Purpose of the NC Pre-Kindergarten Evaluation Study

The purpose of the 2014-2015 NC Pre-Kindergarten (NC Pre-K) Evaluation study was to examine the characteristics and quality of the program and the outcomes for children during pre-k, along with comparisons to previous years. The primary research questions addressed by this evaluation included: 1) What were the outcomes of children attending the NC Pre-K Program and what factors were associated with better outcomes?, 2) What was the quality of the NC Pre-K classrooms attended by children and what factors were associated with better quality?, and 3) What were the key characteristics of the local NC Pre-K programs?

The study included a sample of 595 children who attended a random sample of 102 NC Pre-K classrooms during 2014–2015, including a subsample of 133 Spanish-speaking dual language learners (DLLs). To examine gains during the pre-k year, researchers conducted individual assessments of children’s skills in language, literacy, math, and general knowledge and gathered teacher ratings of behavior skills. For the DLL subsample, assessments were conducted in both English and Spanish to examine their progress when measured in both languages. Researchers also examined different aspects of classroom quality using a variety of measures. Children’s language proficiency and classroom quality were examined as potential moderators of their gains in skills. Information about program characteristics was obtained from the statewide administrative databases and surveys were gathered from teachers and parents. Teacher beliefs and teacher and classroom characteristics were examined as predictors of quality. In addition, changes across time in various program characteristics and levels of quality were examined for relevant data from the current and previous years of the program (2003–2004 to 2014–2015).

Results

CHILD OUTCOMES

Children in the NC Pre-K Program exhibited significant gains during their pre-k year across all domains of learning. Children made significant gains in scores during NC Pre-K in language and literacy skills, math skills, general knowledge, and behavior skills. Most of these were standardized measures, so that changes indicate that children progressed at an even greater rate during the time they participated in NC Pre-K than would be expected for normal developmental growth.

Children with different levels of language proficiency and DLLs showed different rates of gain during participation in NC Pre-K for a few skills, but similar rates of growth for most. DLLs made significant gains in all skills measured in English and many of the same skills measured in Spanish, except for most language and literacy skills. There also were differences in the rates of gain for some skills based on proficiency level and home language. These findings suggest that these differences across groups may warrant consideration of practices such as differentiated instructional approaches or the use of home language, in order to ensure that the NC Pre-K Program is meeting all children’s learning needs.
CLASSROOM QUALITY

The quality of NC Pre-K classrooms was in the medium to good range overall. For most aspects of quality that were measured, classrooms generally scored in the medium to high quality range, with few scoring in the low quality range. These included measures of global quality (ECERS-3), teacher-child instructional interactions (CLASS), language and literacy environment (ELLCO), and sensitivity of teacher-child interactions (CIS). The general pattern of scores as well as the average level of quality has remained fairly constant over time.

Stronger teacher beliefs in developmentally appropriate practices was the most consistent predictor of higher quality observed classroom practices. Teachers with stronger beliefs in developmentally appropriate practices had classrooms with better global quality classroom environments. No associations were found for other predictors of teacher qualifications, classroom characteristics, or work climate.

PROGRAM CHARACTERISTICS

Many of the characteristics of the NC Pre-K Program were consistent with good quality standards, as well as with program guidelines. In 2014–2015, the average NC Pre-K class included a total 16 children, with 13 (85%) funded by NC Pre-K. This number is actually below the program guidelines which specify a maximum class size of 18. The majority of the programs (76%) were at the highest, five-star licensing level, with another 19% at the four-star level. The average days of child attendance was 138 days (80% of the average days of operation and 77% of the intended instructional days).

One continuing trend in the NC Pre-K Program has been improvement in the levels of teacher education and credentials. There have been significant trends toward increasing teacher education and licensure levels, and a significant decreasing trend in those with no credential over the past 12 years, since NC Pre-K became a statewide program. In 2014–2015, almost all NC Pre-K lead teachers had at least a bachelor’s degree in both public school and private settings (>99%). Nearly all lead teachers in public schools and three-quarters in private settings had a B-K license, while relatively few teachers had no credential.

Overview of the NC Pre-Kindergarten Program

NC Pre-K is a state-funded educational program for eligible 4-year-olds, designed to enhance their school readiness skills. Initiated in 2001–2002, the statewide pre-k program has served over 321,000 children, with an average annual cost per child of approximately $5,000. Children are eligible for NC Pre-K primarily based on age (4 years old) and family income (up to 75% of state median income), although children with higher family incomes may be enrolled with at least one of the following risk factors: limited English proficiency, identified disability, chronic health condition, or educational need; or a parent actively serving in the military. NC Pre-K operates on a school day and school calendar basis for 6-1/2 hours/day and 180 days/year. Local sites are expected to meet a variety of program standards around curriculum, screening and assessment, training and education levels for teachers and administrators, class size, adult:child ratios, North Carolina child care licensing levels, and provision of other program services.

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This report is available at http://www.fpg.unc.edu/projects/evaluation-nc-pre-kindergarten-program