

# Research Briefing: The Full-Day Advantage

Summary of research prepared for the Winning Beginning NY Campaign

**Twice as many children who attend full-day Pre-K enter kindergarten at the proper academic level, compared with peers without preschool experience.**

These findings emerge from a 2003 study of prekindergarten effects on school readiness by Donna J. DeSiato, Ed.D., assistant superintendent for the Syracuse City School District's Office of Curriculum and Instructional Services.

## Does Prekindergarten Experience Influence Children's Subsequent Educational Development?

### A Study of Students' Performances and Kindergarten Teachers' Perceptions.

By Donna J. DeSiato, Ed.D.  
Syracuse City School District

As part of a series of research briefings on early education, this publication presents evidence of short-term benefits of quality programs. Early education offers several levels of positive impact on children, families, and society at large. The short-term benefits include increased school readiness among prekindergarten graduates, and improved academic achievement in early grades. Medium-term effects (within a decade) include reduction in special education and grade repetition, as well as substantial cost-savings to taxpayers. Long-term impacts include increased likelihood of high school graduation and college enrollment, higher lifetime income and lower welfare dependence, and reduced involvement in crime.

Her report, "Does Prekindergarten Experience Influence Children's Subsequent Educational Development? A Study of Kindergarten Teachers' Perceptions and Students' Performances," differs from previous research by including public full-day prekindergarten in the mix. Most studies compare only half-day graduates to those with no Pre-K experience, while DeSiato's work examines 346 children in all three categories.

Overall, DeSiato—who conducted the research as part of work toward her doctorate in educational leadership at Syracuse University—found that children with half-day Pre-K experience performed better on assessment tests than those with no preschool. Furthermore, she found that children with full-day Pre-K experience outperformed both groups. She also found that teachers' opinions of prekindergarten effects were consistent with student performance data.



## Teacher Observation Can Make a Difference, Too

Besides analyzing student performance, DeSiato assessed teacher observations using a scale she developed. The DeSiato Kindergarten Teacher Perception Readiness Survey included 50 statements covering social and emotional development (e.g. the child can follow directions); approaches toward learning (e.g., the child is curious about new tasks and challenges); language development (e.g., the child can orally produce various sounds); gross and fine motor development (e.g., the child can use scissors to cut a five-inch circle); and cognitive and general knowledge (e.g., the child can identify primary colors).

She gave the survey to 25 teachers, asking them to rate children in the three categories on a scale from 1 (none of the time) to 5 (all the time). Teachers found that students with full-day Pre-K experience were at the upper end of the distribution, with 65% of teacher responses at 4 (most of the time) or above. More than 50% of the teacher responses for students with no Pre-K background were at 2 (some of the time) or below.

DeSiato considers this an important research finding given the studies showing that teacher opinion about individual students' learning ability influences how they interact with students.

## Full-Day Pre-K Has Significant Effects on Child Development

To analyze student performance, DeSiato used data from the Syracuse City School District's Developmental Assessment. Since 1983, the district has given this test to kindergarteners in the fall and spring to assess language and cognitive development. It evaluates each child's instructional level as "prekindergarten," "kindergarten" or "first grade." To move from one level to the next, a child must display 85% competency.

DeSiato found that less than half of students with no Pre-K experience entered kindergarten at that developmental level. For children with half- or full-day Pre-K backgrounds, the numbers were 60% and 80%, respectively. About 5% of full-day prekindergartners entered kindergarten with first-grade skills.

DeSiato's study also used data from the *Fox in a Box*™ assessment, a nationally available literacy program the district began using in 2001. Like the developmental assessment, *Fox in a Box* follows a fall and spring schedule.

**About 5% of full-day prekindergartners entered kindergarten with first-grade skills.**

*Fox in a Box* measures four areas of literacy: phonemic awareness, phonics, reading and oral expression, and listening and writing. Based on performance, *Fox in a Box* assigns an instructional level to each child: Level 1 (midyear kindergarten), Level 2 (end of year kindergarten), Level 3 (midyear first grade), Level 4 (end of year first grade), Level 5 (midyear second grade), and Level 6 (end of year second grade). Students need an 85% score to move from one level to the next.

While most of the children in the DeSiato study entered kindergarten at *Fox in a Box* Level 1, more children who attended full- or half-day prekindergarten entered at Level 2. Only those with Pre-K backgrounds entered at Level 3. Pre-K graduates also completed kindergarten with greater gains in literacy scores than their peers who had no preschool experience.



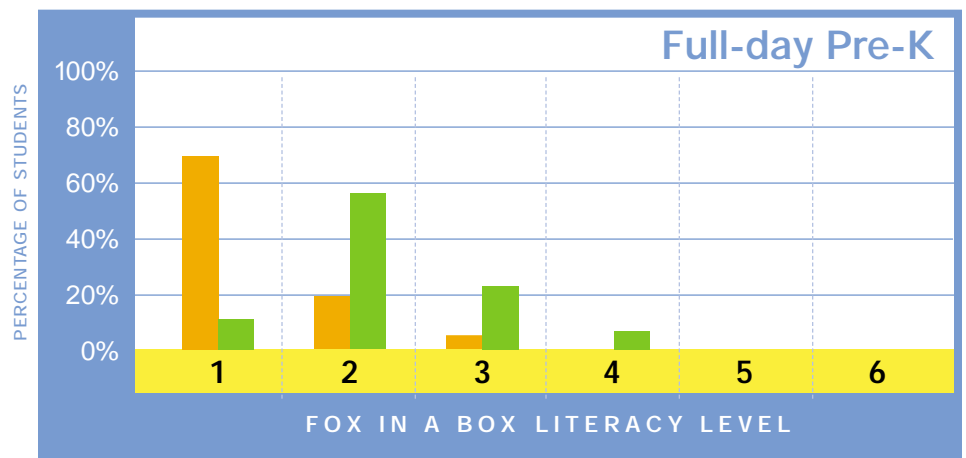
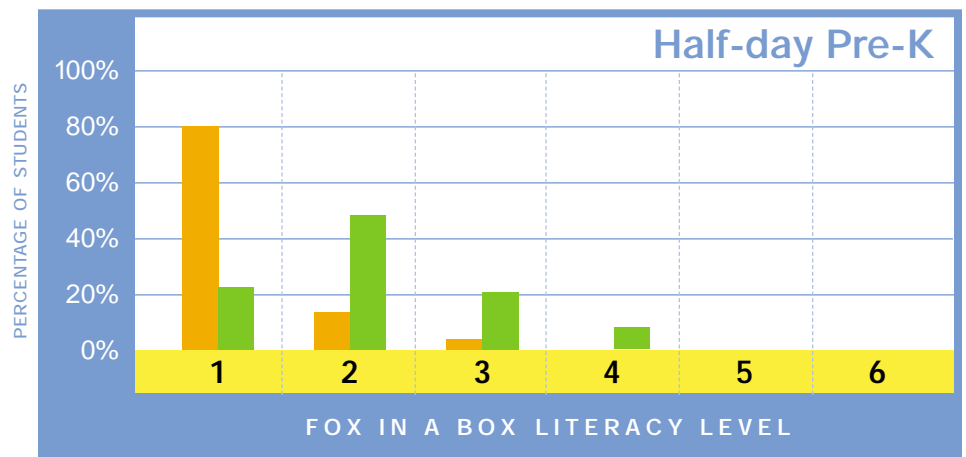
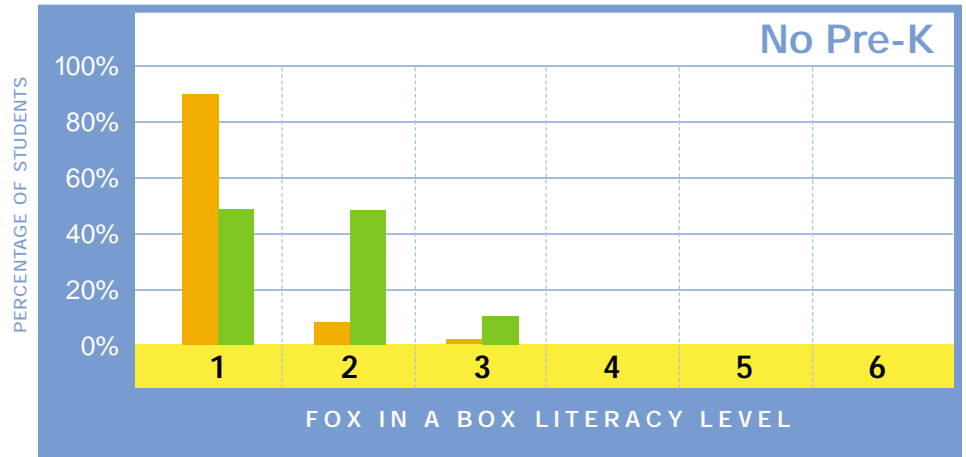
Although the differences among the three categories may seem small, children's first learning steps are among the most important, and they can have a lifetime effect. The research provides further evidence that schools should make prekindergarten available to all 4-year-olds, and expand existing half-day programs to full day. DeSiato contends that this can go a long way in closing learning gaps.

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## Fox in a Box™ Assessment Results

FALL SPRING

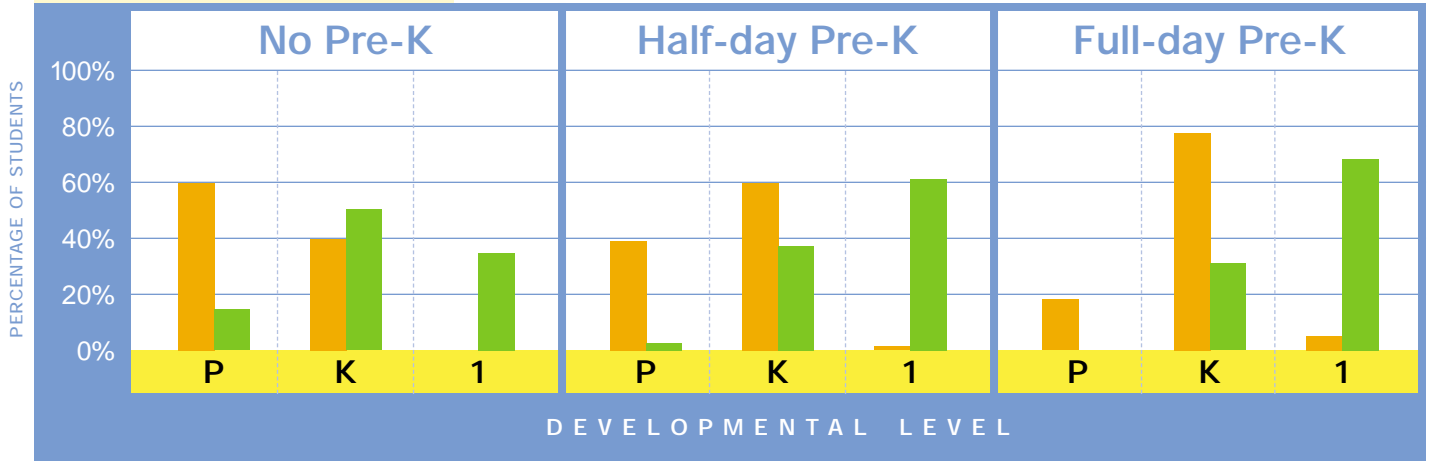


SOURCE: Does Prekindergarten Experience Influence Children's Subsequent Educational Development? A Study of Students' Performances and Kindergarten Teachers' Perceptions, DeSiato, 2003.

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## Developmental Assessment Results

FALL SPRING



SOURCE: *Does Prekindergarten Experience Influence Children's Subsequent Educational Development? A Study of Students' Performances and Kindergarten Teachers' Perceptions*, DeSiato, 2003.

Twice as many graduates of full-day Pre-K programs enter school at the kindergarten level or above compared to children with no preschool experience. About 5% of full-day prekindergartners entered kindergarten with first-grade skills.

The Center for Early Care and Education, created in 1999, is a collaboration of Child Care, Inc., of New York City and the Albany-based Schuyler Center for Analysis and Advocacy. CECE sponsors Winning Beginning NY, a statewide campaign stressing the importance of quality early care and education to all New Yorkers—children, families, employers, and society at large. The campaign receives support from the Pew Charitable Trusts' initiative to advance high quality prekindergarten for the nation's 3- and 4-year-olds through objective, policy-focused research in conjunction with state public education campaigns and national outreach.



Center for Early Care and Education  
c/o Schuyler Center for Analysis and Advocacy  
150 State Street, 4th Floor  
Albany, NY 12207

Tel: 518-463-1896 ext. 23  
Fax: 518-463-3364

info@winningbeginning.org  
www.winningbeginning.org