

Georgia's Pre-K Program: What the Research Tells Us

RESEARCH BRIEF
JANUARY 2021

In 2011, the Georgia General Assembly authorized a **longitudinal study** of Georgia's lottery-funded Pre-K Program to examine the links between participation in Georgia's Pre-K and children's school readiness skills, the quality of Georgia's Pre-K classrooms, and the short- and long-term outcomes of attending Georgia's Pre-K. The study follows a large sample of children over time, with the latest published results including data on performance through the third grade.

A separate analysis, conducted in 2017, **compared performance** on the third-grade Georgia Milestones End-of-Grade (EOG) assessments among children who had and had not participated in Georgia's Pre-K Program.

Taken together, these studies provide valuable insight into Georgia's Pre-K Program and the trajectory of children's learning experiences during early schooling. The brief that follows outlines key findings from these studies. **For full details on this body of work, visit decals.ga.gov/BftS/research.aspx**



HIGHLIGHTS

- Findings from the *longitudinal study* indicated that **students who attended Georgia's Pre-K demonstrated significant rates of growth**—above and beyond what is typical for children their age—**during their Pre-K and kindergarten years**, suggesting they entered kindergarten prepared to take advantage of subsequent learning opportunities. Students' observed rates of growth through first, second, and third grade were closer to what is typical for children in those grades.
- Researchers observed **differences in the quality of teacher-child interactions** in grades K-3 relative to Pre-K, with classroom quality highest in the Pre-K year and slightly lower through third grade. Students' observed rates of growth through first, second, and third grade were closer to what is typical for children in those grades.
- Findings from the *2017 comparison study* indicated that a group of **students who had attended Georgia's Pre-K significantly outperformed their peers** who had not attended Georgia's Pre-K **across all subject areas of the third-grade Georgia Milestones assessments**.
- Collectively, these findings underscore the **importance of alignment** from Pre-K through third grade and provide an opportunity for improved coordination to build on the foundation provided by children's early educational experiences.

Research on Georgia’s Pre-K helps stakeholders better understand children’s early educational experiences and how they build on one another, providing details on the patterns of children’s growth during Pre-K as well as kindergarten, first, second, and third grade. These findings span multiple studies and feature different types of measures, including nationally normed child-level assessments, Georgia-specific end-of-grade assessments, and measures of classroom quality.

LONGITUDINAL STUDY: PRE-K-3RD GRADE

Authorized by the Georgia Assembly in 2011 and begun in 2013-2014, this study follows an initial sample of 1,169 children who attended randomly selected Georgia’s Pre-K classrooms across the state, examining their academic skills as well as classroom quality from Pre-K through fifth grade. The most recently published results include findings through children’s third-grade year.

Children's Learning Over Time

Observed rates of growth varied over the five-year period.

Rates of growth were highest during the Pre-K and kindergarten years, suggesting that children were not only acquiring new skills but doing so at a rate greater than what would be expected for children their age.

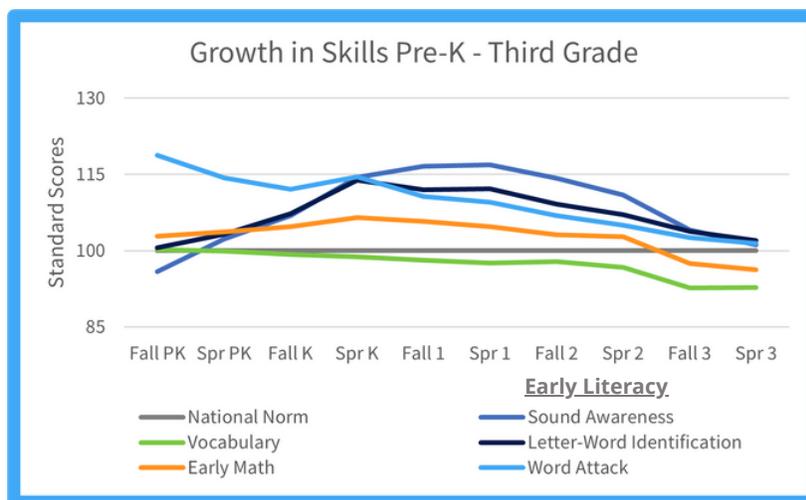
During their first- through third-grade years, observed rates of growth generally slowed, more in line with the expected rate in first grade and a slightly slower-than-expected rate in second and third.

Average standard scores (see box) were in a similar range—around the national mean—on most measures at the beginning of Pre-K and the end of third grade—but the pattern of growth across this time period varied.

In many important early academic areas, like early reading, math, and phonological awareness¹, rates of growth for children who attended Georgia's Pre-K were greater than the national average during those first two years, but then their rates of growth slowed so that by the end of third grade their skills were once again on par with the national average.

STANDARD SCORES EXPLAINED

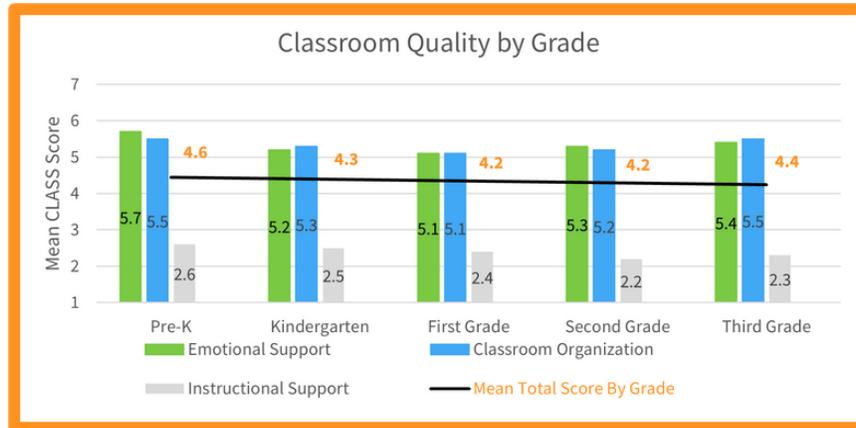
The analyses for the longitudinal study are based on standard scores on norm-referenced assessments. Based on testing with large numbers of children across the country, we expect the average child to score 100 at every age. Because standard scores take the child’s age into account, children who learn an average amount during a year will have the same score at the start and end of the year (a generally “flat” line). Children who learn more than the average child will show increases in standard scores over time, and children who learn less than the average child will show decreases in standard scores. Stable standard scores suggest an average amount of growth, not a lack of learning.



1. Phonological awareness is an important predictor of later reading skills and includes skills like rhyming and the ability to delete, substitute, and reverse sounds or part of words.

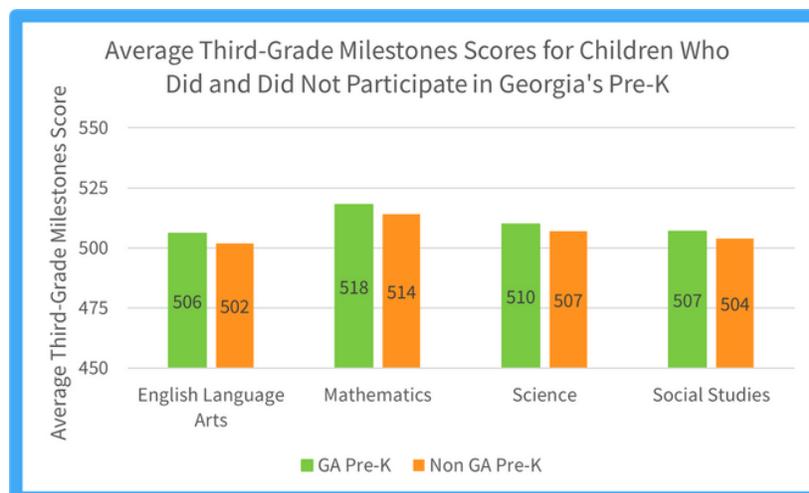
Classroom Quality

The quality of teacher-child instructional interactions, as measured by the Classroom Assessment Scoring System (CLASS), varied across domains and grades, with **higher scores observed during Pre-K than during subsequent years**. These differences were most pronounced for the Emotional Support domain, which measures aspects of the classroom like emotional connection, lack of anger or hostility, teacher sensitivity, and emphasis on students' interests. Furthermore, higher classroom quality was associated with better outcomes for some skills—those children who attended higher quality Pre-K classrooms made greater gains in calculation and vocabulary skills.



COMPARISON STUDY (2017): THIRD-GRADE ACHIEVEMENT FOR CHILDREN WHO PARTICIPATED IN GEORGIA'S PRE-K

While the longitudinal study follows a sample of children over time, a separate analysis, using data from the state's longitudinal data system, compared third-grade scores on the Georgia Milestones End-of-Grade (EOG) assessments for children who had and had not participated in Georgia's Pre-K. This 2017 analysis, which included all children in third grade in 2015-2016, matched those who had participated in Georgia's Pre-K with non-participants who were similar on key variables, such as free-or-reduced-lunch status and home language. **Children who had attended Georgia's Pre-K significantly outperformed their peers who had not participated across all subject areas—English Language Arts, Math, Science, and Social Studies.**



IMPLICATIONS

The existing research on Georgia's Pre-K suggests that **participation in the program helps set the stage for children's subsequent learning.** The observed differences between children's rates of growth and classroom quality during Pre-K and kindergarten relative to grades 1-3 highlight the importance of sustaining and building upon children's earliest school experiences in an aligned and coordinated fashion—across grade levels, learning settings, and curriculum and policy development.

Studies like those outlined above are crucial to stakeholders' understanding of children's experiences across the Pre-K-5th grade continuum. Ongoing research and data sharing—across early learning and elementary settings—can inform instruction and decision-making in this space.

