

New Study Finds Abbott Preschools Cut Achievement Gap

A new study of New Jersey's Abbott Preschool Program shows that children in the state's most disadvantaged communities who participate in the program continue to make significant gains in literacy, language, and math, and that two years of preschool dramatically increases their learning.

The study also finds notable advances in classroom quality in the Abbott Preschool Program, whether the pre-K program took place in a public school or private child care setting. The Abbott Preschool Program Longitudinal Effects Study (APPLES) was conducted by the National Institute for Early Education Research (NIEER) at Rutgers.

“One of the goals of mandating the Abbott pre-K program was to help underprivileged children close the achievement gap,” said Ellen Frede, NIEER co-director and principal author of the study. “As such, there is a great deal of interest in whether it is effective in helping children enter kindergarten with the knowledge, skills and dispositions that will lead to success in school. The results presented here provide clear evidence that by participating in a high-quality program, regardless of auspice, children are improving in literacy and math through the end of their kindergarten year.”

The study estimated the effects of preschool education programs on kindergartners' academic skills and evaluated classroom quality. Children were tested on math, vocabulary, and early literacy skills.

Study findings include:

- The substantial gains made in language, literacy, and math while children were in preschool were largely sustained during the kindergarten year.
- Children who attended preschool for two years at both age 3 and 4 significantly outperform those who attend for only one year at age 4, and both groups of pre-K attendees outperformed those who do not attend at all. The gains in language and math from two years are quite large, nearly double for language and 70 percent larger for math.
- Comparing classroom quality across years, in 2006 almost 90 percent of the classrooms scored above the average score found in 2000. Areas most likely to be directly related to child learning, such as language and reasoning activities, interactions, and program structure now score in the good to excellent range. Less progress appears to have been made in improving teaching practices specifically related to children's learning in math, suggesting the need for further emphasis on professional development in teaching math.



Classroom quality jumps; two years of pre-K boost gains dramatically

“The study is significant nationally given the growing trend for states to provide preschool education for their children,” she said. According to NIEER's State of

Preschool Yearbook 2006, 38 states enrolled nearly 950,000 children in prekindergarten programs. It recognized New Jersey's as one of the highest quality preschool programs in the nation. Frede said that only high-quality preschool education has been proven to reduce the achievement gap for children.

Enrollment in the Abbott preschool program has increased dramatically since its inception in 1999. In 2005-2006, the seventh year, the Abbott districts served more than 40,500 3- and 4-year-old children in preschool. For the purposes of the classroom quality portion of the study, classroom observations were made in 104 public school classrooms, 176 private child care center classrooms and 25 Head Start classrooms.

The study measured the effects of the Abbott preschools on children's learning using two rigorous methods. One provides the strongest controls for possible differences between pre-K attendees and nonattendees, but it can provide estimates of the pre-K program's effects only at kindergarten entry. The other not only provides estimates at kindergarten entry, but also allows for continued comparisons over time. The two research methods, together with the classroom quality data, make for an exceptionally strong study according to Frede, who, prior to returning to The College of New Jersey and rejoining NIEER, directed the state's early childhood program.

In addition to Frede, the study was authored by Kwanghee Jung, W. Steven Barnett, Cynthia Lamy and Alexandra Figueras, with the support of the New Jersey Department of Education as part of its Early Learning Improvement Consortium and The Pew Charitable Trusts. A full copy of the report can be found at:

<http://nieer.org/docs/index.php?DocID=173>

■ [Na](#)