RESEARCH BRIEF

February 2025

NC Pre-K has School-Wide Benefits

Grace Hayward *Undergraduate Research Assistant*Duke University

Clara G. Muschkin, Ph.D. Duke University

Helen F. Ladd, Ph.D.Duke University

Maria Sauval, Ph.D. University of California, Irvine

BACKGROUND

This brief summarizes findings from "Pre-K enrollments and teaching environments in North Carolina elementary schools" in the journal, Children and Youth Services Review. The authors explore the long-term benefits of North Carolina's statewide pre-kindergarten program (NC Pre-K). The research focuses on how NC Pre-K improves teaching environments in the elementary schools where its graduates enroll.

The study analyzed data from 2004 to 2018, looking at the relationship between the increasing presence of NC Pre-K graduates in elementary schools and changes in teachers' perceptions of their teaching environments, as well as teacher and principal retention.

OVERVIEW

NC Pre-K, formerly known as More at Four, is a statewide, publicly funded program launched in 2001 with the goal of preparing students to be academically and socially ready for kindergarten. Today, NC Pre-K serves over 25,600 four-year-olds across the state each year, approximately one out of every four students who enter kindergarten in North Carolina's public elementary schools. NC PreK is a targeted program, with 80% of students coming from households at or below 75% of the state's median income. NC Pre-K also serves students who are English language learners, have an identified disability, chronic illness, or developmental need, have a parent in the military, or are homeless. NC Pre-K has been found to have a number of positive impacts on children (see Figure 1).

Increases in funding for NC Pre-K between 2004 to 2018, greatly increased the number of children who are able to participate in NC Pre-K. In 2004, fewer than 1% of incoming kindergarteners in North Carolina public elementary schools had attended NC Pre-K, by 2016, more than 25% of all students and 30% of economically disadvantaged students entering kindergarten had attended NC Pre-K. This study examines whether this significant increase in the percentage of former NC Pre-K students in elementary schools has impacted teachers' perceptions of their school environments.



For full text, study details and citations, see Muschkin C, Ladd H, Sauval M. Pre-K Enrollments and Teaching Environments in North Carolina Elementary Schools. Child Youth Serv Rev. 2024 Sep;164:107832. DOI: 10.1016/j.childyouth.2024.107832.

While many studies focus on the benefits of NC Pre-K for participating students or look at how elementary school environments foster or impede the persistence of pre-K participation effects, this study looks at how the expansion of NC Pre-K programs influence elementary school learning environments to the benefit of the entire school community.

Specifically, this study focused on how increasing participation rates in NC PreK may improve the learning and teaching environment in elementary schools. More positive teaching environments might then have positive effects on teacher and principal retention. These changes, in turn, have potential to create longer-term academic benefits for all students.

To measure teachers' views on their work environment, the authors used the NC Teachers Working Condition Survey administered by DPI and used administrative records to track changes in teacher and principal retention and turnover.

DEFINITIONS

NC Pre-K:

A free, high quality public preschool program in North Carolina designed to support four-year-olds from low-income families (NC Pre-K was formerly known as More at Four).

Teacher satisfaction:

How happy and content teachers are with their jobs, work environment, and support from colleagues and administrators.

Teacher retention:

The ability of a school to keep its teachers over time. Higher retention means teachers stay at the same school for many years, reducing turnover.

Principal retention:

The ability of a school to keep its principals in the position for several years rather than leaving or changing schools frequently.

Figure 1. Impacts of Funding for NC Pre-K Program on the Education System



Impacts of Funding for NC Pre-K Program on the Education System



Improved Test Scores

NC Pre-K has long-term positive effects on student achievement for all students, leading to better performance over time.

Reduced Special Education Placements



Early intervention through NC Pre-K helps reduce the need for special education services, as children enter school better prepared.



Increased Retention Rates

Higher levels of NC Pre-K funding are associated with students being more likely to stay in school and progress through grade levels, reducing dropout rates.

Long-Term Student Success

Higher levels of NC Pre-K funding are associated with greater academic success for all students, including improved outcomes in later years.





Positive Financial Impact

Investments in NC Pre-K contribute to better student outcomes, leading to long-term cost savings for the education system and society.



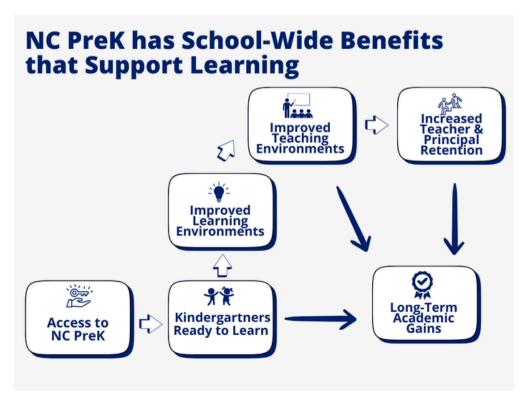
FINDINGS

Overall, this study found that as the percentage of NC Pre-K graduates in individual elementary schools increases, teachers report better working conditions and reduced teacher and principal turnover. These changes contribute to greater stability within elementary schools.

This study highlights the far-reaching benefits of NC Pre-K, not only for the children who attend, but also for the broader school community. NC Pre-K prepares students academically and socially for school, which eases the transition to elementary school kindergarten for students and ensures students are ready to participate and learn when they enter kindergarten. Increasing numbers of former NC Pre-K students in elementary schools helps to create a more positive teaching environment in the schools they enter. When teachers have larger numbers of students ready to learn, teachers have a more positive view of their work environment. This is because teachers are working with students who are better prepared, allowing them more time for collaboration and planning. As a result, teachers feel more supported in their schools, contributing to greater job satisfaction and retention.

TAKEAWAYS

- **1** NC Pre-K has long term benefits for all students (See Figure 1).
- The increase in NC Pre-K funding has allowed for greater numbers of children to participate, which in turn positively benefits elementary school at the classroom, school, and system level.
- As the percentage of former NC Pre-K students increases in an elementary school, teacher working conditions improve, and teacher and principal retention increases.



These results emphasize that expanding access to high-quality pre-K programs like NC Pre-K can have a ripple effect across the education system. Not only do these programs enhance student outcomes, but they also support teachers, principals, and the overall school environment, leading to a more effective and sustainable education system. Policymakers should consider these broader benefits when making decisions about the expansion of early childhood education programs, as the positive impact on both students and educators can lead to long-term improvements in educational quality and equity.