Policy Perspective
Texas Public Policy Foundation
January 2006

The Early Bird Misses the Worm:

Evidence on Early Childhood Education

by Jamie Story, Education Policy Analyst

Across the nation, the movement for an increased government role in early childhood education is gaining momentum. Early childhood education (ECE) is the complete system of education for children from birth to school entry, and generally includes both private child care and preschool, as well as state-funded pre-K and federal Head Start programs. Georgia, Oklahoma, and Florida have already implemented universal public preschool, while such states as California and Arizona may follow closely behind.

Advocates cite ECE as a way to diminish the achievement gap between socioeconomic groups while raising overall academic performance—and call for universal public preschool to accomplish those goals. Organizations such as the National Institute for Early Education Research (NIEER) emphasize the importance of ensuring that every three- and four-year-old receives a quality early childhood education.[1]

However, not all experts agree. Is universal pre-K a good investment of taxpayers' money? With the majority of four-year-olds in Texas and the United States already attending preschool, is it necessary for government to take an even larger role? What improvements can Texas make to its existing system? These questions must be addressed before we continue to expand the role of government in early childhood education.

Early Childhood Education Facts

- In 1965 only 11 percent of United States three- and four-year-olds enrolled in school; that number rose to 55 percent by 2001.
- In the 2003-04 school year, more than 160,000 four-year-olds in Texas enrolled in public pre-K.
- At 44 percent, Texas has the third highest participation rate in public pre-K in the nation.
- Texas taxpayers invested $488 million in public pre-K in 2003-04, in addition to public money spent on Head Start and other child care.
- The Texas Education Agency estimates that 75 percent of qualified children are enrolled in public pre-K.

Do the benefits of Early Childhood Education outweigh the costs?

One common argument used by proponents is the positive return on investment in ECE programs, measured by such student benefits as increased future income, reduced crime rates, and reduced welfare dependence. Such claims are the result of a handful of experimental studies from the past several decades. Before citing these studies as evidence for universal preschool, however, one must examine their scientific validity and social applicability.

Perhaps the most famous study is the High/Scopes Perry Preschool Program from the mid 1960s. The Perry investigators assigned 58 high-risk, low-income African-American children to a program consisting of one or two years of high-quality, half-day preschool, combined with periodic home visits by teachers. In the most recent update, researchers report that the economic return to the public was $12.90 for every dollar

invested.[2] Many experts have questioned these results, however, due to the small sample size, sampling methodology, and use of nonstandard significance levels.[3]

The Abecedarian Early Childhood Intervention project started in 1972. Between the ages of 6 and 12 weeks, 112 children "at risk of retarded intellectual and social development" were assigned to the program. Children spent 10 hours a day, five days a week in year-round center-based care, with as few as three children per teacher, and nutritional and medical care provided. While researchers report up to 3-to-1 returns on investment, the cost to implement the program in public schools would be nearly $42,000 per child (2002 dollars, 3 percent discount rate).[4] The Abecedarian Project has also received criticism due to potential bias in its results.[5] In addition, despite attempts to reproduce the study, its results have never been replicated.[6]

Aside from the shortcomings in research design and inability to be replicated, one must still regard with caution the conclusions of the Perry and Abecedarian projects. It is worth noting that these programs served only the most severely disadvantaged children, and would likely produce different results in students from more advantaged backgrounds. Furthermore, Perry and Abecedarian were small-scale, high-quality, and closely-monitored programs, employing highly qualified teachers at above average salaries, incorporating home visits and parental education, and requiring tremendous amounts of personnel and monetary resources. It would be inappropriate to assume that these program results—and investment returns—could be replicated on a large scale.

Undoubtedly, *some* Texas students may benefit from a quality ECE program. However, a cost-benefit analysis based on results of the Perry and Abecedarian programs should not be used to justify universal pre-K. With more than 1.8 million children under the age of five in Texas,[7] implementing the Abecedarian Project—were it even desirable or possible—for all children in Texas would cost taxpayers more than $15 billion each year. That's nearly $700 per year for every person in the state! The claims of a substantial return on investment from such studies as Perry and Abecedarian cannot be applied broadly to all students statewide, yet proponents of universal preschool cite these "facts" when asking taxpayers for a large investment with unproven returns.

What is the current role of Texas government in Early Childhood Education?

Over the past 40 years, enrollment in ECE across the nation has skyrocketed. Whereas in 1965 only 11 percent of United States three- and four-year-olds enrolled in school, that number jumped to more than 55 percent by 2001.[8] Possible causes include increased participation of women in the paid workforce, increased numbers of single-parent households, reforms making welfare contingent upon work, and even rising standards of living.

Public preschool was created in Texas in 1984 when the Legislature enacted state pre-kindergarten for high-risk four-year-olds in Texas public schools. Students who qualify for free or reduced-price lunch, are homeless, and/or are unable to speak and comprehend the English language are eligible for half-day state pre-K. In the 2003-04 school year, more than 160,000 four-year-olds attended state pre-K in Texas, at a cost to taxpayers of $488 million (in addition to tuition paid by parents of non-qualifying children, the amount of which is unknown because this information is not collected by the state). The Texas Education Agency estimates that state pre-K serves about 75 percent of children who qualify. Presumably, the remaining 25 percent either elect not to attend state pre-K, or live in the minority of districts where pre-K is not offered.

In general, Texas four-year-olds from all socioeconomic backgrounds exhibit high rates of participation in ECE. In the 2002-03 school year, 43 percent of Texas four-year-olds participated in state pre-K—the third highest participation rate in the nation. Another 11 percent participated in Head Start, and 4 percent in state-funded special education.[9] Approximately 122,000 four-year-olds, or 35 percent, enrolled in private preschool or child care.[10] According to these numbers, up to 94 percent of Texas four-year-olds were enrolled in center-based preschool in 2002-03. To an extent, this number likely overestimates the true figure by double counting students who participated in more than one type of ECE, but the numbers are staggering nonetheless.

The vast majority of Texas children—including those who are low-income, homeless, and non-English speaking—are already enrolled in some type of preschool, and this fact alone raises the question of why universal pre-K is even needed in Texas.

What is being done to improve Early Childhood Education in Texas?

In September 2003, Senate Bill 76 charged the State Center for Early Childhood Development with developing pilot projects that better coordinate resources between public pre-K, Head Start, and private ECE centers. This coordination could allow Texas ECE providers to better serve children in a more cost-effective manner, both by reducing "double-dipping" of government services and by facilitating the sharing of resources such as classrooms and teachers. The Center, headed by Dr. Susan Landry, was also charged with developing a quality rating system for all ECE programs.

The Center concluded that the term "quality" in ECE is highly subjective, and that the best way to rate a program is by how well it prepares children for school, most often measured by diagnostic tools such as the Texas Primary Reading Inventory. The Center proposed creating a voluntary rating system that would designate a program (state, federal, or private) as "School Ready" if a specified percentage of its students exhibit school readiness upon entering kindergarten, thereby giving parents better information by which to choose a program, and taxpayers more knowledge about how effectively their money is being spent.[11]

One of the greatest problems with the ECE system in Texas is its lack of accountability to parents and taxpayers. Current regulations place a larger emphasis on square footage and poster placement than they do on results, and do not encourage collaboration among various programs. The recommendations of Dr. Susan Landry and her colleagues go a long way toward ensuring that taxpayer money currently devoted to ECE is spent in the most effective way possible.

Where else is government expanding its role in Early Childhood Education?

Universal preschool is a growing trend across the country. Arizona Governor Janet Napolitano is advocating universal preschool not only for Arizona, but for the entire United States. In California, actor/director Rob Reiner has supported an initiative that would create state-funded universal preschool by raising taxes for the highest income-bracket of Californians. But participating schools—public or private—would be subject to union-driven mandates that will drive up costs, and schools that don't participate will be hard-pressed to find parents willing to pay tuition when there is a "free" preschool around the corner. In addition, California's K-12 public school system scores among the worst in the country, and there is no reason to believe that public pre-K would fare any better.[12]

The Georgia universal pre-K program started in 1993, enrolling 56 percent of four-year-olds in the program by the 2003-04 school year. By the same year, Oklahoma's universal program enrolled 64 percent of the state's four-year-olds.[13] Although reviews of both of these programs have shown cognitive gains for participants, meaningful evaluations are impossible because of selection bias and the absence of control groups.[14]

This school year kicked off Florida's new universal pre-K voucher program. Parents of four-year-olds receive a $2500 voucher to be used at a public, private, or religious-based preschool of their choice.[15] Although it's too soon to gauge the program's academic effectiveness, it certainly exhibits the potential to increase parents' options—a characteristic lacking in most universal pre-K programs to date. However, the funding will undoubtedly subsidize preschool tuition costs for middle- and upper-income families who already participate in private preschool and do not need the subsidy.

Texans should take note of a universal pre-K program started in Quebec eight years ago. The Quebec program now costs $1.7 billion every year—33 times the original projection. Perverse economic incentives are largely to blame for the increased costs, since parents consume much more of the subsidized ECE than they would otherwise consume if having to pay for it out-of-pocket. While the program increased demand for pre-K, its detrimental effect on private preschools caused overall supply to decrease, forcing many of the lowest-income students to be crowded out of the system.[16] By including private providers from the beginning, as does the current Florida program, Quebec could have circumvented this consequence.

Conclusion

It is counterintuitive to assume that Texas should increase taxpayer funding of early childhood education, considering the following:

- The vast majority of Texas four-year-olds—including those who are low-income, homeless, or limited-English proficient—already participate in some type of center-based preschool.

CONTINUED ON BACK

- As shown by high participation rates in both public and private ECE in Texas, the free market is working. An expanded government role would force many private providers out of the market, thereby limiting choices for consumers.
- Commonly cited cost-benefit calculations result from flawed experiments that included only the most disadvantaged children, have never been replicated, and would be impractical for large-scale implementation. Positive "investment returns," while questionable even for disadvantaged children, would be even less positive for children as a whole.
- Existing universal preschool programs have failed to demonstrate significant benefits, and some even exhibit adverse consequences.

Jamie Story is an Education Policy Analyst at the Texas Public Policy Foundation. Contact Jamie Story at: jstory@texaspolicy.com.

Policy Recommendations

- Universal preschool should not be adopted in Texas. It would cost taxpayers billions of dollars with no promise of positive returns, and would limit choices for parents. In addition, it would subsidize middle- and upper-income families who do not need the subsidy.
- ECE in Texas lacks accountability to taxpayers. Pre-K effectiveness should be measured in terms of kindergarten readiness so that parents and taxpayers know that their money is being spent effectively.
- School reform efforts should be focused on K-12, and especially secondary education—the grade levels where U.S. student performance lags the most behind international counterparts.

Endnotes

[1]NIEER Mission Statement, available at http://nieer.org/about/.
[2]Lawrence J. Schweinhart, "The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions," High/Scope Educational Research Foundation, available at http://www.highscope.org/Research/PerryProject/PerryAge40SumWeb.pdf.
[3]Darcy Olsen, "Assessing Proposals for Preschool and Kindergarten: Essential Information for Parents, Taxpayers, and Policymakers," Goldwater Institute Policy Report, Feb. 8, 2005:20-21.
[4]Leonard Masse and W. Barnett, "A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention," NIEER, available at http://nieer.org/resources/research/AbecedarianStudy.pdf:45.
[5]Darcy Olsen: 22-23.
[6]Verne Bacharach, Alfred Baumeister and Jaimily Stoecker, "Do Pre-K Center Care Programs Work?" Education Reporter, Number 206, March 2003, available at http://www.eagleforum.org/educate/2003/mar03/pre-k-center.shtml.
[7]U.S. Census website, available at http://www.census.gov/popest/states/asrh/SC-est2004-02.html.
[8]National Center for Education Statistics, "Digest of Education Statistics, 2004," Table 7, available at http://www.nces.ed.gov/programs/digest/d04/tables/dt04_007.asp.
[9]"The State of Preschool: 2004 State Preschool Yearbook," National Institute for Early Education Research, available at http://nieer.org/yearbook/pdf/yearbook.pdf: 159.
[10]Estimate provided to author by David Fincher, Texas Children's Education Group, using Texas Workforce Data and childcare industry averages.
[11]Dr. Susan Landry, "The Report of the State Center for Early Childhood Development Advisory Committee on Senate Bill 76," UT Health Science Center, Sept. 1, 2004.
[12]Shikha Dalmia and Lisa Snell, "'Meathead' is at it Again," *Wall Street Journal*, Dec. 8, 2005: A16.
[13]NIEER website, available at http://nieer.org/yearbook/compare/scompare.php?CompareID=2.
[14]Lynn A. Koroly and James H. Bigelow, "The Economics of Investing in Universal Preschool Education in California," RAND Corporation, 2005: 48-50.
[15]Jenny Rothenburg, "Florida's Voluntary Pre-K Program Gives Parents New Options," *School Reform News*, The Heartland Institute, Oct. 1, 2005.
[16]Shikha Dalmia and Lisa Snell, "Universal preschool is inviting universal disaster," *San Francisco Chronicle*, Dec. 4, 2005: E2.