

Investing in America's Future

Harvesting the Returns of Quality Preschool

Hope Street Group | October 2007



Executive Summary

The Opportunity

The evidence is clear: high-quality preschool delivers extraordinary benefits. When children attend high-quality preschool before they enter kindergarten, measurable results ensue for these children and for American society as a whole. Children who attend such programs do better in school and throughout their lives. They are more likely to graduate from high school; they will earn more money.¹ They are less likely to commit crimes or become pregnant as teenagers.²

Studies show that high-quality preschool generates economic returns of 10-16% per year – about double what the stock market delivers.³ The greater the number of children in high-quality preschool, the greater the overall benefit.⁴ Indeed, even in terms of the fiscal budget, high quality preschool pays for itself: through higher tax revenues, lower welfare costs, and reduced outlays for prisons and criminal justice.⁵

The Challenge

If America were a business, high-quality preschool would be a high-priority investment. If America were a family, it would give all of its children the best possible start in life. So why isn't quality preschool available to all 3 and 4-year old child in America?

The problem is politics. Politics favors short-term pressures over long-term investments, even very good ones. Most voters do not have children under the age of 5, and the consequences of inadequate preschool do not present themselves in the form of front-page news items that galvanize public demands for change. While many state leaders have invested in preschool,⁶ the current patchwork of programs still leaves too many young children without access to quality education or out of preschool entirely. National leaders with vision and commitment must now step up to the plate to offer a preschool strategy and build support for action.

The Solution: A Straightforward Action Plan

Hope Street Group recommends a preschool action plan that is based on solid research and lessons learned from the experiences of existing private, public, and non-profit preschool programs. The plan calls on the federal government to invest funds and establish standards, and on the states to operate and implement programs based on individual state needs.

- **Recommendation #1: Establish a \$24 billion fund to expand access to quality preschool.** The federal government will invest matching funds to support states that make it easy for parents to send their children to high-quality, voluntary preschool programs.
- **Recommendation #2: Define quality and emphasize outcomes.** Funding will be awarded to states that meet quality standards that have been proven to optimize results.
- **Recommendation #3: Maximize choice and flexibility.** Once they have adopted basic federal quality standards, states will be free to customize and innovate in areas such as curricula, program location, incentives, vouchers, school hours, and outreach. Both private and publicly run preschools will be eligible for funding.

Policy Design

Recommendation #1: Establish a federal fund of \$24 billion to expand preschool access to 87% of 3 and 4-year olds.

- The federal fund will enable states to 1) expand the percentage of 3 and 4-year olds able to attend high-quality preschool and 2) enable existing programs to meet quality standards. In order to qualify for these funds, states must provide at least 20% of the total budgets themselves, while also meeting the various requirements of the program as set forth in Recommendations # 2 and #3 below.
- The funding will cover operating and monitoring costs, including:
 - Teacher training, compensation, and support;
 - Materials, meals, insurance, utilities, and other operational expenses;
 - Assessments of each child's developmental progress and needs; and
 - Studies to determine best practices and results.

The investment will not include the following, which state governments, local governments, and/or nonprofits would need to fund separately (perhaps with long-term bonds to exploit the economic returns available from a preschool investment):

- Facilities construction and refurbishment;
- Capacity-building to develop a pool of qualified early childhood educators; or
- Aggressive marketing programs targeted toward hard-to-reach children and parents.
- The program will be rolled out incrementally over a period of 5 years to enable states to develop an effective plan for quality improvement and workforce development. This rollout should be selective and competitive to emphasize excellence.

Recommendation #2: Define Quality and Emphasize Outcomes

Outcomes. The single most important design element of a federal investment in preschool is a commitment to results. States will be required to demonstrate a strong return on this investment. Eligibility for federal funds will be contingent upon state-level implementation of mechanisms to monitor and ensure results in two areas:

- **Kindergarten readiness of all students in the state.**⁷ Students entering kindergarten in each participating state will be measured for their kindergarten readiness. While each preschool will be encouraged to improve performance by addressing its own specific challenges, state accountability metrics will be based on statewide participation and performance. This broader metric will give states an incentive to reach out to those children in greatest need of kindergarten readiness support.
- **Long-term success for children who participate in the program.** Participating states will be required to track compliance with quality standards and participate in longitudinal studies to track the long-term social and economic benefits of various preschool programs.

Quality. Numerous research studies have demonstrated the link between the quality of preschool programs and the magnitude of outcomes achieved.⁸ Consistent predictors of success are small class sizes; low child-staff ratios; effective teachers and other professionals; and as much parental involvement as possible.⁹ In order to qualify for federal funds, states must include key aspects of quality in their preschool programs:

- **Small class sizes and low student-teacher ratios.** Small classes, with enough staff to meet the needs of every child, deliver results superior to results in classrooms with more students or fewer teachers.¹⁰ Young children learn best through frequent, individualized interaction with engaged, experienced teachers. Classes should be led by a head teacher,

should be no larger than 20 students (4-year olds) or 16 students (3-year olds), and should have at least one teacher for every ten 4-year olds and eight 3-year olds.¹¹

- **Sufficient frequency.** Programs meeting at least 5 days a week for two and a half hours per day would be eligible for funding, although states should consider encouraging full-day programs, particularly for disadvantaged children.¹²
- **Effective teachers.** Evidence demonstrates that it matters who teaches, what they teach, and how they teach.¹³ An effective preschool staff will include a significant number of teachers with college degrees, teachers and assistants with specialized early childhood training, and meaningful professional development opportunities. Additionally, teachers must be required to demonstrate the ability to engage young children in age-appropriate activities that deliver on all aspects of kindergarten readiness – such as social skills, self-regulatory behavior, and foundational math and language skills.¹⁴ Finally, preschool teacher salaries should be increased to a level commensurate with local salaries for elementary school teachers.
- **Adequate professional support.** In order for students to reach kindergarten eager to learn, teachers need training and coaching;¹⁵ schools need to offer appropriate developmental monitoring and assessment; and children requiring extra support must have access to healthcare and behavioral specialists.¹⁶ To qualify for federal matching funds, states will be given the flexibility to propose strategies for meeting these various needs, provided that they have systems in place to ensure results.
- **Parental engagement.** Children’s preschool experiences are enhanced significantly by parents familiar with and supportive of the lessons taught in preschool.¹⁷ The best preschools bend over backwards to get parents involved.

Recommendation #3: Maximize flexibility and choice.

State Flexibility. The parameters for federal funding recommended by Hope Street Group – expanding access, guaranteeing certain quality inputs, and monitoring results – have a proven track record for promoting positive outcomes. Beyond these fundamentals, decisions about key issues including curricula, regulations, pedagogy, vouchers, location of service, and tuition support will be left to the judgment of each state.

Parental Choice. While all children should have the opportunity to attend high-quality preschools, participation will not be compulsory. Parents will be the arbiters of the type of preschool program – or indeed whether any preschool program – is best for their child.

One objective of combining federal funding with quality standards is that parents will have access to a greater selection of preschool options for their children. Parental choice will also be enhanced in states that build convenience for parents into their planning. For example, in urban areas co-location of preschools with existing daycare centers eliminates one logistical barrier facing working parents. In rural areas, transportation should be offered to ensure that all 3 and 4-year olds have access to a high-quality preschool program.

Economic Analysis

Review of the evidence. The results attributable to quality preschool access are based upon decades of careful research.

The longest-running research studies are the Perry Preschool Program Study, which was initiated in 1962 among 123 children in Ypsilanti, Michigan; and the Child-Parent-Center (CPC) Program Study, launched in 1986 among 1,539 children in high-poverty sections of Chicago.

Both programs provided half-day, school-year programs to 3 and 4-year olds from neighborhoods or home environments that indicated that the children were at risk for future school and life problems. Both programs featured qualified instructors, low child-to-teacher ratios, and an emphasis on parental involvement. Both studies track the lifetime benefits of the preschool programs and compare them to outcomes for children from the same neighborhoods who did not participate in the program.

The results, summarized in the table below, provide compelling evidence that participation in a high quality preschool program produces life-long benefits and generates enormous returns.¹⁸

Demonstrated results from high-quality preschool		
	<u>CPC Centers</u>	<u>Perry Preschool</u>
Education		
Special Education Placement	-41%	-26%
Grade Retention	-40%	-13%
High School Completion	+20%	+44%
Crime		
Arrest by Age 19	-32%	-39%
Income and Tax Revenue		
Increased Lifetime Earnings	\$20,517	\$50,448
Increased Tax Revenue	\$ 7,243	\$14,078
Social Services		
Reliance on Welfare	Not measured	-17%
Incidence of Child Abuse or Neglect	-51%	Not measured
Other		
Smoking	Not measured	-24%
Child Care Savings	\$1,657	\$906

Source: Pre-K Now, *Dollars and Sense, A Review of Economic Analyses of Pre-K, 2007.*

Considerable later research bolsters the results obtained by these two prominent programs.¹⁹ Indeed, studies of recent state-initiated programs indicate that when preschools incorporate the quality measures that worked in the Perry Preschool and CPC Programs, comparable results continue to be possible today. One example is Oklahoma, which since 1998 has provided high-quality preschool to all 4-year olds whose parents wish them to attend. A study by a Georgetown University research team found that children in Tulsa who completed the preschool program gain 7 to 8 months (above and beyond gains expected from maturation) in letter-word identification skills; 6 to 7 months in spelling; and 4 months in applied math problems. These gains reflect the combined results of children representing Tulsa's diverse ethnic and socio-economic landscape.²⁰

Policy scope: 3 million new children enrolled in high-quality preschool programs, plus improved quality and access for 2.8 million children currently enrolled in daycare or preschool. According to the 2000 census, there are 7.7 million 3 and 4-year olds in the United States. Roughly 58% (4.5 million) of them participate in some type of center-based preschool or daycare program.²¹ This includes 800,000 that are enrolled in Head Start. Hope Street Group estimates that 25% of the other 3.7 million children attending center-based programs are in programs that could be considered both high-quality and educational. That leaves 2.8 million (non-

Head Start) 3 and 4-year olds in programs that are below the standards needed to optimize school readiness and generate social and economic benefits, in addition to the 3.2 million 3 and 4-year olds that are not attending any type of center-based program at all.²²

Policy cost: \$24 billion in new annual federal spending, plus \$5 billion in annual state spending. The investment of \$29 billion would be allocated as follows: \$22.2 billion to enroll 3 million new children in high-quality preschools at a cost of \$7,400 per child; \$4.5 billion to achieve quality standards for 2 million children enrolled in existing preschool and childcare centers; \$0.9 billion to enable existing Head Start programs to upgrade quality where needed; and a \$1.4 billion pool available for outreach and infrastructure grants to states reaching a minimum of 40% enrollment in high-quality preschool.

Summary of economic returns: 10-16% annual rate of return and Substantial GDP Growth.

Empirical studies consistently demonstrate the measurable economic benefits of high-quality early childhood education, from lower welfare and criminal justice costs to higher salaries and a more competitive workforce. Longitudinal studies of high-quality preschool programs for disadvantaged children indicate that the returns are as high as 16% per year, far outpacing stock market and other attractive investment returns. Even for universal preschool programs, projected returns on an investment are a substantial 10%, indicating that the greater the number of children in high-quality preschool, the greater the total financial benefit.²³

Numerous projections about the long-term impact of broadly accessible high-quality preschool on the overall US economy have been published by highly respected individuals and organizations.²⁴ One estimate suggests that a national high-quality preschool program could generate annual GDP gains of \$2 trillion.²⁵

Political Discussion

Quality preschool is supported by individuals and groups whose interests span the political spectrum. An investment in high-quality preschool is consistent with the enduring American principle that equal opportunity and individual initiative are effective contributors to a thriving economy and healthy democracy.

Voters seem to be on board. Half of voters have said they would be more likely to support a political candidate who supports preschool education; two-thirds of voters say government should fund universal, voluntary preschool; and three-fourths of people surveyed support federal funding to increase universal, accessible preschool programs.²⁶ A national poll conducted from 2004-2007 by Peter D. Hart shows strong bipartisan support for preschool programs among a diverse audience.²⁷

This voter support has made it possible for progress to be made at the state level. In the last year alone, 31 states representing 15 Democratic legislatures, 10 Republican legislatures and 6 split-party legislatures have increased their funding for preschool programs.²⁸

Yet, high-quality preschool is still a reality for only a small percentage of our children. The lack of national investment in high-quality preschool represents a missed opportunity for all Americans. Momentum is needed to drive the broad-based support for high-quality preschool toward the tipping point at which it will be transformed into meaningful action.

HSG believes that the business community is best positioned to be the catalyst for this change. Business owners and leaders are invariably impressed when they become aware of the impact that an investment in preschool can have on the health of the US economy and on US workforce

competitiveness. Many business leaders have taken their support a step further by proactively urging government decision makers and political candidates to make high-quality preschool a priority. Businesspeople become powerful change agents when they use their influence and networks to build support for high-quality preschool.

Hope Street Group's recommended preschool action plan includes elements that appeal to a wide variety of constituents, including business people, politicians, and those who might at first glance be opposed to government-funded preschool. For example:

- This proposal will demonstrate results in areas of interest to the American mainstream, such as welfare, crime, and the long-term competitiveness of our economy;²⁹
- Prominent business leaders of both parties are backing these ideas;³⁰
- Prominent state and local leaders of both parties, plus religious leaders, have backed preschool expenditures in various states – including states representing all regions and political persuasions;³¹ and
- Our proposal explicitly allows states to use federal funds to support alternative preschool governance schemes such as private, non-profit, and charter preschools. School vouchers could also be part of the mix. These proposals should enlist the support of many conservative education thinkers who do not otherwise support general increases in new spending.

Rebuttals

“\$22 billion is a huge new program. Isn't it time we brought our budget into balance?”

Response: High-quality preschool is an investment with a track record for generating significant financial returns. At 10-16%, investment returns on preschool investments outperform the S&P 500 and represent a smart use of taxpayer dollars. While an effective preschool policy will require an initial outlay equal to approximately 1% of current federal spending, the resulting budgetary gains offer a compelling reason to make that investment as soon as possible.

“Doesn't Head Start already cover children in need?”

Response: Head Start is very effective, but it is only offered to children from the lowest income families; even among eligible households the shortage of available enrollment slots is so severe that only half of children eligible for Head Start are actually able to gain admission. Furthermore, when it comes to preschool, the definition of 'children in need' must be expanded to include children from middle and lower-middle income households. These children are least likely to attend a high-quality preschool because they are not eligible for aid and cannot afford any of the options currently available to them.

The federal matching funds program proposed by Hope Street Group will encourage the establishment of a variety of preschools that can meet the needs of all children currently unable to access or afford high-quality preschool. Head Start will certainly be one of the building blocks of this strategy because its programs can quickly be upgraded to meet enhanced federal quality standards.

“Aren't plenty of kids already in preschool?”

Response: No – even though census responses indicate that half of preschool-aged children are enrolled in some type of center-based program, this data is self-reported and does not differentiate between high-quality preschools and those daycare options that are less

developmentally effective. Most children in center-based programs are not receiving the level of quality that will adequately prepare them for school. Without government support, high-quality preschool is unaffordable for most families.

“Won’t some of this money subsidize rich parents who could already afford preschool?”

Response: The program awards funding to states based on their ability to achieve higher overall kindergarten readiness benchmarks, thereby rewarding states that make high-quality preschool available to a larger number of children than are currently enrolled in programs. In most states, high-quality preschool is largely unavailable to middle income children; it is only the small percentage of children in families that can afford private preschool tuition who are able to attend high-quality programs. Hope Street Group’s proposal encourages states to: expand access to existing private and public programs that meet quality standards, help existing programs upgrade their quality, and encourage the development of new, high-quality preschools in low and middle-income neighborhoods.

“Don’t the benefits of preschool fade over time?”

Response: The impression that the benefit of preschool fades over time probably stems from the results of some recent research conducted to evaluate the long-term impact of Head Start programs. This study indicated that while the social advantages attained by children in Head Start programs were long-lasting, the academic gains attributable to Head Start did not continue after two to three years of elementary school.³² More recent and ongoing research studies confirm the significant gains in social and cognitive development enjoyed by children in Head Start programs.³³ While it is not clear why some of the cognitive gains did not last over time, it is clear that preschools that meet the quality standards recommended by Hope Street Group generate overwhelmingly positive results. Children in Head Start programs are likely to benefit when Head Start programs adopt these standards.

“Just because preschool worked in some studies doesn’t mean it will work everywhere.”

Response: Young children learn best when they are treated as individuals by engaged, experienced teachers. Each child is unique and therefore every preschool classroom is unique. The most effective preschools will apply proven best practices on an individualized basis. The objective of Hope Street Group’s proposal is to provide a package of funding, guidelines, and incentives that will encourage this to happen for as many children as possible.

States like Oklahoma and Georgia, which are currently expanding access to high-quality preschool, are achieving statistically significant benefits in a broad range of school-readiness metrics.

“The last thing this country needs is another bureaucracy.”

Response: The federal funding proposed by Hope Street Group will not be implemented in a top-down manner, but will operate as a catalyst for quality and access at the local level. The role of the federal government is to monitor only those elements of preschool policy that have been proven successful and to reward states that integrate knowledge of their own demographic realities into outcome-based preschool programs. Hope Street Group agrees that a ‘one-size-fits-all’ universal system is not the answer.

“Shouldn’t we be investing in areas with more immediate return?”

Response: Previous preschool models have demonstrated vast amounts of impact on children later in life; therefore it is true that from an economic perspective, the returns from a preschool

investment are longer term. Still, the effects will also be immediate as children are better prepared for school and to advance academically throughout their K-12 school years. Additionally, the effects of women returning to work and realized household savings on child care costs will present an immediate impact on local economies.

“The data are inconsistent – isn’t preschool sometimes bad for kids?”

Response: Actually, the data consistently demonstrate that high-quality preschool generates positive results by better preparing children for school and for a productive future. Perhaps this question stems from news of a recent study of children enrolled in child care centers. The study found that keeping a preschooler in a day care center for a year or more slightly increased the likelihood that when the child entered school he/she would be disruptive in class.³⁴ Hope Street Group’s proposal addresses this issue head-on by linking federal funding to the quality components that differentiate high-quality preschools from those day care centers that are lower quality.

About Hope Street Group Policy Papers

Hope Street Group is a new generation of leaders dedicated to building an Opportunity Economy. We build diverse coalitions from our network of business, civil society and political leaders to drive innovative policies that make social and economic mobility possible for all Americans. Hope Street Group Policy Papers are written by volunteers supported by Hope Street Group staff. Papers typically synthesize positions from think tanks of the left and right, and are intended to be user-friendly tools for busy decision-makers to more easily promote opportunity and prosperity. To learn more, visit www.hopestreetgroup.org.

¹ See [Review of the Evidence](#) in the [Economic Analysis](#) section of this paper.

² Lynn A. Karoly, Greenwood, Peter, Everingham, Susan, Hoube, Jill, Killburn, Rebecca, Rydell, Peter, Sanders, Matthew, and James Chiesa, “Investing in Our Children,” (RAND Cooperation 1998); Belfield, Clive, “Research Briefing: The Pre K Payback,” (Center for Early Child Care Education).

³ Lynch, Robert, “Enriching Children, Enriching the Nation. (Economic Policy Institute May 2007).

⁴ Ibid.

⁵ Diamond, Peter, “What Stock Market Returns to Expect in the Future?” (Boston College September 1999). The Social Security Administration’s Office of the Actuary uses a 7.0% real return estimate to evaluate proposals to invest part of the social security fund into the stock market.

⁶ “Pre K across the Country”. (Pre K Now, www.preknow.org). Examples: Florida, Georgia, and Oklahoma are only states who make Pre K available to all four year olds; New York, Illinois, and West Virginia have plans to implement Pre K to all four year olds; and Maine, Maryland, Nebraska, Oklahoma, Texas, Vermont, West Virginia, Wisconsin, and the District of Columbia all include Pre K as part of their school funding formulas; Rolnick, Arthur and Rob Grunewalk, “Early Intervention on a Large Scale.” (Federal Reserve Bank of Minneapolis 2006). Funding levels for such programs vary dramatically across states. While New Jersey provides more than \$9,000 per child, Maryland provides only \$721 per pupil.

⁷ “A Policy Primer: Quality Pre-Kindergarten 2004.” (RAND Cooperation and Trust for Early Education).

Kindergarten readiness is generally defined as a combination of cognitive, physical and social-emotional competencies which together indicate that a child is ready for classroom learning. Children who do not enter kindergarten ready-to-learn are more likely to perform poorly throughout their school career. This is significant because children that do not do well in school are more likely to drop out of high school, become single parents, receive welfare payments, and/or engage in criminal activities.

⁸ See [Review of the Evidence](#) in the [Economic Analysis](#) section of this paper.

⁹ Espinosa, Linda, “High Quality Preschool: Why We Need It and What It Looks Like.” (National Institute for Early Education Research November 2002).

¹⁰ Bowman, Barbara, Donovan, Suzanne, and Susan Burns, “Eager to Learn: Educating Our Preschoolers.” National Research Council, National Academy Press, Washington DC.

¹¹ Note that in order to qualify for NAEYC certification, class size for children aged four must not exceed 20 students, and the student-to-teacher ratio must not exceed 10:1. For three year olds, classes must have 16 or fewer students and a student-to-teacher ration of no more than 8:1. Student-to-teacher ratios between 7:1 and 8:1 are recommended by that National Research Council, American Academy of Pediatrics, American Public Health Association, and that National Research Center for Health and Safety in Childcare. The Perry Preschool Project, often cited for its high return on investment and documented long-term results, had a student-to-teacher ration of 5.7:1. Information

supported by the National Association for the Education of Young Children, Steps and Performance Expectations for Early Childhood Programs to Receive Accreditation, naeyc.org, Pre Kindergarten Policy Framework, The University of North Carolina at Chapel Hill, RAND Cooperation, Promising Practices Network, Children, Families, and Communities.

¹² Kenneth, Robin, Frede, Ellen and Steven Barnett, "Is More Better? The Effects of Full-Day vs. Half-Day PreSchool on Early School Achievement." (National Institute for Early Education Research May 2006).

¹³ Whitebook, Marcy, "Early Education Quality Higher Teacher Qualifications for Better Learning Environment: A Review of Literature". Center for the Study of Child Care Employment, Institute of Industrial Relations, University of California, Berkeley, 2003. Teachers with at least a BA or specialized training in Early Childhood Education were rated as more sensitive; observed to have a higher percentage of responsiveness involvement scores; received a higher frequency of positive initiation; had higher frequencies of language play and positive management; and engaged in more creative curriculum than all other preschool teachers.

¹⁴ Ackerman, Debra and Steven Barnett, "Prepared for Kindergarten: What Does Readiness Mean?" (National Institute for Early Education Research).

¹⁵ Whitebook, Marcy, p. 6-8. When preschoolers attended centers with a high proportion of trained caregivers, they exhibited greater cognitive test score gains than those cared for by less trained teachers.

¹⁶ Christina, Rachel, and JoVictoria Nicholson-Goodman, "Going to Scale with High Quality Education: Choices and Consequences in Universal Preschool Effort". (RAND Cooperation 2005). Preschool families with limited economic resources are more at risk for development delays and require services beyond educational enrichment to combat the effectiveness of early childhood development. Studies on various state preschool initiatives have shown that it is integral to ensure healthy positive child development and cognitive development by providing special services to ensure child wellness and nutrition and family and workforce support.

¹⁷ Weiss, Heather, Caspe, Margaret and Elena Lopez, "Family Involvement in Early Childhood Education". Harvard Family Research Project, November 1, 2006. Substantial research supports family involvement, and a growing body of intervention evaluations demonstrates that family involvement can be strengthened with positive results for young children and their school readiness. To achieve these results, it is necessary to match children's developmental needs, parents' attitudes and practices, and early childhood programs' expectations and support of family involvement.

¹⁸ Wat, Albert, "Dollars and Sense," A Review of Economic Analyses of Pre K 2007. (Pre K Now).

¹⁹ Belfield, Clive, "The Fiscal Impacts of Universal Pre-K: A Case Study Analysis for Three States," Invest in Kids Working Paper No.6, Committee for Economic Development, July 2006.

²⁰ Gormley, William and Ted Gayer, "Promoting School Readiness in Oklahoma: An Evaluation of Tulsa's Pre-K Program." (Georgetown University Public Policy Institute 2003); See Wat and Lynch. Programs like CPC, if applied to all three and four year olds, would generate an 8:1 benefit to cost ratio by 2050. Roughly half of that return would accrue to governments and half to program participants and their families.

²¹ US Census (2000).

²² Note based on US Census Bureau data, there were 7.7 million three and four year olds in the United States in the year 2000, 49.3% of whom were enrolled in school, including nursery school, preschool, kindergarten, and possibly higher grades. For the census, the terms nursery school or preschool were defined as a group or class that is organized to provide educational experiences for children during the year of year preceding kindergarten. This is comparable to results from the National Household Education Survey, which found that half of all 3- and 4- year olds are in center-based programs, but in that survey center-based programs included daycare centers. We know that of 3.8 million three and four year olds who, based on parent self-reporting, were attending "school," roughly 800,000 were enrolled in Head Start programs; Gish, Melinda, Head Start Issues in the 108th Congress. (Congressional Research Service and US Census Bureau December 2003). There were 806,000 three and four year olds in Head Start in FY 2001. There are no accurate counts of three and four year olds in high quality preschools (with quality meaning that they are operated according to standards similar to those that research has shown to produce substantial positive outcomes). Most states do not currently require state preschool programs to achieve quality benchmarks, and only eight states are meeting at least nine of the ten benchmarks established by NIEER. Private programs vary widely in program quality. If, for example, 25% of three and four year olds enrolled in (non- Head Start) preschool are enrolled in high quality programs, and if Head Start students are added to the estimate of children in high quality programs, then 20% (1.55 million) of all three and four year olds are currently enrolled in high quality programs, leaving 2.3 million in center-based programs that do not meet quality standards.

²³ Karoly, Lynn and James Bigelow, "The Economics of Investing in Universal Pre-School Education in California." (RAND Cooperation 2005).

²⁴ Note examples: RAND Cooperation; Brookings Institute; Pew Charitable Trusts; Economic Policy Institute; Council on Economic Development; National Center for Children and Poverty at Columbia University; NIEER at Rutgers University; National Academy of Sciences; James Heckman, Department of Economics, University of Chicago.

²⁵ Dickens, William, Sawhill, Isabel, and Jeffrey Tebbs, 'The Effects of Investing in Early Education on Economic Growth,' The Brookings Institute Policy Brief #153, April 2006.

²⁶ 'Votes Count: Legislative Action on Pre K Fiscal Year 2007.' (Pre K Now October 2007). Discussion of recent state initiatives to implement universal Pre K programs, as well as the public responses to current and future policies.

²⁷ 'Voters Attitude Toward Pre K Education.' Peter D Hart Research Association, 2004. Majority of voters agreed that Pre K is important for four year olds, government should play a larger role in Pre K education, and that teacher quality, assessment, and curriculum are the most important details.

²⁸ See endnote 27; "Pre K Now to Lead National Movement." Grantee Press Release, The Pew Charitable Press, January 26, 2005. State Pre K programs have grown rapidly over the past five years and now serve almost a million youngsters, surpassing the federal Head Start programs. FY'05 was the starting point of state legislatures providing more money than ever before. Currently, Pre K is building political momentum with 31 states and the District of Columbia increasing total funds to over 450 million for Pre K education, an increase of 12% from 2006.

²⁹ See Lynch, Robert; Note that research from the Center of Economic Development, the PEW Charitable Trust, and the National Institute for Early Education Research discuss the various economic benefits of high-quality pre-school programs. For example, roughly three quarters of the projected financial returns from pre-school investments are in the form of reduced costs, and presumably a reduced tax burden, for all Americans. The long-term cost reductions include lower expenditures in the areas of remedial education, public welfare, and incarceration programs. Twenty-five percent (25%) of the benefits are in the form of higher lifetime income for those children who attend pre-school, which should in turn lead to additional society-wide benefits such as a more competitive workforce to position American students optimally in relation to the global economy, and additional public welfare cost reductions in subsequent generations.

³⁰ Note examples: Tyler Nottberg, CEO of US Engineering Company; Steve Glenn, CEO of LivingHomes; Michael Harreld, President of PNC Bank Greater Washington Area; Ted Meisel, former CEO of Overture Service and President of Yahoo!; Andrew Tilton; Senior Economist at Goldman Sachs & Co; Charles Kolb, CED President; Ira Lipman, Founder and Chairman of Guardsmark LLC; Robert Dugger, Managing Director, Tudor Investment Corp; Brian Gallagher, President and CEO, United Way America; George Kaiser; President and CEO, Kaiser-Francis Oil.

³¹ See endnotes 6 and 28; Note examples: Governor Kathleen Sibelius (D), Kansas; Governor Eliot Spitzer (D), New York; Governor Tim Kaine (D), Virginia; Senator Tom Coburn (R), Oklahoma, Senator Bill Nelson (D), Florida; Senator Mel Martinez (R), Florida; have all supported preschool programs in their states.

³² See Gish, Melinda.

³³ Fuller, Bruce, "Standardized Childhood." Stanford University Press, p. 199-201, 2007; See also Gish, Melinda.

³⁴ Benedict, Cary, 'Poor Behavior is Linked to Time in Day Care.' (New York Times, March 26, 2007).