
Early Childhood Development on a Large Scale ¹

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For well over 20 years, government leaders at the state and local levels have been deeply engaged in efforts to promote economic development. Their concerns are understandable: A stronger economy enables citizens to better engage in “the pursuit of happiness” that our founding fathers hoped to guarantee. To the degree that public leaders can assist economic growth, they facilitate that pursuit.

Unfortunately, many economic-development schemes using public dollars are at best a zero-sum game. In the name of 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 (Burstein and Rolnick 1995). 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 foundations—can reap extraordinarily high economic returns, benefits that are low risk and long lived.

In this essay, we put forth a pragmatic proposal for economic development at the state and local levels that capitalizes on the high returns investment in

early childhood education can yield. Our proposal envisions a private/public endowment that would fund early childhood development scholarships for all at-risk children. The scholarships would cover the expense of parent mentoring as well as tuition for children to attend qualified ECD programs. Government support of the endowment would provide the assurance of long-term commitment, and the market-based nature of the ECD and mentor programs would promise innovation, outcome accountability, and quality improvement.

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. Investing in the education of children in their earliest years makes sense as an economic development strategy precisely because the returns are large, reliable, and reaped by both the individuals involved and the general public. As economists, we are trained to be skeptical of policies that interfere with market forces. But when it comes to early childhood education, we're confident that this is one policy with a high public return.

EXTRAORDINARY RETURNS

Policymakers rarely view early childhood development as economic development. They should. Careful academic research demonstrates that tax dollars spent on ECD provide extraordinary returns compared with investments in the public, and even private, sector. The potential return from a focused, high-quality ECD program is as high as 16 percent per year. 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 ECD programs have greater skills than they otherwise would, and they're able to

contribute productively to their local economies. Thus, it's estimated, the annual *public* return to good ECD programs is 12 percent.

The promise of ECD 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 five years old, 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. ECD programs recognize this potential—and this risk—and seek to nurture healthy development from the earliest years.

In a previous essay, we reviewed several longitudinal evaluations that all reached essentially the same conclusion: The return to ECD programs that focus on at-risk families far exceeds the return to other projects that are funded as economic development (Grunewald and Rolnick 2003). 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 almost \$9 for every dollar invested. This implies an annual rate of return, adjusted for inflation, between 7 percent and 16 percent.

A more recent analysis suggests that these figures may actually understate the true returns: The November 2004 follow-up study on the Perry Preschool Program 40 years after its inception calculates the total benefit-cost ratio at \$17 for every dollar invested, confirming that the benefits of ECD continue well into adulthood. Other recent studies of ECD programs in Michigan, New Jersey, Oklahoma, and elsewhere provide additional evidence that investments to help young children prepare for school and beyond pay large dividends to society.

ESSENTIAL ELEMENTS FOR LARGE-SCALE ECD

These findings, promising though they are, pose a challenge: Small-scale ECD 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 ECD have been disappointing. However, based on a careful review of past and current programs—those that have failed as well as those that thrive—we believe that large-scale efforts can succeed if they incorporate four key features: careful focus, parental involvement, outcome orientation, and long-term commitment. We further believe that to achieve these characteristics, large-scale ECD programs must be structured so as to blend the benefits of market incentives and long-term government support. In the discussion that follows, we describe the importance of these features and explain how a hybrid structure can achieve them.

Focus on At-Risk Children

Without doubt, all children benefit from investment in early childhood development. Given the inherent limits of tax revenue, however, we suggest that government resources for ECD programs be focused on those children at highest risk for developmental deficits. Conditions that can indicate whether a child is at risk include low family income, violence or neglect in the home, low parent-education levels, low birth weight, and parent chemical addiction.

Children from economically advantaged families are likely to thrive without additional government resources. But children from low-income families need additional support. Hence, to maximize the impact of scarce public dollars, large-scale ECD programs should focus on at-risk children.

Encourage Parental Involvement

Research shows unequivocally that parental involvement is a crucial ingredient in the success of ECD programs. When parents receive training in why and how to nurture their children's development, they're better able to nurture their children at home, outside of ECD program hours. Comprehensive ECD programs should therefore be designed to encourage parents to participate.

Assess Outcomes Regularly

ECD programs succeed when their goals are clear, explicit, and carefully monitored. Since their primary goal is the improved functioning of the children in their care, these programs should perform regular assessments of cognitive and social-emotional outcomes. And the programs themselves should be oriented toward achieving constant progress for each child. Outcome assessments allow for individual progress reviews, for curriculum improvements, and for staff and program accountability.

Provide Long-Term Commitment

Children thrive in secure, consistent environments. Similarly, programs designed to expand the cognitive and psychological abilities of children need the security of long-term commitment. This is not to say that such programs shouldn't be challenged to improve continuously, but children, parents, and ECD providers will benefit if they're assured of financial backing and institutional support as long as specified standards and outcomes are met.

AN ENDOWMENT WITH A MARKET ORIENTATION

Achieving these characteristics in large-scale ECD programs requires the flexibility, innovation, and incentives that are inherent to markets and the long-term assurance and stability that government backing provides. To establish a successful, large-scale ECD 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 ECD would be used to provide scholarships for children in low-income families who aren't able to afford a quality ECD program. The program would be financed and managed as follows: A state or local government, in partnership with the private sector and the federal government, would create an ECD endowment to fund the scholarships. The scholarships would cover child tuition to qualified ECD programs *plus* the cost of parent mentoring to ensure parental involvement. Scholarships would be outcome based, meaning that they would include incentives for achieving significant progress toward the life and learning skills needed to succeed in school.

Tuition-Plus Scholarships

The central component of our market-oriented approach to ECD is tuition-plus scholarships. A tuition-plus scholarship would cover tuition for the at-risk child to a qualified ECD program plus the cost of high-quality parent mentoring and home visits. Parent mentoring would include parent education; information about available financial, health and human services; and guidance on selecting an ECD program.

Through parent decisions and provider responses, the market would determine the structure of the ECD industry. Market participants would include ECD 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 ECD endowment. ECD 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 ECD infrastructure, and opening the door for new providers.

To encourage ECD providers to compete for the most severely at-risk children, scholarships would be based on initial conditions. To this end, the scholarship amount would be highest for a child with multiple risk factors. This would create an incentive for providers to register children who require more costly resources.

We should note several additional features of the scholarships. First, a partial scholarship could be layered on top of existing funding streams that providers currently receive. Second, the scholarship provided to the family would be for qualified ECD services only; actual payments would flow from the endowment directly to the family-chosen provider. And third, the scholarships would include financial incentives to providers based on accountability measures.

The Mentoring Program

Home visits by qualified mentors are among the best ways to achieve a high degree of parental involvement. To this end, as noted, the scholarships would provide funds for qualified mentors. Mentor qualifications would include ECD training and parent training and

counseling on issues related to health as well as education. Mentors would help parents decide which of the qualified ECD providers best meets the family's needs and would advise parents throughout the program.

Research shows that reaching children with multiple risk factors as early as possible is essential; even three years old may be too late. Therefore, we suggest that while scholarships would pay tuition for a child to attend an ECD program beginning at age three, the parent mentoring program could start much earlier.

The Value of a Market Orientation

A market-oriented approach would directly involve the parents with their children's education; research shows this is vital. Parents would be empowered to choose among the various providers and select one based on location, hours of service, quality of program and other features, much as they would any other product or service. The process of self-education and provider choice would itself involve the parent.

Furthermore, the approach would be outcome-based, so scholarships would include financial incentives focused on performance and would encourage innovation. While programs would have to meet requirements to accept children with scholarships, providers would have room for innovation in providing services.

Unlike a top-down, planned system, the ECD industry would be shaped by the market, through micro-level decisions by parents and responses by providers. This approach would allow the diverse mix of current providers and new entrants to find the best means to supply high-quality ECD.

THE ADVANTAGES OF AN ECD ENDOWMENT

An endowed fund for ECD represents a permanent commitment and effectively leverages resources by public and private stakeholders. Because the endowment would provide a stable funding source, we would expect the market response to be better than otherwise. A permanent commitment sends a market signal to providers that they can expect a consistent demand for their product. By drawing up a business plan that demonstrates it can successfully attract scholarship children, an ECD provider can leverage funds for capital expansions or improvements from low-interest loan sources and

philanthropic organizations; lenders will be reassured by the stability of the ECD endowment.

State governments are well-positioned to provide leadership to build a public/private endowment. Just as they do for capital campaigns for physical buildings, state governments can lead drives to build human capital through ECD. The state can encourage contributions to the fund by matching donations and providing tax credits. A donation of \$50,000 to \$150,000 would help provide ECD for an at-risk child every year into perpetuity.

As mentioned above, a board of directors with representatives from the public and private sectors would provide oversight for the endowment. Under the board's supervision, the program's executive director would determine the number of families eligible for scholarships, develop a mentoring program that would work with existing organizations, and design incentives for providers to ensure desired outcomes while promoting best practices.

How Much Money Would the Endowment Need?

Based on costs used in previous studies and current programs for at-risk children, we estimate that total resources needed to fund an annual scholarship for a high-quality ECD program for an at risk three- or four-year-old child would be about \$10,000 to \$15,000 for a full-day program that includes 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 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. The board could also consider providing scholarships for families that don't qualify based on income, but whose children are identified with risk factors other than living in poverty.

To derive an approximate dollar amount for the endowment, therefore, 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 in order to ensure that all three- and four-year-old children living below poverty receive high-quality ECD, the state needs about an additional \$90 million annually. For children who aren't already involved in an ECD program, the scholarship would give them 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 would create an endowment that could provide scholarships to the families of children 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.

CONCLUSION

The evidence is clear that investments in ECD 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 ECD is a far better and far more secure economic development tool. Now is the time to capitalize on this knowledge.

We argue that a market-oriented approach to ECD has several strong features. The present ECD landscape includes a variety of providers from the public and private sectors; a market-oriented approach would help improve the access and quality of ECD without creating additional bureaucracy. Focusing on at-risk children and encouraging direct parental involvement would help reach those children and families with the greatest need for ECD programs. Providers would receive incentives for successful outcomes and make local decisions on how to best achieve strong results. Finally, with a long-term, demand-side commitment through the creation of state-level private/public endowments, we expect a strong response from the supply side of the ECD market.

This essay outlines a market-oriented approach to ECD, and we acknowledge that the proposal should be tested in pilot projects to learn from practical experience. For example, a pilot project that distributes 200 or 300 scholarships over a five-year period would provide experience and lessons about implementing a scholarship system. With this information, researchers, policymakers, and practitioners could convene to make informed recommendations.

In our view, the case is closed for why we must invest in ECD. 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 ECD programs have shown they can deliver.

ENDNOTE

¹ Art Rolnick based his remarks at the conference on this article (*The Region* 2005), which itself is an abbreviated version of "A Proposal for Achieving High Returns on Early Childhood Development" by Rob Grunewald and Art Rolnick (Federal Reserve Bank of Minneapolis, Prepared for "Building the Economic Case for Investments in Preschool," Washington, D.C., December 3, 2004. Convened by the Committee for Economic Development, with support from The Pew Charitable Trusts and PNC Financial Services Group.)

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