

# CAPITOL RESEARCH

## ● ● ● EDUCATION POLICY

### Early Childhood Investments

As states look to trim budgets and focus on programs that have proven results, early childhood programs have shown high return on the investment of taxpayer dollars on long-term nonacademic indicators.

Nobel Laureate James Heckman cites data that show early interventions such as high quality early care and education programs provide greater return on investment than high school and post school interventions and are on average much less costly.<sup>1</sup>

A 2012 report by the Annie E. Casey Foundation suggests that if a child starts kindergarten behind, it can be incredibly hard for them to catch up. Early childhood education and preschool help children who are behind catch up to their peers. A child who is behind in kindergarten is likely to be behind at third grade and less likely to graduate high school. A child who is not reading at grade level by third grade is four times less likely to graduate high school than their peers who are reading at grade level by third grade.<sup>2</sup>

States were eligible for federal funding to establish early childhood state advisory councils through the 2009 American Recovery and Reinvestment Act. These councils were federally required through the Head Start Reauthorization Act of 2007, but until funding became available in 2009, there was little action taken by states.

Early childhood state advisory councils were convened in 45 states and territories and were charged with researching the availability and quality of early childhood care and education programs in their states. The councils also were charged with increasing participation in early childhood education and care programs. Advisory councils provided states the opportunity to research the quality and availability of early childhood services for their citizens and to look at data collection and research the return on investments of state early childhood programs.<sup>3</sup>



According to Heckman, early childhood investments pay dividends for the life of the child. Each \$1 invested returns \$60 to \$300 over a child's lifetime.<sup>4</sup>

Analysts of the Chicago Child-Parent Center study estimated \$48,000 in benefits to the public per child from a half-day public preschool for children who are at-risk.<sup>5</sup>

Children enrolled in a quality early childhood program:

- Earn \$2,000 more per month than their peers.
- Are more likely to graduate high school.
- Are more likely to own a home.
- Are less likely to repeat grades.
- Are less likely to need special education.
- Are less likely to be incarcerated.



In the 2015-16 budget cycle, 32 states and the District of Columbia increased funding appropriations for pre-kindergarten programs. While eight states decreased funding amounts for pre-kindergarten programs, overall funding at the state level increased by almost \$767 million.<sup>6</sup>

States continue to make funding decisions based on research and thoughtful analysis of programmatic return on investment.

Ninety percent of brain development occurs before age 5.<sup>7</sup> Early childhood is a crucial period for brain development.

What a child hears, sees, feels and experiences in the early years establishes the wiring that is the foundation for life. Their experiences before beginning kindergarten strongly influence their education.

Research has found that high-quality early learning experiences can improve children's academic performance, build strong social and cognitive skills, reduce the cost of K-12 special education, increase long-term earning potential, and lower health and criminal justice costs.

The High/Scope Perry Preschool study is one of the most cited examples of this research. This study identified both the short- and long-term effects of high-quality programs for young children living in poverty. From 1962 to 1967, David Weikart and his colleagues in the Ypsilanti, Mich., school district operated the High/Scope Perry Preschool Program for young children to help them avoid school failure and related problems.<sup>8,9</sup>

Researchers identified a sample of 123 children who were low-income and were assessed to be at high risk of school failure. They randomly assigned 58 of the children to a program group that received a high-quality preschool program at ages 3 and 4, and assigned 65 to another group that received no preschool program. Project staff collected data annually on both groups from ages 3-11, and again at ages 14, 15, 19, 27 and 40. The findings of the program through age 40 span the domains of education, economic performance, crime prevention, family relationships and health.

The study found that adults at age 40 who participated in the preschool program had higher earnings, were more likely to hold a job, had committed fewer crimes and were more likely to have graduated from high school than adults who did not have preschool.

The results showed a statistically significant effect on children's IQs during and up to a year after the program, but not after that, suggesting the program had strong effects that faded out over time. However, all of the subsequent findings of program effects in this study (effects on school achievement, high school graduation, adult earnings and crime prevention) disprove this conclusion.

- The participating group significantly outperformed the non-participating group on highest level of schooling completed.
- The study presents strong evidence that the Perry Preschool program played a significant role in reducing overall arrests and arrests for violent crimes, property and drug crimes, and reduced subsequent prison or jail sentences over study participants' lifetimes up to age 40.
- The economic return to society of the Perry Preschool program in 2000 was \$244,812 per participant on an investment of \$15,166 per participant—a return of \$16.14 per dollar invested in the program.
- Significantly more of the participating group than the non-participating group was employed at age 40, which continues the trend from age 27.

This study confirms that these findings extend not only to young adults but also to adults in midlife.

The Perry Preschool study indicates that the return to the public on its initial investment in such programs is not only substantial, but larger than previously estimated.<sup>10</sup>

In addition, more studies have now found evidence of the long-term effects of high-quality preschool programs,<sup>11,12</sup> suggesting that high-quality early childhood programs for young children have long-term effects that outlast short-term academic gains.



Elizabeth Whitehouse, Director, Education & Workforce Development Policy,  
ewhitehouse@csg.org

## REFERENCES

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## TOTAL STATE PRE-K FUNDING

State	2014-2015 Funding Level	2015-2016 Funding Level	Level Change	Percentage Change
Alabama	\$38,624,146	\$48,462,050	\$9,837,904	25.47%
Alaska	\$11,185,100	\$9,308,700	-\$1,876,400	-16.78%
Arizona	\$17,220,685	\$37,206,696	\$19,986,011	116.06%
Arkansas	\$103,500,000	\$105,000,000	\$1,500,000	1.45%
California	\$921,488,000	\$1,029,987,000	\$108,499,000	11.77%
Colorado	\$83,099,166	\$85,881,179	\$2,782,013	3.35%
Connecticut	\$96,358,572	\$101,255,328	\$4,896,756	5.08%
Delaware	\$6,149,300	\$6,149,300	\$0	0.00%
District of Columbia	\$207,226,639	\$213,223,589	\$5,996,950	2.89%
Florida	\$396,065,224	\$389,254,479	-\$6,810,745	-1.72%
Georgia	\$314,300,032	\$321,295,347	\$6,995,315	2.23%
Hawaii	\$3,000,000	\$2,876,182	-\$123,818	-4.13%
Idaho				
Illinois	\$300,192,400	\$314,238,100	\$14,045,700	4.68%
Indiana	\$12,000,000	\$12,000,000	\$0	0.00%
Iowa	\$77,490,446	\$74,698,988	-\$2,791,457	-3.60%
Kansas	\$41,288,990	\$41,288,117	-\$873	0.00%
Kentucky	\$71,315,300	\$90,113,200	\$18,797,900	26.36%
Louisiana	\$90,281,071	\$90,858,450	\$577,379	0.64%
Maine	\$16,383,452	\$20,641,778	\$4,258,326	25.99%
Maryland	\$114,464,245	\$115,457,232	\$992,987	0.87%
Massachusetts	\$17,350,000	\$26,869,279	\$9,519,279	54.87%
Michigan	\$239,275,000	\$243,593,000	\$4,318,000	1.80%
Minnesota	\$59,920,000	\$87,792,000	\$27,872,000	46.52%
Mississippi	\$3,000,000	\$3,000,000	\$0	0.00%
Missouri	\$19,258,100	\$16,194,141	-\$3,063,959	-15.91%
Montana				
Nebraska	\$31,298,523	\$32,246,176	\$947,653	3.03%
Nevada	\$3,247,375	\$3,338,875	\$91,500	2.82%
New Hampshire				
New Jersey	\$652,843,000	\$655,517,000	\$2,674,000	0.41%
New Mexico	\$39,600,000	\$51,500,000	\$11,900,000	30.05%
New York	\$410,034,734	\$784,977,409	\$374,942,675	91.44%
North Carolina	\$144,927,934	\$144,178,390	-\$749,544	-0.52%
North Dakota		\$3,000,000	\$3,000,000	
Ohio	\$45,268,341	\$60,268,341	\$15,000,000	33.14%
Oklahoma	\$143,119,465	\$143,296,282	\$176,817	0.12%
Oregon	\$66,354,262	\$69,999,910	\$3,645,648	5.49%
Pennsylvania	\$136,462,000			
Rhode Island	\$3,750,000	\$4,750,000	\$1,000,000	26.67%
South Carolina	\$79,434,547	\$78,034,547	-\$1,400,000	-1.76%
South Dakota				
Tennessee	\$86,366,000	\$87,043,400	\$677,400	0.78%
Texas	\$808,500,000	\$909,200,000	\$100,700,000	12.46%
Utah	\$7,800,000	\$8,800,000	\$1,000,000	12.82%
Vermont	\$17,931,751	\$20,700,000	\$2,768,249	15.44%
Virginia	\$68,569,714	\$68,651,478	\$81,764	0.12%
Washington	\$76,474,000	\$96,925,000	\$20,451,000	26.74%
West Virginia	\$93,429,297	\$93,316,924	-\$112,373	-0.12%
Wisconsin	\$186,314,100	\$190,314,100	\$4,000,000	2.15%

SOURCE: Data sourced from the Education Commission on the States: [http://www.ecs.org/ec-content/uploads/01252016\\_Prek-K\\_Funding\\_report\\_revised\\_02022016.pdf](http://www.ecs.org/ec-content/uploads/01252016_Prek-K_Funding_report_revised_02022016.pdf), retrieved April 3, 2016.