

An Early Childhood Investment with a High Public Return

By Rob Grunewald and Arthur J. Rolnick



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Investments in high-quality early childhood programs, particularly those targeted to children at risk, are not just a virtuous service, but can yield a large return for those paying the bill. Study after study has proved that such programs, coupled with training for parents, result not only in economic gains for the children as they grow up, but sizable savings on taxes. For example, graduates from these preschool programs are less likely to need special education, end up being arrested fewer times and spend less time in prison (which means fewer crime victims), require fewer social services, are healthier and wind up paying more in taxes.

Although this may sound too good to be true, we've seen the evidence in our eight years following this issue as economists for the Federal Reserve Bank of Minneapolis. In particular, we've kept our eye on four

dollars. The total benefits reached \$300,000, for a rate of return of about 18 percent.¹ A lengthier and more intense program (ages 3 months through 4 years) was provided by the Carolina Abecedarian Project in Chapel Hill, N.C. The total four-year cost per child was on average almost \$43,000, and the total benefit was \$162,000 with a rate of return of 7 percent.² At the other two early childhood programs (another preschool program and one in which nurses visit the homes of expectant mothers who are at risk), returns were estimated as high as 20 percent. Well over half of all these returns accrued to the nonparticipants, the public.³

The Stumbling Blocks

If the benefits clearly outweigh the costs, why aren't more disadvantaged children enrolled in early childhood programs? First, as noted by the price tag of the model

instead of at higher grades, when children are less receptive to the additional help.

Another hurdle to providing such programs for at-risk children is the difficulty in reaching low-income families; they are often on the move in their search for housing and jobs. Among the other obstacles is the dearth of high-quality programs in low-income neighborhoods.

To help overcome these difficulties, we have proposed a "tuition plus" scholarship program for all at-risk children.⁵ A scholarship would cover tuition for the child to a qualified early childhood development program, starting at age 3 and lasting up to two years. The "plus" would be a parent-mentoring program, starting even before the child is born. The scholarships and parent mentoring would be funded with a permanent endowment led by state governments.

In January 2008, a pilot project based on this model was begun in St. Paul with about \$6 million raised by the Minnesota Early Learning Foundation. The foundation was established with the help of business leaders in 2005; its mission is to sponsor demonstration projects that explore how Minnesota can cost-effectively invest in early childhood development with an emphasis on market-oriented solutions.⁶

The St. Paul Early Childhood Scholarship Program has served about 650 children and their families with parent mentoring and/or scholarships in two neighborhoods in St. Paul. In December 2009, the two-year point of the pilot, the program evaluator noted that the scholarships were reaching especially poor children: 71 percent of the families had household income below the poverty level, which is about \$22,000 for a family of four. Prior to the availability

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early childhood programs in different parts of the country for which cost-benefit analyses have been conducted with well-matched control groups.

Children who attended the Perry Preschool in Ypsilanti, Mich., were tracked until they turned 40. While 3 and 4 years of age, they attended the school half-day and their teachers visited their homes once a week to reinforce lessons learned in the classroom. The two-year total cost per child was on average almost \$19,000 in today's

programs discussed above, quality does not come cheap. Successful programs require well-trained staff and low ratios of children to teachers. One funding suggestion is to shift taxpayer-financed incentives from other programs, such as the sort of economic development plan that pays a company to move from one part of the country to another, yielding no net benefit for the nation.⁴ Others have suggested that when extra school funds are found, they be invested in early childhood education

Pre-K Spending in the Eighth District, 2009

	Percent of 3- and 4-year-olds enrolled in pre-K	Ranking among 50 states	Total state pre-K spending	State pre-K spending per enrolled child
Illinois	25.0	7th	\$327,024,460	\$3,438
Arkansas	24.6	9th	\$111,000,000	\$5,421
Kentucky	19.1	13th	\$75,127,700	\$3,497
Tennessee	11.2	19th	\$83,000,000	\$4,520
Missouri	2.9	34th	\$13,156,901	\$2,880
Indiana	No Program			
Mississippi	No Program			

SOURCE: National Institute for Early Education Research

of scholarships, only about one-third of children in the pilot program attended a licensed early childhood program. After the availability of the scholarships, children were attending a variety of high-quality early childhood programs, including nonprofit and for-profit child care and preschools, Head Start, family-based child care and public school-based preschool programs. About three-quarters attended full-day programs; the rest attended half-day programs.⁷

The two-year report also shows the number of high-quality programs in and near the pilot area increased more than 50 percent, from 14 programs to 22 between September 2008 and September 2009, as existing programs improved their quality and new programs opened in the area. Meanwhile, parents considered the program to be user-friendly and had strong positive opinions about the parent mentors and scholarships.⁸ During the remainder of the pilot, the evaluators will measure the impact of the program on the school readiness of participating children.

Lessons in Progress

Thirty-eight states provide state funds for prekindergarten programs. In the Eighth District, five states fund pre-K; Indiana and Mississippi do not. (See table.) As these and other states consider starting or expanding pre-K or scholarship programs, lessons learned so far from the St. Paul pilot are applicable, particularly in reaching low-income children, engaging parents and providing incentives to increase openings at high-quality programs.

As discovered in the St. Paul pilot, recruiting low-income families can be challenging,

particularly since these families tend to be highly mobile. On the ground, person-to-person recruitment and word of mouth were more effective than passive outreach efforts. However, once parents enrolled in the program, they noted it was relatively easy to use and were enthusiastic about the scholarships, particularly when compared with government-administered child-care subsidies.⁹ Combining parent mentors with the resources to choose a high-quality program for their child seems to have helped engage parents in the education of their children. On the program side, more openings in high-quality programs have become available in part because the programs are paid at a higher rate than if they provided more-typical child care. [9](#)

Arthur J. Rolnick is a senior vice president and the director of research at the Federal Reserve Bank of Minneapolis. Rob Grunewald is an associate economist there. Go to www.minneapolisfed.org for more on their work.

Watch Video on This Topic

James Heckman from the University of Chicago spoke recently at the St. Louis Fed on the economic case for early childhood education for disadvantaged children. See excerpts from his address, which was delivered at the Missouri Business Leaders Summit on Early Childhood Investment. To watch the eight-minute video, go to the multimedia page on www.stlouisfed.org/newsroom/multimedia/video/20100308-childhood-investment.cfm



ENDNOTES

- See Schweinhart et al. A recent re-analysis of the Perry Preschool Program data by Heckman et al. shows a total rate of return between 7 percent and 10 percent.
- See Masse and Barnett.
- See Heckman, Grunewald and Reynolds.
- See Grunewald and Rolnick (2003).
- See Rolnick and Grunewald (2006).
- More information about MELF, including a list of board members, is available at www.melf.us.
- See Gaylor et al.
- Ibid.
- Ibid.

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