# HIGH-QUALITY UNIVERSALLY-ACCESSIBLE PRE-KINDERGARTEN FOR TEXAS

High-quality pre-kindergarten is an important policy issue in Texas because economic and demographic changes make upgrading the skills of the state's labor force essential. Over the last two decades, Texas' economy has shifted from an emphasis on extractive industries, such as oil and agriculture, to an emphasis on knowledge and technology. Unfortunately, a large percentage of the Texas population is not highly skilled or educated. Furthermore, without efforts to reform the quality and educational attainment of the labor force in Texas, the situation will only get worse. The average American citizen became better educated during the 1990s, but Texans showed much less improvement than the residents of other states.

The demographic profile of Texas suggests that the need for change is urgent. The future workforce is over 57 percent non-Anglo (Murdock and Klineberg 2005). For a variety of reasons, members of minority populations are much less likely to have completed high school or attended college. Unless these patterns change, the state will be substantially "poorer and less competitive in the future" (Murdock and Klineberg 2005, 9). In fact, if the state continues on the current path, by 2040 the proportion of households living in poverty will increase by 4 percent and average annual household income will decrease by \$6,500 (Murdock and Klineberg 2004). These consequences will be accompanied by losses in tax revenue and increases in the demand for health, criminal, and social services from the state.

Upgrading our educational system is an obvious solution to labor quality problems now facing Texas, and pre-kindergarten is one of the most cost-effective educational investments. Several states have recognized the importance of early childhood education. In 1995, Georgia was the first state to create a universally-accessible pre-kindergarten program and Oklahoma, West Virginia, New York, Florida, and Massachusetts have all since passed legislation calling for the implementation of universally-accessible pre-kindergarten.

Policy groups have played a significant role in developing potential solutions. The Texas Early Childhood Education Coalition (TECEC) and the Texas Program for Society and Health (TPSH) at the James A. Baker III Institute for Public Policy at Rice University developed *The Texas Plan: Statewide Early Education and Development System (SEEDS)* to address the need for high-quality, universally-accessible pre-kindergarten. Our analysis of a high-quality, universally-accessible pre-kindergarten program is based on our interpretation of *The Texas Plan*'s policy recommendations, with an emphasis placed on infrastructure and educational quality.

## A High Quality Program in Texas

The quality of existing pre-kindergarten programs in Texas varies greatly. Realizing the benefits of a high quality program will require significant improvements in the quality indicators over the current publicly funded system. The program evaluated here is a full school day program available to all Texas four year olds. A full school day program enables those Texas mothers to reenter the labor force sooner and lowers the out-of-pocket cost of child care significantly. The focus in the classroom will be on language arts and math through numerous academic enrichment activities that include whole class exercises, small groups, and individualized learning activities. Teachers in the proposed program will be required to possess a Bachelors degree and certification in early childhood education. Finally, student to teacher ratios for four year olds would be 17:2.

### Benefits of Universally-Accessible Pre-Kindergarten

The program evaluated in this study is modeled after a well documented high quality pre- kindergarten program called the Chicago Child Parent Centers (CPC). The outcomes observed for participants in the program have been measured for twenty years and include a significant reduction in dropping out of school, grade retention, special education, and arrests by the age of 18. Participants were also much more likely to graduate from high school. As we report, schools will save the costs of providing remedial education to those that are retained and special education costs. However, schools will be responsible for educating those that would have otherwise dropped out.

Many of the benefits measured and reported here stem from the above educational outcomes. We found that the increases in graduation lead to very large increases to lifetime earnings for those that would not have otherwise graduated. Increases in earnings lead to increases in tax revenue for the state. Participants in a program like the one evaluated here were also less likely to be victims of abuse or involved with the juvenile justice system.

Parents of Texas four year olds would immediately benefit from the program. Their out-of-pocket child care cost would be greatly reduced and they would be able to increase their own lifetime earnings by reentering the labor force.

## **Cost-Benefit Comparison**

Our cost-benefit analysis for Texas indicates that the combined benefits to the participant, society, and the government from a statewide universally-accessible pre-kindergarten program greatly exceed the costs. We find that every \$1.00 invested in the proposed high-quality program returns \$3.50 per participant, based on the enrollment of seventy percent of all four-year-olds in the state. Because it is more expensive to establish new classrooms than to upgrade existing public and private classrooms, the return on investment decreases to \$3.31 with ninety percent enrollment. This calculation is conservative. When judgment was required, we estimated the benefits conservatively and overestimated the costs. Furthermore, we chose to exclude benefits based on incomplete literature and data, such as a reduction in welfare dependency and improved health conditions over participants' life spans.

**Texas Investment Return per Child** 

	70% Enrollment	80% Enrollment	90% Enrollment
Program Costs	-\$5,268	-\$5,446	-\$5,585
<b>Education Outcomes</b>	\$1,096	\$1,096	\$1,096
Increased Earnings	\$7,280	\$7,280	\$7,280
<b>Current Increased Income for Mothers</b>	\$484	\$484	\$484
Increased Lifetime Earnings for Mothers	\$2,145	\$2,145	\$2,145
<b>Juvenile Justice System Costs</b>	\$70	\$70	\$70
Juvenile Crime Victim Costs	\$30	\$30	\$30
Adult Justice System Costs	\$550	\$550	\$550
<b>Adult Crime Victims Costs</b>	\$18	\$18	\$18
Child Welfare Numbers	\$48	\$48	\$48
Value of Child care	\$6,741	\$6,741	\$6,741
<b>Total Benefits</b>	\$18,462	\$18,462	\$18,462
Rate of Return	\$3.50	\$3.39	\$3.31

#### Conclusion

The need to address the lagging educational attainment in the state and the implications that it has for the economy is urgent. A universally-accessible high quality pre-kindergarten program could make significant progress toward closing the gaps in education and earnings across the state.



#### **Citation:**

Aguirre, Elisa et al. 2006. "A Cost-Benefit Analysis of Universally-Accessible Pre-Kindergarten Education in Texas." The George Bush School of Government and Public Service at Texas A&M University.