

POLICY FORUM: INVITED COMMENTARIES & SIDEBARS

Promoting Third Grade Reading Proficiency in North Carolina: Policy Considerations

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North Carolina's NC Pre-K program currently meets 9 of the 10 benchmarks for high-quality preschools established by the National Institute for Early Education Research. Longitudinal studies consistently show improvements in students' third grade math and reading proficiency and reductions in special education placement and grade retention. Increasing investment in NC Pre-K will expand opportunities for North Carolina's children to attain school readiness, third grade reading proficiency, and longer-term academic and social outcomes.

Introduction

High-quality Pre-K is a foundation for third grade reading proficiency, a key predictor of long-term academic and life success. Mirroring the federal Healthy People program administered by the U.S. Department of Health and Human Services (DHHS), North Carolina's DHHS has published Healthy North Carolina (HNC) objectives every ten years, starting in 1990. HNC 2030 goals include 21 metrics to guide statewide initiatives for enhancing health and wellness, including the goal of improving third grade reading proficiency.¹

According to experts, reading proficiency includes decoding, fluency, comprehension, vocabulary, critical thinking, and writing. Decoding provides the foundation for word recognition; fluency enables automaticity and prosody; comprehension facilitates meaning-making; vocabulary supports both understanding and expression; critical thinking allows for higher-order analysis; and writing integrates phonics, comprehension, and expressive language. These components operate synergistically: strong vocabulary enhances comprehension, comprehension fuels critical thinking, and writing consolidates and deepens learning.²

Third grade reading proficiency is widely recognized as a strong predictor of later academic success, high school completion, and long-term socio-economic outcomes.³ Prior to third grade, children are primarily engaged in *learning to read*, focusing on decoding, sight word recognition, and fluency.

In fourth grade, the emphasis shifts to *reading to learn*, where prior literacy skills become the foundation for mastering increasingly complex content across language arts, mathematics, science, and social studies.⁴

Research shows that children who do not achieve reading proficiency by third grade have a heightened risk of experiencing cumulative learning gaps, diminished self-efficacy, and not graduating high school. These gaps are accentuated for children from low-income families, as systemic inequities create additional obstacles to their academic success.⁵⁻⁷ The trajectory toward third grade reading proficiency is shaped by the cognitive, linguistic, and socio-emotional foundations established during the earliest years of life, including in preschool.^{8,9}

The Foundational Role of Preschool in Building Third Grade Reading Proficiency

Between birth and age five, children experience unparalleled neural growth, establishing the architecture that supports future learning. High-quality early education programs are critical for fostering oral language development through rich, reciprocal conversations with adults, building vocabulary and syntactic knowledge, and cultivating phonological awareness through songs, rhymes, and wordplay.¹⁰ Print awareness emerges as children routinely engage with books and learn that print carries meaning and that letters correspond to sounds. Early learning experiences that expose children to concepts related to nature, community, and culture equip them with the cognitive scaffolding essential for later reading comprehension.¹¹

Research shows that four-year-olds who attend high-quality preschool programs demonstrate larger vocabularies and stronger letter-sound knowledge, classroom engagement, and social-emotional skills, all of which are predictive of improved school readiness and later academic achievement. Over time, these strong early foundations contribute to third grade reading proficiency, less reliance on remedial support, narrower opportunity gaps, and improved pathways to high school graduation and higher education. These benefits extend beyond academics, as higher levels of educational attainment are closely linked to economic stability, stronger participation in the workforce, and enhanced life outcomes.^{6,12}

Benchmarks of High-Quality Preschool Programs

High-quality preschool or Pre-K environments are intentionally designed to foster the cognitive, linguistic, and social-emotional foundations that support long-term academic achievement. The National Institute for Early Education Research (NIEER) established 10 benchmarks to support the development and expansion of states' preschool programs¹³:

1. *Early learning and development standards (ELDS).* States must establish comprehensive learning standards spanning developmental domains, including physical and social-emotional development, learning, general knowledge, language, and cognition. These standards should be preschool-specific and vertically aligned across age groups. They should be culturally sensitive, and supported by professional development resources.

2. *Curriculum supports.* States must guide the adoption of a comprehensive curriculum spanning language, literacy, mathematics, and social-emotional learning. There should be approval processes and support for the implementation of curricula through training and technical assistance.

3. *Teacher degree.* Research demonstrates that qualified teachers foster more effective learning environments for children. States must require lead teachers to have bachelor's degrees including training in early childhood education. Adequate teacher compensation is key to attracting and retaining strong teachers.

4. *Teacher specialized training.* To align with the ELDS, states must require that teachers have specialized training in early childhood education and/or development. State institutions of higher education should examine teacher education programs to strengthen this alignment.

5. *Assistant teacher degree.* States must require that assistant teachers hold a Child Development Associate (CDA) or equivalent preparation to ensure minimum standards of instructional quality.

6. *Staff professional development.* States should require that all teachers engage in a minimum of 15 hours of annual in-service training. Teachers should have formal annual professional development plans, including in-service training and additional coaching or classroom-embedded support.

7 & 8. *Class size and staff-child ratio.* States should require that the maximum class size should not exceed 20 children, with the staff to child ratio capped at 1:10. Smaller class sizes and lower ratios enable individualized attention and a better understanding of children's needs.

9. *Screenings and referrals.* States must ensure that children receive vision, hearing, and at least one additional health screening with appropriate referrals as part of securing children's overall physical and mental well-being.

10. *Continuous Quality Improvement System (CQIS).* States must initiate processes of systematic data collection at the state and program level to guide implementation and improvement of the preschool program. Such systems, rather than simply ensuring compliance, should focus on ongoing problem-solving and refinement of the program.¹³

North Carolina's Pre-K program

NC Pre-K, a state-funded program, aims to provide a solid foundation for children's learning and development prior to their entry into kindergarten. Established in 2001, the program enrolls children from families with incomes at or below 75% of the state median income or with a disability or developmental delay. The program had the following features in the 2023–2024 academic year, the most recent year for which data are available:

- The program is available in all counties across the state.
- A total of 27,304 children were enrolled in NC Pre-K.
- Funding for the program included state funds of \$115,259,501, Temporary Assistance for Needy Families (TANF) funds of \$66,776,585, and \$12,281,934 in federal recovery funds, reflecting an increase of 14% from the previous year.
- Per child spending was at \$7,117.
- The state met 9 of 10 quality standards benchmarks.
- The state received a three-year Preschool Development Grant Birth to Five renewal for \$9 million annually.¹⁴

About 57% of all eligible children in North Carolina are enrolled in NC Pre-K.¹⁵ In 2022–2023, NC Pre-K was implemented through a mixed-delivery model, with 54% of public school sites, 33% of private centers, and 13% of Head Start programs implementing the program statewide.¹⁶

Positive Effects of NC Pre-K on Third Grade Reading

A few studies have documented the longer-term academic effects of NC Pre-K on end-of-grade (EOG) outcomes of participants and found positive gains in third grade academic outcomes. Peisner-Feinberg and Schaaf (2010) found that lower-income children who attended NC Pre-K (then called More at Four) outperformed their peers who did not attend the program. They write,

These findings suggest that for poor children (those who qualified for free or reduced-price lunch), participating in the More at Four Program during Pre-K had longer-term benefits in terms of math and reading skills at the end of third grade. These findings were consistent across all EOG outcomes, indicating a broad positive effect of participation in the More at Four Program. These findings are of note, given that poor children represent the majority (90%) served by the More at Four Program... In sum, these findings provide evidence that the More at Four Program is helping to lessen the achievement gap

for poor children in both math and reading performance, and that such early Pre-K experiences can have a lasting effect into the elementary school years.¹⁷

Dodge, Bai, Ladd, and Muschkin (2017) evaluated the impact of More at Four on student outcomes in elementary school by correlating the level of funding at the county-level on students' end-of grade standardized test scores. They write, "A larger allocation was associated with better, end-of-grade (EOG) standardized test scores in reading and math and reductions in the probability of grade retention and placement into special education services."¹⁸

Bai, Ladd, Muschkin and Dodge (2020) summarized the impact of Pre-K funding levels across counties on reading and math scores, reductions in special education placement, and grade retention across a sample of nearly 900,000 students. Students were matched to funding levels provided to their home county in their early childhood years and then followed through eighth grade. They write, "These impacts do not fade out and seem instead to grow (for More at Four) as students advance through middle school. Students from economically disadvantaged backgrounds experience particularly large benefits from the More at Four Program."¹⁹

These longitudinal evaluations consistently showed gains in third grade attainment and imply that the effects do not fade out in higher grades. Economically disadvantaged students benefit from being enrolled in NC Pre-K in their early years, potentially reducing opportunity and attainment gaps for these students throughout their schooling.

Conclusion

Third grade reading proficiency serves as a milestone that shapes educational trajectories, the foundations for which are established well before children enter kindergarten. NC Pre-K is a valuable program that has changed the educational trajectories of children from low-income communities throughout the state. Research consistently shows that NC Pre-K participants outperform their non-participating peers on third grade assessments, with benefits that persist and even strengthen through middle school. These gains extend beyond test scores to include reduced special education placements and lower rates of grade retention—outcomes that reflect genuine improvements in children's developmental trajectories. For the 27,304 children currently enrolled, NC Pre-K is fulfilling its promise of narrowing opportunity gaps and creating more equitable pathways to academic achievement.

However, about 43% of children do not have access to NC Pre-K due to funding constraints that hamper the expansion of this valuable program within counties. While the state aims to enroll 75% of eligible four-year-olds

in NC Pre-K, only 37 out of 100 counties are meeting this enrollment goal.¹⁵ Recent reports indicate that NC Pre-K may be shrinking in some counties due to funding and staffing constraints.¹⁶ Policy measures that can help NC Pre-K reach its enrollment goals include:

- Increasing the subsidy rate to encourage more Pre-K programs in counties to stay economically viable and expand over time.
- Increasing wages for preschool teachers to slow the movement to the K-12 system, which offers higher pay and benefits.
- Providing incentives for Pre-K providers to offer or expand programs in underserved areas of the state.

The return on investment in early childhood education is well-documented; every dollar spent yields benefits in educational attainment, workforce participation, and reduced need for remedial services.¹² As North Carolina pursues its Healthy North Carolina 2030 objectives, expanding access to high-quality Pre-K to improve third grade reading proficiency must remain a policy priority.

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