

Tennessee pre-k students see 82 percent gain over non pre-k peers

NASHVILLE, Tenn.—Children who attended state-funded prekindergarten classes gained an average of 82 percent more on early literacy and math skills than comparable children who did not attend, researchers from the Peabody Research Institute at Vanderbilt University have found.

The initial results are from the first rigorous longitudinal study that has been conducted on the effects of public prekindergarten attendance on a statewide scale.

“This research is difficult to do but critically important to evaluating the effects of Tennessee’s investment in pre-k,” study leaders Mark Lipsey and Dale Farran said. “Such evidence is especially important in the context of the current budgetary constraints in Tennessee and other states that have made commitments to pre-k education.”

For the study, 23 schools in 14 Tennessee school districts randomly admitted children to their pre-k program. All of the schools received applications from more students than they could accommodate. The children admitted to pre-k were then compared to the children whose families applied but were not admitted. A total of 303 children were involved in this phase of the study.

Assessments at the beginning and end of the prekindergarten year found that the pre-k children had a 98 percent greater gain in literacy skills than children who did not attend a state pre-k program, a 145 percent greater gain in vocabulary and a 109 percent greater gain in comprehension. They also made strong, but more moderate, gains in early math skills (33 percent to 63 percent greater gains). Overall, the average gain across the board was 82 percent more than for the children who did not attend state pre-k.

Results from a second parallel study corroborated these findings. That study compared 682 children who attended 36 pre-k classes in rural and urban middle Tennessee schools to 676 children who had to enter a year later because of the birth date cutoff for pre-k eligibility.

The second study also found that children enrolled in state-funded pre-k classes scored significantly higher on emergent literacy and math assessments than the children who had not yet attended pre-k once the age difference was accounted for.

The strongest differences were again in the areas of literacy and language skills, with more modest gains in math skills.

Both studies will continue collecting data for the next four years. The second study will continue collecting data in waves across the state until every region is represented.

“These studies were possible only because of a strong partnership with the Division of School Readiness and Early Learning in the Tennessee Department of Education and the commitment of school districts across the state to learning about the effects of pre-k,” Lipsey said.

The studies are led by Lipsey, research professor of human and organizational development and Peabody Research Institute director, and Dale Farran, professor of education and psychology. Carol Bilbrey, research associate at the Peabody Research Institute, directed data collection.

The research is funded by the U.S. Department of Education’s Institute of Education Sciences.

The researchers will report on these and other findings March 4 at the annual meeting of the Society for Research on Educational Effectiveness in Washington, D.C.

Media contact: Melanie Moran, (615) 322-NEWS
melanie.moran@vanderbilt.edu