

POLICY Research Brief

EXAMINING KEY EDUCATION ISSUES

A Membership Benefit of NSBA National Affiliates

Expanding Voluntary Preschool Education: The Federal Role

By *Chrisanne L. Gayl*

The first five years of life are a time of enormous growth for children. The cognitive, social, and emotional skills that children develop during their early years are essential building blocks for their entire educational lives. The pace of learning, however, depends on whether and to what extent they encounter and engage in supporting environments.

As the National Research Council reported in *Eager to Learn: Educating Our Preschoolers*, “there can be no question that the environment in which a child grows up has a powerful impact on how the child develops.” Given this reality, preschool education programs play a critical role in setting a positive trajectory for student success and can help close some achievement gaps that exist among children even before they enter school.

Yet, despite the importance of early childhood education on the continuum of learning, the federal government has been slow to engage in efforts to develop or encourage pre-Kindergarten programming for 3 and 4 year-olds. In fact, it is estimated that the U.S. Department of Education spends only 1 to 1.5 percent of its \$57.6 billion annual discretionary budget on preschool education.

Instead, the federal government’s primary focus over the past few decades has been on subsidizing child care options for low-income families through programs administered by the U.S. Department of Health and Human Services. HHS administers the Child Care Development Block Grant and Temporary Assistance for Needy Families programs, which together provide more than \$8 billion in federal resources for child care.

Head Start is the one notable exception that addresses education outcomes.

However, even at \$6.8 billion, this program only reaches families that are living at or below 100 percent of the poverty line. Head Start also is designed to focus on a broader spectrum of services for children and their families than primarily school readiness.

With the onset of No Child Left Behind, preschool has emerged as an important strategy to increase school readiness and improve student achievement in elementary school and beyond. As states and districts struggle to meet the law’s accountability benchmarks, they have begun to recognize that high quality early education is critical to ensuring that every child who enters kindergarten will be well prepared to undertake a challenging curriculum and meet high standards.

School board members are challenged to implement cost-effective programs that will have a positive and sustainable impact on increasing the student achievement of their students.

This policy brief examines efforts currently underway to prepare our children for school, what the research tells us works, and how the federal government can assist school districts in implementing effective programs. First though, we must set a context for the role that early childhood education plays in the United States’ overall system of education and how this compares to other parts of the world.

Preschool in the U.S. and abroad

In 2004, there were nearly 8 million children ages 3 to 4 in the United States. Among them, 40 percent of 3-year-olds and 66 percent of 4-year-olds were enrolled in some type of preschool program, according to the National Center for Education Statistics. This may seem like a substantial number of children that are being served, but the educational focus and quality of

these programs vary substantially.

In addition, these enrollment figures are relatively low compared with the formal schooling that children receive in other developed countries. For example, Belgium, France, and Italy enroll 95 percent of children ages 3 to 6 in universal, voluntary, and free preschool programs. Other countries such as England, Sweden, Hungary, Japan, and Russia all have higher percentages of 4-year-olds and under enrolled in school than the United States.

No substantial evidence suggests that preschool enrollment has an impact on cross-national indicators of student performance, but a strong correlation exists between countries with high percentages of children enrolled in preschool and later student performance on international assessments. In fact, almost all of the nations referenced above outperformed the United States on the 2003 Trends in International Mathematics and Science Study (TIMSS), which measures fourth-grade math achievement. In addition, Sweden, Hungary, and England scored higher than the U.S. on reading achievement as measured by the 2001 Progress in International Reading Literacy Study.

For the United States to compete on a level playing ground with our international competitors, it seems only reasonable that we must devote more time and resources ensuring that our children have the same opportunity to develop the necessary skills to be successful in school.

State programs

While the federal government has tended to overlook the importance of early education, many states have made significant strides in establishing and/or expanding preschool programs in recent years. Currently, 41 states and the District of

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About NSBA

The National School Boards Association is the nationwide advocacy organization for public school governance. NSBA's mission is to foster excellence and equity in public elementary and secondary education in the United States through local school board leadership. Founded in 1940, NSBA is a not-for-profit federation of state associations of school boards across the United States and the school boards of the District of Columbia, Guam, Hawaii, and the U.S. Virgin Islands.

About the National Affiliate Program

The National Affiliate Program extends NSBA's services directly to local school districts. School districts are eligible to join provided they are members in good standing of their state school boards associations.

About the Advocacy and Issues Management Section

The Advocacy and Issues Management Section implements NSBA's Action/Advocacy Agenda and carries out NSBA's lobbying efforts at the national level. By lobbying the Congress, the White House, and federal agencies, the section helps increase federal funding for local school districts and reduces costly federal mandates; helps improve federal education programs by making legislative and regulatory changes local board members support; protects the governance role of school boards from congressional attack; and promotes the role of school boards as a key democratic institution in our country's education system.

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Columbia operate some type of pre-kindergarten program. During the 2004-05 school year, states spent \$2.84 billion on these programs.

Today, 801,900 children—approximately 10 percent of the nation's 3- and 4-year-olds and 17 percent of all 4-year-olds—are enrolled in state-funded pre-K initiatives. To pay for these programs, states rely on a variety of resources, including general revenues, lottery sales, special excise taxes on cigarettes and beer, and tobacco settlement funds. A few—Maine, Nebraska, Oklahoma, Vermont, West Virginia, and Wisconsin—even include financing for pre-K in their school funding formula.

But while states have been active in promoting preschool, the scope and quality of these programs has been uneven. Some states content themselves with targeting services toward specific populations of students (low-income, disabled, English language learners) to address a particular deficiency with a subset of the population, while others such as Oklahoma and Georgia have adopted a universal approach. And some states do not offer any publicly funded pre-K at all.

The quality of preschool programs also varies depending on the amount of state investment and what policymakers decide to focus their resources on. Often, states are forced to make trade offs between variables such as the percentage of highly trained teachers and staff, small class sizes, and low teacher-child ratios. As a result, the National Institute for Early Education Research (NIEER) reports that only six states met at least nine of the 10 quality benchmarks used to assess program quality. Another six states met no more than three indicators. Given these disparities, the federal government has a legitimate role in helping to provide quality programs for children that otherwise would not have access to these services.

Research findings

According to numerous studies, programs that provide children with developmentally appropriate stimulation can improve school readiness and academic performance in the early grades. Children who participate in high-quality preschool programs also demonstrate greater interest in learning, are less likely to repeat a grade or require special education classes, and are more likely to graduate from high school and attend college. Many of these effects are compelling incentives for districts

to invest in preschool programs.

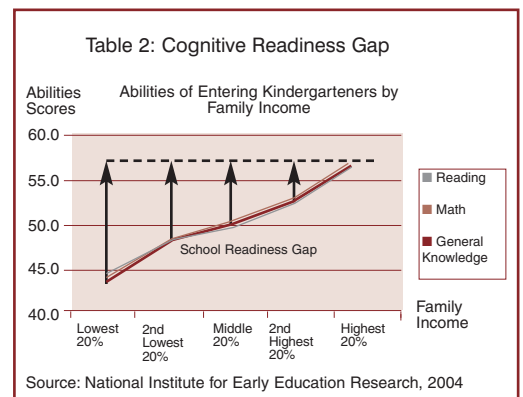
Academic achievement

Several national and state studies have shown that students who attend preschool programs score higher on academic assessments than peers who do not attend preschool. For example, the nationally representative Early Childhood Longitudinal Study, which provides data on 14,000 children from birth through age 5, indicates that students who participated in preschool programs scored higher on reading and math tests than children who did not participate.

A more tailored study from NIEER, which used a rigorous approach to control for measured differences between children (and their families) who attend and do not attend preschool, found that "graduates" from publicly funded pre-K programs in Michigan, New Jersey, Oklahoma, South Carolina and West Virginia performed substantially better on vocabulary, math, and print awareness assessments compared to non-participants. Overall, children in these programs posted scores that were 31 percent higher in vocabulary, 44 percent higher in math, and 85 percent higher in print awareness (including recognition of letters, letter-sounds and book concepts) compared to children who did not participate in a program.

Studies also have shown that these cognitive benefits are particularly powerful among children from low-income and minority families who tend to obtain, on average, lower reading assessment scores than their more affluent peers without some type of intervention. As a result, preschool can help to mitigate some gaps in children's skills and knowledge (see Table 1) that are present before children begin school and that tend to worsen over time.

An analysis of Oklahoma's universal pre-kindergarten program has shown greater increases in cognitive development



among children on free and reduced-price lunch and among certain racial and ethnic groups. For example, Hispanic children in the study increased letter-word identification scores by 4.15 points and applied problem-solving scores by 4.97 points, compared to white children who experienced gains of 3.02 and 0.85, respectively.

Long-term impacts

Besides the effects on young children's cognitive growth, preschool programs have demonstrably positive effects on the future lives of young children as measured by a variety of educational and social indicators. Much of this data can be traced to longitudinal studies of three well-designed and well-implemented model programs—the Perry Preschool Project, the Carolina Abecedarian Project, and the Chicago Parent Centers program. Together, these projects have shown that students who attended preschool were more likely to graduate from high school, less likely to repeat a grade in school, less likely to be arrested for a violent crime by age 18, less likely to become teen parents, and more likely to be employed and have higher earnings than their peers who did not attend (see Table 2).

In addition, all three studies show significantly lower rates of receipt of special education services for students who attended preschool. For example, only 15 percent of the Perry participants required special education services, compared with 34 percent of children from the control group. For Abecedarian, 48 percent of the control group received special education services vs. 24 percent for pre-K children. In the Child-Parent Centers project, the gap was 11 percentage points (14 percent vs. 25 percent) in placements between pre-K participants and non-participants.

Economic benefits

Many of the benefits that high-quality preschool education provides have a significant impact on reducing school district costs as well as federal, state, and local government expenditures. A cost/benefit analysis done by the Committee for Economic Development reports that targeted preschool programs can generate \$2 to \$16 in long-term net benefits for students and taxpayers for every dollar invested. Viewed another way, these programs provide an annual return on the initial investment of about 7 to 18 percent.

According to research by Clive Belfield, a school district's investment in early education largely pays for itself by

reducing the cost of high-priced interventions such as special education placement and grade retention. In the near-term, Belfield contends that K-12 education can expect to retain between 30 to 40 percent of the overall state fiscal benefits.

Depending on various expansion scenarios, the cost savings in subsequent years can offset up to 75 percent of preschool expansion costs—translating into K-12 savings ranging from 36 to 77 cents for every dollar spent on preschool.

Quality Matters

The benefits of preschool education that accrue both to individuals and the community are impressive; however, the amount of this benefit varies greatly depending on the quality of each program. Factors such as teacher training, class size, teacher-child ratios, and comprehensive learning standards play an important role in determining the quality of a program and ultimately in influencing child outcomes.

According to NIEER, students experience large gains when programs share similar characteristics such as highly educated teachers, teacher-child ratios of 1-to-10 or lower, support for teachers' ongoing professional development, and intellectually challenging curricula. In addition, teachers who have at least a bachelor's degree and specialized training in early childhood education are most likely to have a positive

impact on their students. Yet along with improving quality comes additional costs for states and school districts, which makes tackling this challenge ever more difficult.

Legislation sought by NSBA

Unfortunately, access to and the quality of preschool programs is far from uniform. Many children are placed in mediocre child care settings without the tools and instruction necessary to achieve their full potential. Regulations governing class size, teacher-child ratios, and teacher qualifications in preschool programs vary from state to state or even within states. Additionally, some parents and policymakers have concerns that, from a social standpoint, 3- and 4-year-olds should not be in a structured school setting.

NSBA believes that the federal government has an appropriate role to play in addressing these and other challenges to help provide voluntary high-quality preschool education for all 3- and 4-year old children.

As we embark on the 110th Congress, NSBA urges policymakers to incorporate the following recommendations as key components of any federally funded voluntary preschool plan. These policy ideas form the foundation of NSBA's advocacy agenda upon that we will continue to build on over the next year.

NSBA seeks federal legislation that

Table 1: Early Education Programs Have Long-term Effects

	Carolina Abecedarian ³	Chicago Child-Parent Centers ²	High/Scope Perry Preschool ¹
	Treatment vs. Control Group		
Cognitive Outcomes			
IQ	94 vs. 88* at age 12	95 vs. 83* at age 6	91 vs. 88* at age 7
Achievement	93 vs. 82* Math achievement at age 15	147 vs. 142* Reading achievement at age 14	6.0 vs. 5.2* Problem solving at age 27
Educational Outcomes			
Special Education Placement	24% vs. 48%*	14% vs. 25%*	15% vs. 35%*
Grade Retention	31% vs. 55%*	23% vs. 38%*	35% vs. 40%
High School Completion	70% vs. 67%	62% vs. 51%*	65% vs. 45%*
Crime Outcomes			
Arrests/Convictions	8% vs. 12% at age 21 ⁴	17% vs. 25%* at age 18	33% vs. 48%* at age 40 ⁵
Child Abuse and Neglect	n/a	5% vs. 10%* at age 18	n/a
Employment and Earnings			
Employed	64% vs. 50% at age 21	n/a	76% vs. 62%* at age 40
Employed in Skilled Jobs	67% vs. 41%* at age 21	n/a	n/a
Monthly Earnings	n/a	n/a	\$1,856 vs. \$1,308* at age 40

1. Model program, randomized treatment and control groups.
2. Large-scale program, matched treatment and control groups.
3. Program began while children were in infancy.
4. Convicted of a felony.
5. Arrested for a violent crime.

*Difference between treatment and control groups is statistically significant at the .05 level.

Source: *The Economic Promise of Investing in High-Quality Preschool*, Committee for Economic Development

will create a new grant program that will increase funding over the next five years to develop, expand, and sustain voluntary quality preschool programs for participating three- and four-year olds. Although the federal government currently invests in a variety of early childhood programs, these resources do not necessarily go to support programs that focus on developing the cognitive, social, and emotional skills that help children to become school ready. NSBA believes that Congress should focus its attention on establishing a new, separate funding stream that is dedicated to assisting school districts seeking such programming and other qualified providers in creating, expanding, and improving school readiness programs. Just as such programs would not be compulsory for school districts to operate, they would be available only to those children ages 3-4 whose parents wish to enroll them. The design of the delivery system should not operate as or foster an education voucher system, nor should it come at the expense of K-12 funding.

NSBA proposes that federal legislation require federally-funded preschool programs to adopt developmentally appropriate early education standards that are aligned with state K-12 academic content standards. Preschool programs should increase their emphasis on developmentally appropriate pre-reading, pre-mathematics, and language skills that are part of an overall coordinated system of learning that supports student achievement. Such standards should be aligned both vertically and horizontally so they are logically connected, meaningful, and provide achievable steps of learning. In doing so, however, young children should not be pressured by high-stakes testing, and recognition should be given for expected variations in individual development among young children.

The federal government should require outside pre-K providers that receive federal funding to collaborate with local school districts to ensure that programs are reflective of the expectations of local schools. In instances where pre-K services are offered by outside providers, NSBA believes school districts should have a role in designing these programs to ensure that they are well articulated with the kindergarten programs that students will attend in their communities.

The federal government should create incentives for states to upgrade their teacher certification and licensure systems to ensure all preschool instruc-

tors are highly qualified. Congress should provide dedicated resources to states to phase-in over time certification requirements for preschool instructors. All instructors should possess a bachelor's degree and some type of specialized training in early childhood education. Such resources should be used to develop career ladders for existing preschool instructors to meet these new requirements as well as to increase teacher compensation.

Congress should devote specific resources to helping school districts develop and implement joint training and professional development programs for PK-3 instructors. Coordinated professional development is essential for instructors to increase their awareness of the connections between child development and academic instruction in young children. These professional development academies will help to ensure a more seamless transition between preschool, kindergarten, and the elementary grades.

The federal government should provide tools and incentives to replicate effective models and improve program quality. Congress should encourage states and local service providers to adopt policies that have been shown to be effective. These include: reducing class size, limiting teacher/student ratios, adopting full-day

instruction, and implementing rigorous curriculum. In addition, the Administration should work to disseminate best practice research on new and effective models that have strong impacts on student outcomes.

Conclusion

Publicly funded preschool programs are essential to improving our education system and providing a solid foundation on which every child can build. By giving children a quality education early on, we can have a tremendous impact on their future education success. With the passage of No Child Left Behind, the stakes are now higher than ever for school districts as they struggle to meet the accountability benchmarks for their students.

Yet, the current system of early education is disjointed and the federal investment is weak. Although states have made progress in this area over the past few years, our nation still is a long way from matching the efforts of many of our global competitors. The federal government must do more to help implement and expand voluntary quality programs that will make a significant impact on the future successes of our children.

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