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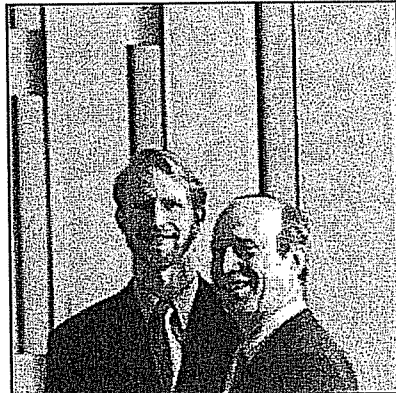


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## Early Intervention on a Large Scale

The economic benefits of ensuring good early-childhood development are clear. Now it's time to design and implement a system to do it.

By Arthur J. Rolnick and Rob Grunewald



Arthur J. Rolnick, right, is a senior vice president and the director of research at the Federal Reserve Bank of Minneapolis, where Rob Grunewald is an associate economist. The views expressed are the authors' and not those of the Federal Reserve. —Sevans/Education Week

For well over 20 years, government leaders at the state and local levels have been deeply engaged in efforts to promote economic development. Unfortunately, many economic-development schemes using public dollars are at best a zero-sum game. In the name of

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economic development and creating new jobs, virtually every state in the union has a history of trying to lure new companies with public subsidies.

Previous studies have shown that the case for these so-called bidding wars is shortsighted and fundamentally flawed. From a national perspective, jobs are not created—they are only relocated; the public return is at most zero. And the economic gains that seem apparent at state and local levels are also suspect because they would likely have been realized without the subsidies. In other words, what often passes for economic development and sound public investment is neither.

Persuasive economic research indicates that there is a far more promising approach to economic development with government assistance. It rests not on an externally oriented strategy of offering subsidies to attract private companies, but rather on government support of those much closer to home—quite literally: our youngest children. This research shows that by investing in early-childhood education, governments—in partnership with private firms and nonprofit

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foundations—can reap extraordinarily high economic returns, benefits that are low-risk and long-lived.

We would like to put forth a pragmatic proposal for economic development at the state and local levels that capitalizes on the high returns that investment in early-childhood education can yield. We don't pretend to have all the answers to economic development, but we're

quite certain that investing in early-childhood education is more likely to create a vibrant economy than using public funds to lure a sports team by building a new stadium or to attract an automaker by providing tax breaks.

Careful academic research demonstrates that tax dollars spent on early-childhood development provide extraordinary returns compared with investments in the public, and even private, sector. Some of these benefits are private gains for the children involved, in the form of higher wages later in life. But the broader economy also benefits because individuals who participate in high-quality early-childhood-development programs have greater skills than they otherwise would, and they're able to contribute productively to their local economies.

The promise of early-childhood programs is based on fundamental facts about early human development. A child's quality of life and the contributions that child makes to society as an adult can be traced to his or her first years of life. From birth until about the age of 5, a child undergoes tremendous development. If this period of life includes support for growth in language, motor skills, adaptive abilities, and social-emotional functioning, the child is more likely to succeed in school and to later contribute to society. Conversely, without support during these early years, a child is more likely to drop out of school, depend on welfare benefits, and commit crime—thereby imposing significant costs on society. Early-childhood-development programs recognize this potential—and this risk—and seek to nurture healthy development from the earliest years.

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Several longitudinal evaluations all reach essentially the same conclusion: The return on early-childhood-development programs that focus on at-risk families far exceeds the return on other projects that are funded as economic development. Cost-benefit analyses of the Perry Preschool Program, the Abecedarian Project, the Chicago Child-Parent Centers, and the Elmira Prenatal/Early Infancy Project showed returns ranging from \$3 to \$17 for every dollar invested. This implies an annual rate of return, adjusted for inflation, of between 7 percent and 18 percent.

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These findings, promising though they are, pose a challenge: Small-scale early-childhood-development programs have been shown to work, but can their success be reproduced on a much larger scale? There are reasons to be skeptical; some recent attempts at scaling up early-childhood development have been disappointing. But based on a careful review of past and current programs, we believe that large-scale efforts can succeed if they incorporate four key features: careful focus, parental involvement, outcome orientation, and long-term commitment.

Achieving these characteristics in large-scale early-childhood-development programs requires

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the flexibility, innovation, and incentives that are inherent in markets, as well as the long-term assurance and stability that government backing provides. To establish a successful, large-scale early-childhood-development program, therefore, we propose a permanent scholarship fund for all families with at-risk children. Similar to endowments in higher education, earnings from an endowment for early-childhood development would be used to provide scholarships for children in low-income families who aren't able to afford a quality early-childhood program.

The scholarships would cover child tuition to qualified programs plus the cost of parent mentoring to ensure parental involvement. Scholarships would be outcomes-based, meaning that they would include incentives for achieving significant progress toward the life and learning skills needed to succeed in school. Parent mentoring would include parent education; information about available financial, health, and human-services resources; and guidance on selecting an early-childhood-development program. Research shows that reaching children with multiple risk factors as early as possible is essential; even age 3 may be too late. So we suggest that while scholarships would pay tuition for a child to attend an early-childhood-development program beginning at age 3, the parent-mentoring program could start much earlier.

Through parent decisions and provider responses, the market would determine the structure of the early-childhood-development industry. Market participants would include early-childhood providers from the public and private sectors, which represent a mix of preschools, child-care providers, and home-visiting programs. The market structure, however, would be influenced by standards set by an executive board that manages the early-childhood-development endowment. Providers would have to comply with these standards in order to register the scholarship children. The standards would be consistent with the cognitive and social-emotional development needed to succeed in school. We envision a diverse mix of providers competing to serve at-risk children, leveraging the existing early-childhood-development infrastructure and opening the door for new providers.

Based on costs used in previous studies and current

### **Does preschool have long-term educational and economic benefits?**

**Research suggests the answer may be YES.**

Intensive preschool interventions targeting disadvantaged children have been shown to yield significant gains that may last well into adulthood. Longitudinal studies have been conducted to evaluate the enduring outcomes of several well-known preschool programs.

- Michigan's Perry Preschool program served 123 4-year-olds for two years. Participants have been tracked to age 40.
- North Carolina's Abecedarian preschool served 111 children from age 4 months to 5 years. Participants have been followed to age 21.
- Illinois' Chicago Child-Parent Centers served 1,500 children. Participants have been followed to age 20 .

### **How did children served by these programs fare later in life?**

- They were more likely to stay in the regular classroom and out of special education.
- They were more likely to go through school without repeating a grade.
- They were more likely to complete high school without dropping out.
- As adults, they were more likely to be employed and to have higher earnings.

Although long-term benefits of such interventions have been demonstrated, the costs of some exemplary programs can be quite high. On an annual per-student basis, the Perry Preschool and Abecedarian programs, respectively, spent about \$9,000 and \$10,500 (adjusted to 2000 dollars). As a

programs for at-risk children, we estimate that total resources needed to fund an annual scholarship for a high-quality early-childhood-development program for an at-risk 3- or 4-year-old would be about \$10,000 to \$15,000 for a full-day program that included parent mentoring. The scholarship either would cover the full cost of tuition or would be layered on top of existing private and public funds, such as child-care subsidies, to enhance quality features that correlate with school-readiness outcomes. The endowment's board could vary the amount of the scholarship to reach children in families just over the poverty line on a sliding scale, or increase the amount of the scholarship for children facing multiple risk factors.

result, some have questioned the cost-effectiveness of such programs and the extent to which they can serve as models for larger-scale interventions.

Citations:

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Borman, G.D. & Hewes, G.M. (2002). **The Long-Term Effects and Cost-Effectiveness of Success for All.** *Educational Evaluation and Policy Analysis*, 24(4), 243-266.

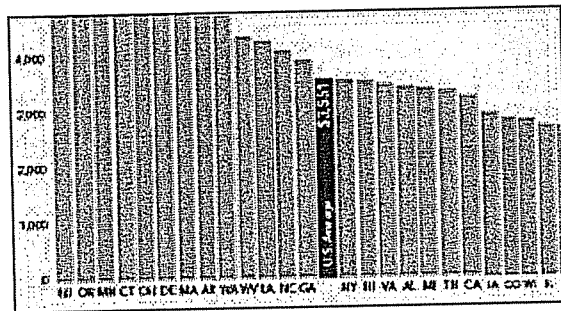
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To derive an

### Investing in Early Childhood

All but a dozen states now offer some form of state-financed preschool education. But 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.

**\*Click image to see the full chart.**



SOURCE: National Institute for Early Education, 2005

approximate dollar amount for the endowment, a state would have to estimate the number of children to be covered, multiply that by the average scholarship, and calculate the investment return for the interest derived from investing the endowment funds in low-risk government or corporate bonds.

In Minnesota, for example, we estimate that to ensure that all 3- and 4-year-olds living below the poverty line receive high-quality early-childhood development, the state needs about an additional \$90 million annually. For children who aren't already involved in an early-childhood program, the scholarship would provide access. For children who are enrolled in a child-care center or preschool, the scholarship would ensure that the quality is at the necessary level to meet school-readiness goals.

A one-time outlay of about \$1.5 billion—about the cost of two professional sports stadiums—would create an endowment that could provide scholarships to the families of children in Minnesota living below poverty on an annual basis. With the endowment's funds invested in corporate AAA bonds, earning about 6 percent to 7 percent per year, we estimate that \$90 million in annual earnings would cover the costs of scholarships, pay for program monitoring and assessments, and supplement existing revenue sources as needed for early-childhood screening and teacher-training reimbursement programs.

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The evidence is clear that investments in early-childhood-development programs for at-risk children pay a high public return. Helping our youngest children develop their life and learning skills results in better citizens and more-productive workers. Compared with the billions of dollars spent each year on high-risk economic-development schemes, an investment in early-childhood programs is a far better and far more secure economic-development tool. Now is the time to capitalize on this knowledge.

To fully achieve the benefits of early investments in children, they need to be followed up with quality education in the K-12 school system. However, if we are successful in getting most at-risk kids ready for school, K-12 will be more successful.

In our view, the case is closed for why we must invest in early-childhood development. Now it is time to design and implement a system that will help society realize on a large scale the extraordinary returns that high-quality early-childhood programs have shown they can deliver.

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