

# background

Report # 86

Pre-Kindergarten Quality Factors

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## Pre-K In America

# An Emphasis On Quality Pre-K

## Few Studies Offer Insights Into How To Achieve It

**W**hile the look of public pre-kindergarten may vary across the United States, these programs share an important mandate: Nearly all of the state legislation supporting pre-kindergarten insists on high quality classroom experiences to help ensure that children enter school well prepared. Unfortunately, those who design these initiatives have little information to guide them.

Unlike the early elementary grades, few large-scale studies have examined the characteristics that predict classroom quality in public pre-kindergarten programs. Recent research, however, is providing some insight into this important question.

How program, teacher, child, and classroom characteristics of pre-kindergarten programs in six states predict the observed quality and teacher-child interactions was examined in studies that draw from data gathered in the 2005 National Center for Early Development and Learning (NCEDL) Multi-State Pre-Kindergarten Study.

The NCEDL study, the first major comprehensive study of pre-kindergarten across several states, collected data from 240 programs in Georgia, Illinois, Kentucky, Ohio, California, and New York. Each state has well-established, large-scale public pre-kindergarten initiatives.

Pennsylvania only recently joined the list of states that offer funding for public pre-kindergarten. The Education Accountability Block Grant, begun in fiscal 2004-2005, offers grants to the 501 public school districts in the state to support research-based programs de-

signed to boost student achievement, including pre-kindergarten.

In 2005, Pennsylvania public schools invested most of the more than \$200 million state allocation on early childhood education, spending more than \$2 of every \$3 to support kindergarten, pre-kindergarten, and smaller class sizes in grades K-third. Most invested in full-day kindergarten.

Only 40 districts spent their share specifically on pre-kindergarten programs.<sup>1</sup> But, as national trends suggest, investment in these early education programs is expected to grow in school districts across Pennsylvania.

### Measuring Quality

Recent studies use certain features of the Early Childhood Environmental Rating Scale-Revised (ECERS-R), the Classroom Assessment Scoring System (CLASS), and the Emerging Academics Snapshot to measure the warmth and appropriateness of teacher-child interac-

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*Features of pre-kindergarten programs vary from state to state. But the location of the program, the length of the school day, and the education of teachers have surfaced as common issues of importance.*

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tions, quality of language interactions, emotional and instructional climate of the classroom, quality of instruction, and other factors.

Researchers reported differences in state policies and regulations appear to account for many of the differences in the quality of the pre-kindergarten experience among programs. Other studies that have examined the impact of state-level factors on programs for young children suggest that what affects quality the most is the extent to which regulations, such as those that set teacher-child ratios or minimum teacher credentials, are enforced and the extent to which professional development support is provided to help programs meet those regulations.<sup>2</sup>

Certain characteristics of public pre-kindergarten programs were found to significantly relate to quality, while others were reported to have little impact.

Location of the program, child-staff

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ratios, and the length of day were found to have little or no affect on the quality indicators used by researchers. Little variation, however, was found in child-staff ratios across programs. Most were at favorable levels.

The quality of the pre-kindergarten experiences was found to be more influenced by characteristics of the teachers and children in the programs.

**Child Poverty A Factor**

Studies in elementary schools have reported that the characteristics of children, particularly poverty, can affect program quality and teacher behavior. More specifically, teachers tend to be less sensitive and instructional quality lower in classrooms with a high concentration of children who live in poverty.<sup>3</sup>

Similarly, studies drawn from the NCEDL data suggest the quality of public pre-kindergarten programs – as measured by ECERS-R and CLASS – tends to be lower when a majority of children are from families whose incomes fall below the poverty line. Researchers suggest that in those cases, teachers and staff, training, and other resources intended to help offset the effects of poverty may be insufficient.

**Teacher Characteristics Matter**

Certain characteristics of pre-kindergarten teachers, particularly their level of education, appear to matter when it comes to the quality of their classrooms.

A substantial number of pre-kindergarten teachers in the six NCEDL study states had bachelor's degrees, but no early childhood training. Studies report that several quality indicators are higher when teachers have some level of specialized early childhood training.

Researchers, for example, reported that teachers with a four-year degree and a teaching certificate in early child-

hood were rated on the ECERS-R as creating a more positive emotional climate and providing more activities than were teachers who had no formal training in early childhood. Although the effects were small, the observations suggest that specialized training may be needed in addition to a bachelor's degree for a teacher to be more effective in a pre-kindergarten classroom.

Teacher education has also been found to relate to the demographics of children in the class. Studies report that teachers who do not have a bachelor's degree tend to teach significantly more children and a higher proportion of children with low-income backgrounds than teachers with a bachelor's degree, who are more likely to teach children with higher learning skills.

Other teacher characteristics found to relate to pre-kindergarten classroom quality include the teacher's attitudes

and beliefs about interactions with children. These were measured with a questionnaire that discriminates between traditional or relatively adult-centered perspectives on interactions with children and more modern or progressive child-centered perspectives. Teachers with traditional or adult-centered perspectives were rated significantly lower on CLASS instructional and ECERS-R interaction scores.

Understanding how these and other classroom characteristics influence classroom quality is becoming increasingly important as the interest and investment in pre-kindergarten soars across the nation. From 1988 to 2003 alone, state funding for pre-kindergarten programs rose from \$200 million<sup>4</sup> to \$2.54 billion.<sup>5</sup>

**references**

*This report is based on the following publications:*

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*References noted in the text follow:*

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<sup>2</sup> Phillips, D.A., Howes, C., & Whitebook, M. (1992). The effects of regulation and auspice on child care quality. *American Journal of Community Psychology*, 20, 25-51.

<sup>3</sup> National Institute of Child Health and Human Development, Early Child Care Research Network (2003b). *A day in third grade: Observational descriptions of third grade classrooms and associations with teacher characteristics*. Manuscript submitted for publication.

<sup>4</sup> Schulman, K., Blank, H., & Ewen, D. (1999). *Seeds of Success: State Pre-kindergarten Initiatives, 1998-99*. Washington, DC: Children's Defense Fund.

<sup>5</sup> Barnett, W.S., Hustedt, J.T., Robin, K.B., & Schulman, K.L. (2004). *The State of Preschool: 2004 State Preschool Yearbook*. National Institute for Early Education Research: New Brunswick, NY. [www.nieer.org/yearbook/pdf/yearbook.pdf](http://www.nieer.org/yearbook/pdf/yearbook.pdf)