

Alaska Pre-Elementary Research Compilation



Introduction

This compilation of research will outline include several studies about the positive outcomes for state funded preschool. Included in this compilation are several state studies on the impact preschool has on kindergarten readiness, increased likelihood of long-term academic achievement and the reduction for the need of special education services. This compilation of research will also include reports addressing the concerns that the impact of preschool is not long lasting and “fades out” over time.

Foundational research on the impact of preschool for young children is built on a 40 year study of the High Scope Perry Preschool program. The High Scope Perry Preschool and the Abecedarian Preschool Project are considered the gold standard in pre-k quality. These programs were shown to produce academic benefits, health improvements, reductions in crime, and improved economic outcomes such as higher earnings and reduced need for public benefits. The High Scope Perry Preschool students had an almost 20 percent higher high school graduation rate and children in the Abecedarian Preschool Program were four times more likely to graduate college than students in the control group.

These returns on investment have attracted support for high quality pre-k among Federal Reserve leaders, corporate CEOs, economists such as Nobel Prize winner James J. Heckman, law enforcement and military leaders, and bipartisan policymakers in Texas and across the country, among others.

- Schweinhart, L.J., Montie, J., Zongping, X., et al. (2005) *Lifetime Effects: The HighScope Perry Preschool Study Through Age 40* High Scope Press. Retrieved from: http://www.highscope.org/file/research/perryproject/specialsummary_rev2011_02_2.pdf
- Conti, G., Heckman, J., Pinto, R., (2015) *The Effects of Two Influential Early Childhood Interventions on Health and Healthy Behaviors*. National Bureau of Economic Research. Retrieved from: <http://www.nber.org/papers/w21454.pdf>
- Heckman, J., (2012) *Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy*. Retrieved from: <https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/>

Increased Kindergarten Readiness

Many evaluations have found state-funded pre-k programs are effective in preparing young children to be successful in kindergarten. Research shows that pre-k promotes the successful acquisition academic skills such as pre-reading and pre-math.

- Isaacs, J. (2008). *State Pre-Kindergarten: Impacts of Early Childhood Programs*. Brookings Institute. Report https://www.brookings.edu/wp-content/uploads/2016/06/09_early_programs_isaacs.pdf

State Studies:

- **Arkansas:** Students who participated in the **Arkansas Better Chance (ABC)** program scored higher on kindergarten measures of vocabulary, math skills, and understanding of print concepts than students who had non-ABC preschool experiences

Jung, K., Barnett, W. S., Hustedt, J. T., & Francis, J. (2013). *Longitudinal effects of the Arkansas Better Chance program: Findings from first grade through fourth grade*. Rutgers University & The University of Delaware. Retrieved from <http://nieer.org/wp-content/uploads/2016/08/Arkansas20Longitudinal20Report20May2013n.pdf>

- **Georgia:** Georgia's Pre-k Program found a significant positive effect for participating children in measures of language and literacy, math, and general knowledge at kindergarten entry when compared to students of a similar age who had not yet participated.

Peisner-Feinberg, E., Schaaf, J., LaForett, D. R., Hildebrandt, L. M., & Sideris, J. (2014). *Effects of Georgia's pre-k program on children's school readiness skills: Findings from the 2013-2013 evaluation study*. University of North Carolina at Chapel Hill. Retrieved from <http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/reports-and-policy-briefs/GAPreKEval2013-2014%20Report.pdf>

- **New Mexico:** Four-year-old children in the New Mexico Pre-K had better outcomes on kindergarten measures of vocabulary, math, and early literacy when compared to students who had not yet attended pre-k.

Hustedt, J. T., Barnett, W. S., Jung, K., & Friedman, A. H. (2010). *The New Mexico PreK evaluation: Impacts from the fourth year (2008- 2009) of New Mexico's state-funded PreK program*. National Institute for Early Education Research. Retrieved from <http://nieer.org/wp-content/uploads/2010/11/NewMexicoRDD1110.pdf>

- **Oklahoma:** An evaluation of Oklahoma's Early Childhood Four-Year-Old Program found large academic benefits for students of differing racial and ethnic groups across socioeconomic backgrounds. Four year old children, who had participated, showed, significantly improved performance on cognitive tests of reading, writing, math reasoning, and problem solving abilities.

Gormley Jr., W. T., Gayer, T., Phillips, D., & Dawson, B. (2005). *The Effects of Universal Pre-k on Cognitive Development*. *Journal of Developmental Psychology*, 41(6), 872-884. DOI: 10.1037/0012-1649.41.6.872. Retrieved from <http://www.iapsych.com/wj3ewok/LinkedDocuments/Gormley2005.pdf>

Long Term Academic Outcomes.

Participation in high-quality state funded pre-k programs has been found to benefit students. Benefits include improved academic outcomes lasting into elementary, middle, and high school. Several longitudinal studies have examined well-established state pre-k programs. Those studies compared participating students' outcomes on state assessments to those of similar control groups of students who did not participate in state-funded pre-k.

- **Louisiana:** A longitudinal study of **Louisiana's LA 4** public pre-kindergarten program compared the academic outcomes of participating students to non-participating students on the Louisiana Educational Assessment Program (LEAP) test in eighth grade. The study found that at-risk LA 4 students (as determined by family income) outperformed at-risk non-LA 4 students in all eighth-grade measures.

Cecil J Picard Center for Child Development and Lifelong Learning. (2013). *Eighth-grade outcomes for LA4 cohort 1 students*. (Technical brief).

- **New Jersey:** New Jersey's **Abbott Preschool Program Longitudinal Study (APPLES)** has measured the academic outcomes of participating students in kindergarten, second, fourth, and fifth grades. At all levels of measurement, the Abbott preschool program has been shown to improve achievement in literacy, language arts, and math.

Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013). *Abbott Preschool program longitudinal effects study: Fifth grade follow-up*. National Institute for Early Education R Retrieved from: <http://nieer.org/wp-content/uploads/2013/11/APPLES205th20Grade.pdf>

- **Michigan:** More students in the **Michigan Great Start Readiness Program (GSRP)** graduated on time compared to students who had not attended GSRP pre-k (58% vs. 43%). Additionally, more GSRP students of color graduated from high school on time compared to similar students of color who had not attended GSRP (60% vs. 37%).

Schweinhart, L. J., Xiang, Z., Daniel-Echols, M., Browning, K., & Wakabayashi, T. (2012). Michigan Great Start Readiness Program evaluation 2012: High school graduation and grade retention findings. HighScope Educational Research Foundation. Retrieved from http://www.highscope.org/file/Research/state_preschool/MGSRP%20Report%202012.pdf

Decreased Grade Retention and Special Education Referrals

The benefits associated with participating in quality pre-k have been found to not only impact cognitive performance measures like test scores, but also costly educational interventions like special education and grade retention.

- **Pennsylvania:** Typically expected rates of special education placement were significantly reduced for students who participated in the Pennsylvania's Pre-K Counts (PKC) program as they transitioned into kindergarten.

Bagnato, S., Salaway, J., & Suen, H. (2012). *Pre-k counts in Pennsylvania for youngsters' early school success*. Early Childhood Partnerships- Specs Research. Retrieved from <http://www.heinz.org/UserFiles/Library/SPECS%20for%20PKC%202009%20Final%20Research%20Report%20113009.pdf>

Results Demonstrated by Alaska School Districts

Two School districts receiving state funds to provide preschool since 2008, have been able to track the progress of young children into 2nd and 3rd grade. Lower Kuskokwim School District provided documentation of student progress on MAPS testing for 3rd grade. The results showed an increase in scores for those children who attended preschool versus children who did not. Nome Public School, used MAPS testing to show 2nd grade outcomes. Results of testing showed higher scores for young children who attended preschool versus children who did not.

Addressing Reports of Preschool Fade Out

A common argument against investing in early childhood education, is based on a highly selective read of research findings found in Head Start evaluations and, to a lesser extent, the Perry Preschool project.

Critics argue that gains made through early childhood education disappear by the third grade. They acknowledge that disadvantaged children who received early education arrive at kindergarten ahead of peers who did not, but use third grade evaluations to claim there is no lasting effect to justify the investment. The fade out argument may come from an incomplete read of data and a narrowed view of what constitutes success.

For example, the Perry Preschool Project has been criticized for not permanently increasing IQ among the treatment group. Studies showed IQ gains that are evident at kindergarten among the treatment group tend to equalize with the control group during schooling years. However, IQ is not the only one measure of success in an individual. Other child development skills are equally important. Nobel Laureate Economist James Heckman found that the social and emotional skills learned through early childhood education were the major drivers of success in school, career and life among the Perry treatment group, who far outperform the control group in adult outcomes.

- Video: [No Fade Out: Lasting Effects](#)

A major, well-designed project is called the **Head Start Impact Study**. It found that Head Start produces educational gains that fade away. By third grade, when the research ended, there was little detectable difference between those assigned to Head Start and those in control groups. However, early education has always had an impact not through cognitive gains but through long-term improvements in life outcomes. There are often long-term improvements on things that matter even more, such as arrest rates and high school graduation rates. The **Head Start**

Impact Study couldn't examine those outcomes. James Heckman says that using the Head Start Impact Study to claim that early childhood education is ineffective is "a generalized conclusion that is neither thoughtful nor accurate."

- Garces, E., Thomas, D., Currie, J. (2000) Long Term Effects of Head Start. Retrieved from:
http://www.princeton.edu/~jcurrie/publications/Longer_Term_Effects_HeadSt.pdf

A 2015 study reviewed the outcome results of the Tennessee Voluntary Pre-K program. The study, found no evidence of lasting academic or social gains for elementary students who had participated in Tennessee's pre-K program, and some point to this as evidence that pre-K gains fade-out over time. However, these results are more complex and need further review. There are several key points about the outcomes of this study.

First, this is only one study and does not take into account multiple factors of child development. Nor does the study consider the longer term results the preschoolers involved in the study. The Tennessee study only looked at kindergarten performance.

Second, the released results were only a portion of the full study. The full study will follow over 3000 preschool-aged Tennesseans and will analyze the results of the third grade state test.

Finally, the early learning community learned an important lesson from this study, quality matters. The study found that many of the preschool children attended programs that lacked quality and there was no measure of quality in those study programs. The study showed that focus must be on more than access and quality is the critical component of preschool success as is ensuring young children continue into early grade classrooms of high quality.

- Snow, K. & Hogan, L. (2015) *Making Sense of the Tennessee Voluntary Pre-k Study*. Retrieved from: <http://www.naeyc.org/blogs/making-sense-tennessee-voluntary-pre-k-study>