gaps. *The Future of Children Spring Policy Brief*. Princeton, NJ: Princeton University and Brookings Institution.
- ²⁹ Brooks-Gunn, J. & McLanahan, S. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. In: *School readiness: Closing racial and ethnic gaps. The Future of Children*. Vol. 15, No. 1. pp. 139–168. Princeton, University and Brookings Institution; and Lara-Cinisomo, S., Pebly, A., Vaiana, M., Maggio, E., Berends, M., & Lucas, S. (2004). *A matter of class: Educational achievement reflects family background more than ethnicity or immigration*. Santa Barbara, CA: RAND Corporation.
- ³⁰ Layzer, J., Goodson, B., Bernstein, L. & Price, C. (2001). *National evaluation of family support programs final report*. Cambridge, MA: Abt Associates.
- ³¹ Schorr, L. & Schorr, D. (1988). *Within our reach: Breaking the cycle of disadvantage*. New York: Anchor Books Doubleday; Dunst, C. & Trivette, C. (2001). *Parenting supports and resources, help-giving practices, and parenting confidence*. Asheville, NC: Winterberry Press; and Bruner, C. (2004). *A stitch in time: Calculating the cost of school unreadiness*. Washington, DC: The Finance Project.
- ³² Early Head Start Research and Evaluation Project. (2001). *Building their futures: How early head start programs are enhancing the lives of infants and toddlers in low-income families. Summary report*. Washington, DC: Commissioner's Office of Research and Evaluation and the Head Start Bureau, Administration on Children, Youth, and Families, Department of Health and Human Services; and Lombardi, J. & Bogle, M. (eds.). (2004). *Beacons of hope: The promise of early head start for America's youngest children*. Washington, DC: Zero to Three.
- ³³ Council on Child and Adolescent Health. (1998). The role of home-visitation programs in improving health outcomes for children and families. *Pediatrics*. Vol. 101, No. 3. pp. 486–489.
- ³⁴ Weiss, H. (2001). Making progress: Learning and public accountability. In Bruner, C. et. al. *Funding what works: Exploring the role of research on effective programs and practices in government decision-making*. Des Moines, IA: National Center for Service Integration; and Schorr, L. & Schorr, D. (1988). *Within our reach: Breaking the cycle of disadvantage*. New York: Anchor Books Doubleday.
- ³⁵ Children's Defense Fund. (2003). *Key facts: Essential information about child care, early education, and school-aged care 2003*. Washington, DC: Author.
- ³⁶ Heckman, J. (2000). *Invest in the very young*. Chicago, IL: Ounce of Prevention Fund.
- ³⁷ Rolnick, A. & Grunewald, B. (2003). Early child development: Economic development with a high public return. *Fedgazette*. Minneapolis, MN: Federal Reserve Bank of Minneapolis.
- ³⁸ Karoly, L., et. al. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: Rand Corporation.
- ³⁹ Bruner, C. (2004). Rethinking the evaluation of family strengthening strategies: Beyond traditional program evaluation models. *The Evaluation Exchange*. Vol. X, No. 2, pp. 24–5ff.
- ⁴⁰ Bruner, C. *A stitch in time: Calculating the costs of school unreadiness*. Washington, DC: Finance Project; and Bruner, C. *Many happy returns: Three economic models that make the case for school readiness*. Des Moines, IA: State Early Childhood Policy Technical Assistance Network.
- ⁴¹ Pax World Funds and National Head Start Association. (2003). *More than 9 out of 10 Americans support existing head start program*. Retrieved at: www.paxworld.com/newscenter03/nr090403.htm.
- ⁴² National Institute for Early Education Research. (2001). *Voter's attitudes toward early childhood education*. Washington, DC: Author.
- ⁴³ Bruner, C., et. al. (2004). *Early learning left out: An examination of public investments in education and development by child age*. Des Moines, IA: Child and Family Policy Center and Voices for America's Children.
- ⁴⁴ Business Roundtable and Corporate Voices for Working Families. (2003). *Early childhood education: A call to action from the business community*. Washington, DC: Author.
- ⁴⁵ Newman, S. et.al. (2000). *America's child care crisis: A crime prevention strategy*. Washington, DC: Fight Crime: Invest in Kids.



About the Child and Family Policy Center

The Child and Family Policy Center was established in 1989 by former Iowa legislator Charles Bruner, Ph.D. to better link research and policy on issues vital to children and families, and to advocate for outcome-based policies to improve child well-being. The Center is active both statewide and nationally. In Iowa, the Child and Family Policy Center assists the state and communities in developing integrated, community-based, family-focused and results-accountable services, particularly for vulnerable children. CFPC also produces a variety of reports, case studies, concept papers, and technical assistance tools on systems reform and community building that are widely used across the United States.



About Voices for America's Children

Voices for America's Children is a national organization committed to working at the state and local levels to improve the well-being of children. With member organizations in almost every state, Voices provides a voice for the voiceless—children—in city halls and statehouses across the country.



About SECPTAN

The State Early Childhood Technical Assistance Network (SECPTAN) provides current information about early childhood policy initiatives to state policymakers. It assists them in assessing the best available evidence and information about effective policies and practices on early childhood issues. The Network is managed by the Child and Family Policy Center with funding from the Ford Foundation, the Ewing Marion Kauffman Foundation, and the David and Lucile Packard Foundation. For more information about SECPTAN, visit www.finebynine.org.

National Partners

Voices for America's Children
1522 K Street, NW, Suite 600
Washington, DC 20005-1202
202.289.0777 phone
202.289.0776 fax
www.voicesforamericaschildren.org

Child and Family Policy Center
218 Sixth Avenue, Suite 1021
Des Moines, IA 50309-4006
515.280.9027 phone
515.244.8997 fax
www.cfpciowa.org

State Partners

DC Action for Children
1616 P Street, NW, Suite 420
Washington, DC 20036
202.234.9404 phone
202.234.9108 fax
<http://www.dckids.org>

New Mexico Voices for Children
2340 Alamo SE, Suite 120
Albuquerque, NM 87106
505.244.9505 phone
505.244.9509 fax
<http://www.nmvoices.org>

Voices for Illinois Children
208 S. LaSalle Street, Suite 1490
Chicago, IL 60604-1120
312.456.0600 phone
312.456.0088 fax
<http://www.voices4kids.org>

The Center for Community Solutions
(formerly known as the Federation for Community Planning)
1226 Huron Road, Suite 300
Cleveland, OH 44115
216.781.2944 phone
216.781.2988 fax
<http://www.communitysolutions.com>

Kentucky Youth Advocates
2034 Frankfort Avenue
Louisville, KY 40206
502.895.8167 phone
502.895.8225 fax
<http://www.kyyouth.org>

Oklahoma Institute for Child Advocacy
420 NW 13th Street
Oklahoma City, OK 73103
405.236.5437 phone
<http://www.oica.org>

Mississippi Forum on Children & Families
737 North President Street, Suite 585
Jackson, MS 39202
601.355.4911 phone
601-355-4813 fax
<http://www.mfcf.org>

Texans Care For Children
814 San Jacinto, Suite 307
Austin, Texas, 78701
512.473.2274 phone
512.473.2707 fax
<http://www.texanscareforchildren.org>

The Association For Children of New Jersey
35 Halsey Street
Newark, NJ 07102
973.643.3876 phone
973.643.9153
<http://www.acnj.org>

Voices for Virginia's Children
701 East Franklin Street, Suite 807
Richmond, VA 23219
804.649.0184 phone
804.649.0161 fax
<http://www.vakids.org>