

CAPITOL RESEARCH

● ● ● EDUCATION

Investing in High-Quality Pre-Kindergarten

When each of Lenore Brown's three youngest children turned 4—an age when many children's schooling might, at best, consist of watching educational television programs—they attended free, full-day preschool in the Tulsa, Okla., public school system. Brown credits Tulsa's pre-K program for teaching her children basic reading and writing skills, as well as classroom cooperation, a full year before many children learn those same skills in kindergarten.

"The early equipping in that kind of insulated, comfortable environment gave them a solid building block," she said. "I think if they had gone into a kindergarten program without having had that kind of experience, it would be easier to fall through the cracks."

Brown remains a strong advocate for early education, years after her youngest child completed pre-K.

"I do have a stake in that I genuinely believe that's where character starts," she said. "They're still so receptive to positive messages. They're receptive to encouragement. They're receptive to anything that gives them hope to be better. And so if we continue to (invest) in that, I believe we'll harvest a population of positive, productive people."

A Retreat from Gains in State Funding

During most of the past decade, states significantly increased funding for pre-K. Those increases, however, have given way to significant budget cuts in each of the past two years. State funding for pre-K decreased by almost \$60 million for the 2010-11 school year when adjusted for inflation, despite the infusion of \$127 million in funds from the American Recovery and Reinvestment Act, according to the National Institute for Early Education Research. It marked the second consecutive year of a decline in total state spending for pre-K programs.

State funding per child for pre-K declined in 26 of the 39 states with programs in 2010-11, when adjusted for inflation. Only 11 states increased per-child spending. Eight states cut per-child spending by 10 percent or more from the previous year. Nevertheless, despite a drop in pre-K spending nationally, the number of children enrolled increased by more than 30,000.¹ That dynamic leaves states in an unsustainable position of trying to provide educational services to more children with less money.



Until the recent economic downturn, state funding for early childhood education had been increasing steadily. Between 2001 and 2012, funding more than doubled to \$5.1 billion annually. Maryland's funding level increased nearly 600 percent, from \$19.9 million in 2005 to \$113.9 million in 2012. Alabama's pre-K funding more than quintupled during that period.

Since the start of the Great Recession, some have backtracked on support for early education. According to data from the National Institute for Early Education Research, Missouri's funding for pre-K has dwindled from \$14.7 million in 2005 to \$11.8 million in 2012. Arizona's funding, which was once more than \$12.5 million, has been eliminated, taking preschool services away from more than 4,300 children.

Today, 39 states provide funding for 4-year-old kindergarten. Nine states plus the District of Columbia offer pre-K to all 4-year-olds. No state provides universal pre-K programs for 3-year-olds, although 26 states provide pre-K for some 3-year-olds, according to the National Institute for Early Education Research. (See chart for a state-by-state breakdown of the percentage of children served by pre-K programs and per-child funding levels.)





New Jersey has been widely considered a leader in funding for pre-K education. In 2012, it budgeted \$613 million, or more than \$11,600 per student, according to The Pew Center for the States. Texas is the only state spending more on early education, at \$764 million. Texas, however, spends only one-third as much for each preschool student. To put New Jersey's funding in perspective, its pre-K funding nearly equals that of Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island and Vermont combined.²

These pre-K programs touch more than 1 million children nationwide. Offering quality pre-school programs to all 3- and 4-year-old children would cost an average of \$8,700 per pupil, the National Institute for Early Education Research estimates.³ But is the investment worth it, particularly given current budgetary constraints? The research center estimates the average benefits from a program accessible to all 3- and 4-year-old children would be at least \$25,000 per child, substantially more than the cost.⁴

The study found that at age 20, participants were more likely to have finished high school than children who weren't in the program. They also were less likely to have been held back in school, less likely to have needed remedial help and less likely to have been arrested. Consequently, the report concluded, for every dollar invested, the return is \$7, based on the reduced costs of remedial education and justice system expenditures, and the increased earnings and projected tax revenues for participants.⁴

Research has shown clear evidence linking quality pre-K programs and future academic success. Children who attend high-quality pre-K programs outperform their peers who did not have pre-K on achievement tests and they are more likely to attend college.⁵ High-quality early education programs also improve early literacy and math skills in primary grades and beyond.⁶

Research concludes quality pre-K programs have the potential to close as much as 20 percent of the achievement gap that exists between students from low-income families and those from wealthier families.⁷ If the achievement gap can be reduced that much by providing increased access to early education programs, one outcome likely will be more students achieving college readiness by the time they complete high school and a greater number of students who are academically prepared for postsecondary education.

Oklahoma a National Leader in Pre-K

Oklahoma leads the nation in the percentage of 4-year-olds enrolled in state pre-K programs. In Oklahoma, 70 percent of 4-year-olds are enrolled in an early education program, a percentage that has remained relatively constant since 2005.⁸ Although Oklahoma ranks 28th nationally in its total population, only eight states spend more on preschool education, according to a data analysis by the National Institute for Early Education Research. In 2009-10, the state spent more than \$167 million on pre-K education, plus an additional \$2.5 million in state spending for Head Start, a federal pre-K program for children from low-income families.

Spearheaded by the state Department of Education, Oklahoma's pre-K program has received legislative backing for more than three decades. Oklahoma established the Early Childhood Four-Year-Old Program as a pilot preschool education program in 1980. At that time, former Assistant State Superintendent of Education Ramona Paul met with a group of state leaders of the Head Start program. Paul recalled they were initially apprehensive about plans to expand pre-K services for children in the state. "I said, 'There are probably about 40,000 4-year-olds in Oklahoma and Head Start is serving 7,000. I think there's enough room for us all.' That was the end of the conversation."

By the early 1990s, the legislature provided line item funding to make early education available to 4-year-olds statewide, free to children meeting income requirements. All 4-year-olds, regardless of family income, could enroll in pre-K and pay a fee based on a sliding scale. Then in 1998, two important policy changes took place. First, Oklahoma's legislature enacted House Bill 1657, which provided free, voluntary access to preschool programs for all 4-year-olds, regardless of family income. It became the second state to offer free, universal pre-K, following Georgia, which created the nation's first universal preschool program three years earlier. Second, the legislature began funding pre-K through the same funding formula used for K-12 education, rather than as a separate line item.

Paul said the change to formula funding was an important step to make the pre-K program more secure. "When you're cutting the budget, it's a lot easier to cut a line item. If it's in the funding formula, you don't cut out a part of the funding formula. You may reduce the funding that reduces everybody, or you increase the money in the pot that increases everybody."

Within seven years, the number of 4-year-olds enrolled in pre-K in Oklahoma doubled, from approximately 16,700 in 1998 to 33,000 in 2005.⁹ That number increased to nearly 38,500 in the 2010-11 school year.

The Oklahoma Department of Education has partnered over the years with Head Start, child care and faith-based facilities, and community organizations to ensure all families who want preschool services

for their children have access to it. “We never had a strategic plan. We just kept doing what was right,” Paul said.

The Tulsa Public School System provides full-day early education to more than 3,000 4-year-olds. In addition, the school system is in the process of implementing a pilot program that will result in 26 new classrooms for 3-year-olds by the fall of 2012. “We’re really building the infrastructure that will support all of their later learning. It’s literally an investment we’re making that will pay off great dividends down the road,” said Andrew McKenzie, Tulsa’s director of early education.

Research on Pre-K Effectiveness

The overriding question confronting policymakers is whether investing in early education ultimately will improve students’ educational outcomes. That question was the subject of a research study published in a 2005 edition of *The Policy Studies Journal*, a product of the academic research group Policy Studies Organization.

Researchers tested 4-year-olds entering pre-K and a similar-aged control group that had not attended preschool. The study revealed 4-year-olds who had completed a year of preschool scored 16 percent higher on language tests than children who had not attended preschool. The results varied widely, however, according to race and economic background. White children showed no significant increase in test scores, while Hispanic children’s scores increased more than 50 percent. Low-income children’s scores also increased significantly, including a 31 percent increase in cognitive skills and an 18 percent increase in language skills. The research concluded children enrolled in full-day pre-K programs outperformed those enrolled in half-day programs.¹⁰

It is the growing consensus among education leaders that vital learning happens before age 5. A report issued by The Pew Center on the States concludes, “When schooling starts at kindergarten or first grade, it deprives children of the chance to make the most of this critical period.”¹¹ The report strongly urges state policymakers to consider the benefits of investing in high-quality pre-K programs for all 4-year-olds.

Defining Quality Pre-K

In order to be effective, The National Institute for Early Education Research believes pre-K programs must clearly provide sound educational purposes and be led by a well-trained and qualified staff. Classroom visitors should observe learning just as they would in any classroom filled with older children. Quality pre-K programs are much more than substitutes for child care while parents are working. The National Institute for Early Education Research has created a checklist that rates the quality of state pre-K programs. Policymakers should consider these characteristics when designing pre-K programs for their states. Some of the elements of high-quality early childhood education include:

- Well-educated teachers, preferably with a bachelor’s degree and specialized training in early childhood education;
- Low child-teacher ratios in classes, with no more than 20 children in each class;
- A research-based curriculum aligned to K-12 standards;
- A staff-child ratio of no more than 1-to-10; and
- A focus on the whole child and family. Pre-K programs should include children’s health needs, social services, information about nutrition, and access to breakfast and lunch.

In addition to a commitment to fund quality pre-K programs, policymakers should ensure that licensure standards and teacher training and evaluation reflect this commitment to early childhood education. Advocates of strong early childhood education contend greater compensation parity must be included or many prospective teachers will opt to teach older children instead of going into early childhood education.¹



Tim Weldon, CSG Education Policy Analyst
tweldon@csq.org

REFERENCES

- ¹Barnett, Steven, et al. “The State of Preschool 2011.” National Institute for Early Education Research. (2011) Accessed at <http://nieer.org/sites/nieer/files/2011yearbook.pdf> on January 12, 2013.
- ²The Pew Center on the States. “Proof Into Policy: Pre-K Milestones.” Accessed at http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=85899364272 on January 12, 2012.
- ³National Institute for Early Education Research. “Cost of Providing Quality Preschool Education to America’s 3- and 4-Year Olds.” Accessed at <http://nieer.org/resources/facts/index.php?FastFactID=5> on January 12, 2012.
- ⁴National Institute for Early Education Research. Economic Benefits of Quality Preschool Education for America’s 3- and 4-year olds.” Accessed at <http://nieer.org/resources/facts/index.php?FastFactID=6> on January 12, 2012.
- ⁵Reynolds, A.J., et al. “Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers.” Educational Evaluation and Policy Analysis. (2002); Barnett, W. Steven and Leonard N. Masse. “Comparative Benefit-Cost Analysis of the Abecedarian Program and its Policy Implications.” Economics of Education Review. (2007) Reported by The Pew Center on the States, “Transforming Public Education: Pathway to a Pre-K-12 Future.” (2011) Accessed at http://www.pewcenteronthestates.org/uploadedFiles/wwwpewcenteronthestates.org/Initiatives/Pre-K_Education/Pew_PreK_Transforming_Public_Education.pdf on January 12, 2012.
- ⁶Dearing, Eric, et al. “Does Higher Quality Early Child Care Promote Low-Income Children’s Math and Reading Achievement in Middle Childhood?” Child Development. (2009) Accessed at <http://www.eyi.org/eyi/data/ChildDevelopmentReport.pdf> on January 12, 2012.
- ⁷Frede, Ellen and W. Steven Barnett. “Why Pre-K is Critical to Closing the Achievement Gap.” (2011) Accessed at <http://www.naesp.org/principal-mayjune-2011-early-childhood/why-pre-k-critical-closing-achievement-gap> on January 12, 2012.
- ⁸National Institute for Early Education Research. The State of Preschool 2010 – State Preschool Yearbook. Accessed at http://nieer.org/yearbook/pdf/yearbook_OK.pdf on January 13, 2012.
- ⁹Oklahoma Department of Education. “Public School Applications for Accreditation.” (March 2006) Accessed at <http://sde.state.ok.us/Programs/ECEduc/pdf/PreKHistory.pdf> on January 23, 2012.
- ¹⁰Gormley, William T. and Deborah Phillips. “The Effects of Universal Pre-K in Oklahoma: Research Highlights and Policy Implications.” The Policy Studies Journal. (2005) Accessed at http://www.tecec.org/files/PK_Oklahoma.pdf on January 13, 2012.
- ¹¹The Pew Center on the States. “Transforming Public Education: Pathway to a Pre-K-12 Future.” (September 2011). Accessed at http://www.pewcenteronthestates.org/uploadedFiles/wwwpewcenteronthestates.org/Initiatives/Pre-K_Education/Pew_PreK_Transforming_Public_Education.pdf on January 12, 2012.

PRE-K ACCESS BY STATE

State	PERCENT OF CHILDREN ENROLLED IN STATE PRE-K (2010-11)		STATE DOLLARS PER CHILD ENROLLED IN PRE-K	CHANGE IN STATE PER-CHILD SPENDING FROM 2009-10 TO 2010-11, INFLATION-ADJUSTED DOLLARS
	4 Year-olds	3 Year-olds		
Alabama	6.4%	0.0%	\$4,544	-\$91
Alaska	2.4%	0.0%	\$6,855	-\$1,815
Arizona	0.0%	0.0%	-	-
Arkansas	44.1%	10.1%	\$5,021	-\$501
California*	18.8%	10.1%	\$4,986	-\$532
Colorado	21.2%	6.1%	\$2,044	-\$324
Connecticut	13.0%	7.4%	\$9,356	-\$127
Delaware	7.4%	0.0%	\$6,795	-\$136
Florida*	76.0%	0.0%	\$2,422	-\$142
Georgia	59.3%	0.0%	\$4,298	\$7
Hawaii	0.0%	0.0%	-	-
Idaho	0.0%	0.0%	-	-
Illinois	28.9%	20.2%	\$3,449	\$10
Indiana	0.0%	0.0%	-	-
Iowa	52.1%	1.3%	\$3,282	\$128
Kansas	21.1%	0.0%	\$2,640	\$100
Kentucky	31.9%	7.0%	\$3,399	\$234
Louisiana	32.8%	0.0%	\$4,669	-\$131
Maine	26.9%	0.0%	\$1,985	\$162
Maryland	37.1%	0.0%	\$4,414	\$215
Massachusetts*	15.0%	3.9%	\$3,691	-\$283
Michigan	18.0%	0.0%	\$4,453	-\$39
Minnesota	1.5%	1.0%	\$7,475	\$28
Mississippi	0.0%	0.0%	-	\$-
Missouri	3.7%	1.6%	\$3,085	-\$28
Montana	0.0%	0.0%	-	-
Nebraska*	25.5%	9.5%	\$1,607	\$421
Nevada	2.8%	0.7%	\$2,468	-\$297
New Hampshire	0.0%	0.0%	-	-
New Jersey	27.9%	18.4%	\$11,669	-\$141
New Mexico	14.7%	0.0%	\$3,561	\$80
New York	45.1%	0.1%	\$3,685	\$111
North Carolina*	24.2%	0.0%	\$5,166	-\$179
North Dakota	0.0%	0.0%	-	-
Ohio	2.4%	1.1%	\$3,942	-\$39
Oklahoma	73.5%	0.0%	\$3,461	\$1,106
Oregon	7.7%	4.6%	\$8,454	-\$150
Pennsylvania	16.0%	6.1%	\$5,193	-\$850
Rhode Island	1.0%	0.0%	\$5,556	-\$111
South Carolina	40.7%	3.6%	\$1,342	-\$132
South Dakota	0.0%	0.0%	-	-
Tennessee	21.5%	0.8%	\$4,620	\$86
Texas	51.7%	6.1%	\$3,761	-\$138
Utah	0.0%	0.0%	-	-
Vermont	66.9%	17.4%	\$3,272	-\$788
Virginia	15.5%	0.0%	\$3,808	-\$497
Washington	7.7%	1.5%	\$6,780	-\$174
West Virginia	58.2%	9.2%	\$5,605	-\$26
Wisconsin	55.2%	1.0%	\$3,466	\$119
Wyoming	0.0%	0.0%	-	-

Source:

Source: The National Institute for Early Education Research. "The State of Preschool 2011" Accessed at <http://nieer.org/sites/nieer/files/2011yearbook.pdf>

*In the 2010-11 school year, California, Florida, Massachusetts, Nebraska and North Carolina reported using funding from the American Recovery and Reinvestment Act for state-funded pre-K. This funding is included in the state funding amounts reported.