

What Will It Take to Help All North Carolina Third Graders Read to Achieve?



Recommendations for Improving Early Literacy Learning
Across the State

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Background

The North Carolina Read to Achieve program, established by the legislature in 2012, is an ambitious investment in the early literacy achievement of children across the state. The goal of the policy is to ensure that every child reaches grade-level proficiency in reading by the end of third grade.

The Read to Achieve legislation places many demands on North Carolina schools and local education agencies (LEAs), either explicitly (in the requirements of the policy) or implicitly (in the form of resources and expertise that are necessary for explicit requirements to be fulfilled). There is increasing concern that the capacity to successfully implement the requirements of the policy—in every classroom, for every child, every day—is not equitably distributed across the hundreds of LEAs and charter schools in our state. There is also concern that the policy’s emphasis on screening, assessment, summer intervention, and student retention does not adequately address the issues that are preventing children from reaching proficiency in reading. A recent evaluation found that the initial cohorts of third graders affected by the legislation did not benefit in reading achievement.¹ Moreover, passing rates on the third and fourth grade End-of-Grade (EOG) English Language Arts/Reading tests have not substantially improved since the start of the Read to Achieve initiative.

This report briefly describes what it might take for the goals of the policy to be fully met across North Carolina. As detailed below, the short answer to this question is that it will take a much more intensive focus on teacher professional development, allocation of resources, and increased access to high-quality school-day and supplemental instruction for the state’s most vulnerable readers.

The guidance provided in this report is based on recent research in early literacy instruction, reading comprehension, teacher development, educational assessment, and implementation of multi-tiered academic interventions. The goal of this report is to provide theoretically and empirically driven recommendations so that future versions of Read to Achieve or similar legislative actions can proactively address the challenges that have prevented the current legislation from making a stronger impact on reading proficiency in North Carolina.

Realizing the Read to Achieve goals will take an intensive focus on teacher professional development, allocation of resources, and increased access to high-quality school-day and supplemental instructional.

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Effective Core Classroom Instruction

By emphasizing intervention supports for retained or nearly retained students, the Read to Achieve initiative may inadvertently underemphasize the importance of ensuring that every child in every classroom receives high-quality instruction in literacy, using evidence-based methods that can reduce children’s vulnerability to reading difficulties. No amount of screening or supplemental instruction can replace the need for excellent core instruction, implemented effectively and consistently by all K-3 teachers and supported by highly knowledgeable administrators. The empirical research provides clear directions for the instructional practices that support early reading development in foundational code-based skills² and in comprehension.³ The challenge is to ensure that these practices are implemented effectively across the entire state, particularly in schools and districts that have historically had a harder time attracting and retaining qualified educators.

Improving the quality of evidence-based reading instruction in the early years will be essential for the policy to meet its goals. This will require a systematic and coherent state-wide effort to improve professional learning opportunities to ensure that early reading expertise is widely available in every school. This includes ensuring that all educator preparation programs in the state are meeting their commitments to cultivate teacher expertise. Even with excellent initial preparation, educators and school leaders will need ongoing sustained professional learning opportunities to

¹Weiss, S., Stallings, D.T., Porter, S. (October 2018). *Is Read to Achieve making the grade?: An assessment of North Carolina’s elementary reading proficiency initiative*. North Carolina State University College of Education. Available at: <https://www.fi.ncsu.edu/projects/rta/>

²Foorman, B., Beyer, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://whatworks.ed.gov>.

³Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from whatworks.ed.gov/publications/practiceguides.

strengthen expertise in effective classroom literacy instruction and in implementation of intervention practices.

Efforts to promote teacher capacity must be grounded in the evidence base for effective professional development. A recent review of this literature identified important elements that must be in place to foster teacher learning.⁴ Effective professional development allows for teacher collaboration, focuses on the content that is being taught, includes opportunities to practice the teaching strategies being learned, includes models of expert practice along with coaching and feedback, and importantly, is long enough for all these elements to be effectively implemented.

Realistic Expectations for Summer Reading Camps

Summer reading camp is widely regarded as one of the most promising aspects of the Read to Achieve legislation. Given concerns about summer reading loss and the possible benefits of adding additional instructional time to the year for the state's most vulnerable readers, the excitement around the summer camps is understandable. But this excitement should be tempered. Supplemental summer instruction is an important learning opportunity, but it is not sufficient as the main intervention support for third grade readers at risk of being retained. A recent evaluation of Read to Achieve found no differences between children who attended camp and those who were eligible but did not attend.⁵ Historical trends since 2014 show that just under 30 percent of camp attendees achieve proficiency and avoid retention during camp. These findings have prompted many conversations about how to improve the efficacy of these camps. Although improvements are possible and warranted, there is a risk that focusing on optimizing the effectiveness of summer camps will allow schools, districts, and state leaders to tinker around the edges of the problem without addressing the more pressing systemic issues affecting the learning opportunities provided during the school day.

Summer reading intervention can do only so much. When implemented at their minimum legislated level, summer camps amount to around a 30 percent increase in instructional time for those who attend.⁶ This sounds like a lot of time, but the potential of the summer intervention has to be examined in the context of what is known about what it takes to produce meaningful growth among elementary children on standardized measures of reading. Using one commonly accepted estimate of expected yearly growth of children in third grade on nationally normed measures of reading achievement,⁷ we can estimate that summer camp will improve reading scores by 0.20 standard deviations, on average. An effect of this size amounts to about two scale score points on the third grade EOG.⁸ These small estimates of summer camp impact, although hypothetical, align closely with previous literature on the impact of summer reading programs⁹ and with typical achievement gains observed in rigorous studies of reading comprehension instruction.¹⁰ In other words, it is theoretically implausible to expect a 72-hour summer camp to produce drastic changes in the percentage of children who reach the EOG proficiency level. Only children who begin the camp within a few points of the proficiency cut-off are likely to reach this goal.

These cautions do not mean that summer camps cannot be a useful intervention strategy. Young readers can definitely improve during summer reading camps. But they are more likely to grow in specific skill areas than in broad reading comprehension proficiency, and only with highly intensive instruction. The metrics for judging the success of reading camps should be more granular. They should include attention to readers' growth in carefully selected skill areas. This will require using and reporting diagnostic assessment data beyond EOG proficiency attainment.

⁴ Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.

Available at: <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>

⁵ Weiss, Stallings, & Porter (2018)

⁶ 72 hours as a percentage of the total reading/literacy time in a school year (estimated conservatively at 14,400 minutes, or 90 minutes x 160 days)

⁷ Lipsey, M.W., Puzio, K., Yun, C., Hebert, M.A., Steinka-Fry, K., Cole, M.W., Roberts, M., Anthony, K.S., Busick, M.D. (2012). *Translating the statistical representation of the effects of education interventions into more readily interpretable forms*. (NCSE 2013-3000). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education. This report is available on the IES website at <http://ies.ed.gov/ncser/>.

⁸ Lipsey et al. estimate that typical growth in reading on seven nationally normed tests, on average, across the 3rd grade year is 0.60 standard deviations. If summer camp is 0.3 school years, then its average effect would be about 0.20. The standard deviation for the 3rd grade EOG in 2018 was 10.7. An ES of 0.20 with respect to this SD would be around 2 raw scale score points (10.7 x .20). This is a rough back-of-the-envelope calculation. Evaluations of the actual score gains associated with reading camp attendance can yield more precise estimates. The point here is that the expectations placed on the summer reading camp are unreasonable given what is already known about reading comprehension development and assessment.

⁹ Kim, J.S., & Quinn, D.M. (2013). The effects of summer reading on low-income children's literacy achievement from kindergarten to grade 8: A meta-analysis of classroom and home interventions. *Review of Educational Research*, 83(3), 386-431.

¹⁰ Shanahan et al. (2010).

Availability of Coherent and Comprehensive Interventions during the School Day

Readers who do not meet grade-level expectations are a heterogeneous group with difficulties in many different areas of reading.¹¹ Districts and schools will not be able to properly support the reading development of these students unless they have access to evidence-based supplemental interventions addressing all the areas in which children might have difficulties. Every school in the state will need a robust menu of interventions covering foundational reading skills related to the alphabetic code and skills related to language and text comprehension. Both of these clusters of skills are important for reading development in early elementary grades.¹² Schools will also need the materials and texts required for integrous implementation of the interventions.

The literature on effective instruction within the Response to Intervention (RTI) or Multi-tiered systems of support (MTSS) approach makes it clear that some students will need intensive instruction beyond their core classroom time. This instruction should be provided in a tiered framework, during protected blocks of time in the school-day schedule, and should supplement, not replace, their core (Tier 1) literacy instruction. Tier 2 instruction should focus on a few carefully identified skills, taught three to five times a week for at least 20-40 minutes. When students do not respond to this level of support, they may need Tier 3 instruction. Tier 3 supports are intensified by reducing the number of focus skills, reducing the group size, and increasing the amount of supplemental instructional time.¹³

To fulfill the promise of intervention, districts will need a coherent strategy for matching interventions to readers within a tiered intervention framework. A casual review of the interventions reported by districts in recent years (required as part of the legislation) reveals a wide array of intervention approaches. The reports list commercial products, websites, general teaching strategies, small-group reading, computerized interventions, after-school tutoring, etc. It makes sense that a variety of intervention supports are in use across the state. However, districts will need support to ensure that their intervention strategies are part of a coherent framework that is implemented consistently and systematically by educators with the appropriate expertise.

The difficulties associated with effectively implementing coherently designed tiered intervention should not be underestimated. Adoption of a tiered intervention structure that includes general guidelines and lists of possible interventions does not guarantee that the interventions will be implemented coherently and consistently or that they will result in positive student outcomes.¹⁴ Effective implementation of intervention services requires strong campus leadership, teacher collaboration, schedules that support adequate time for intervention, and expertise in data use to ensure proper alignment of interventions to students' needs.¹⁵

Increased Access to Intensive Supplemental Programs Outside of the School Day

Summer camps should be seen as one part of a larger system of school-day and beyond-the-school-day supplemental instruction, made available to all eligible students in grades K-3 (and beyond). Expanding access and opportunity for eligible students is an important area for improvement. In 2017, only 59 percent of eligible students attended summer camps. Increasing camp enrollment will not be easy. It will require gaining a fuller understanding of why parents choose not to enroll their children in camp so that the specific challenges/reasons can be systematically addressed by LEAs. If summer is found to be a difficult time for families, flexibility should be offered to allow camp-like supplemental programs to be held after school as well.

Additionally, the state should take measures to ensure that high-quality camps (and other out-of-school options) are available in every district, particularly those with limited capacity to hire exemplary teachers and to design and implement evidence-based practices consistently. The supplemental instruction that is offered should be built on a comprehensive and theoretically valid model of the component skills needed for reading comprehension

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¹¹ Wixson, K.K. (2017). An interactive view of reading comprehension. Implications for assessment. *Language, Speech, and Hearing Services in Schools*, 48(77-83).

¹² Kendeou, P., van den Broek, P., White, M.J., & Lynch, J.S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology*, 101(4), 765-778.

¹³ Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., and Tilly, W. D. (2008). *Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide*. (NCEE 2009-4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/www/publications/practiceguides/>.

¹⁴ Balu, R., Zhu, P., Doolittle, F., Schiller, E., Jenkins, J., & Gersten, R. (2015). *Evaluation of Response to Intervention practices for elementary school reading* (NCEE 2016-4000). Washington, DC: National Center for Education

¹⁵ Coyne, M.D., Oldham, A. Leonard, K., Burns, D., & Gage, N. (2016). Delving into the details: Implementing multitiered K-3 reading supports in high-poverty schools. *Challenges to implementing effective reading intervention in schools: New directions for child and adolescent development*, 154, 67-85.

development. They should focus on helping students develop important language and literacy skills in a logical sequence, with enough practice to ensure mastery. They should also be engaging so that children are motivated to accelerate their literacy learning.

Without removing local control of the summer reading camps, the state should consider curating a resource bank for LEAs that contains a menu of fully developed and vetted camp protocols, along with access to all the materials and professional development needed for effective implementation. LEAs should be empowered to implement programs of their choosing, keeping within the legislated guidelines for program quality. However, districts that do not have the necessary capacity should not be required to invent a coherent camp experience from scratch.

Specialized Teacher Expertise in Reading Intervention

The Read to Achieve legislation stipulates that teachers who work with non-proficient students must be selected based on demonstrated outcomes in reading proficiency. This applies to teachers in summer reading camps and third/fourth grade accelerated and transitional classes. This requirement assumes that all LEAs and charter schools have sufficient concentrations of teachers who meet this criterion, which may not be the case. Even in districts where there are large numbers of teachers with demonstrated success in reading outcomes, teachers selected for these roles will need to have specialized expertise in evidence-based intervention methods.

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Professional standards for literacy specialists call for expertise in selecting, adapting, and implementing interventions that are explicit and carefully scaffolded for readers.¹⁶ Teachers in the reading camps are being asked to take on these complex practices. To do so, they will need specialized knowledge of language and literacy development and opportunities to build this knowledge through intensive professional development, advanced university coursework, and coaching.

Teachers assigned to accelerated/transitional classrooms are expected to fulfill an even more daunting professional role. They are tasked with leading hyper-differentiated, multi-grade classrooms. This is an instructional arrangement for which few teachers are adequately prepared. It is not entirely clear if these arrangements are beneficial for children. Even the most skilled teachers will need specialized training in how to organize instruction in this context. Many of the most qualified teachers may not want to take on this role without proper supports and incentives. The challenges associated with these complex instructional arrangements, for both students and teachers, should be examined more fully in order to understand how and if they impact student achievement.

Assessment Literacy for Educators

In addition to professional learning opportunities related to evidence-based early literacy instruction, successful implementation of the Read to Achieve policy will require a more concentrated effort on building assessment expertise across the state. The policy demands effective use of formative and diagnostic assessment data to precisely pinpoint students' difficulties and to make sound instructional decisions. The expertise needed for using data in this way is often called assessment literacy.¹⁷ The need for robust assessment literacy among teachers, school leaders, and district personnel is distributed across multiple aspects of the policy, including the comprehensive reading plan, the screening and assessment mandates across grades K-3, the design of the reading camps, and the provision of supplemental instruction for retained students.

For example, consider the scenario faced by summer camp teachers who, at best, are provided with their students' end-of-year mClass and EOG reports. Neither of these data sources provides the level of specificity needed to pinpoint the source of students' reading difficulties. Students reading at a non-proficient level according to either measure might have word reading difficulties, language comprehension difficulties, or both.¹⁸ If they have word reading difficulties, they might lack the level of phonemic mastery required for efficient word learning, they might have gaps in their

¹⁶ International Literacy Association. (2018). *Standards for the preparation of literacy professionals 2017*. Newark, DE: International Literacy Association.

¹⁷ Xu, Y., & Brown, G.T.L. (2016). Teacher assessment literacy in practice: A reconceptualization. *Teaching and Teacher Education*, 58, 149-162.

¹⁸ Spear-Swerling, L. (2016). Common types of reading problems and how to help children who have them. *The Reading Teacher*, 69(5), 513-522.

knowledge of specific letter-sound patterns, or they might need help with more complex multisyllabic words. If they have a specific comprehension difficulty, they might need support with vocabulary, making causal inferences across non-adjacent ideas in the text, monitoring and fixing-up their understanding, or help with text structure.¹⁹ Chances are most students in these contexts will need to build new content knowledge so that they can understand a more versatile range of grade-level texts. These detailed areas of difficulty are not always evident in the typical assessment profiles that teachers have access to. To properly intervene, teachers will need to leverage their assessment expertise to gather additional diagnostic assessment data to inform their instruction.

It is not easy to administer, score, interpret, and appropriately act on assessment data. According to the literature, educators vary tremendously in their knowledge and skills related to assessment. The good news is that assessment literacy can be developed through high-quality professional development.²⁰ As detailed above, effective professional development in this area will need to be intensive, long-term, and applicable to teachers' daily practices.

A Consistent Definition of Reading Comprehension Proficiency

The requirements of the policy center on the state standardized test of reading comprehension administered at the end of third grade (the EOG). Reading proficiency in this policy is defined as reaching or exceeding the scale score cut-off for Level 3 on the EOG. This is a clear-cut definition that seems reasonable given the goals and structure of the policy.

However, the policy also allows for the use of a wide range of alternative assessments (e.g., Scholastic Reading Inventory, Iowa Test of Basic Skills, i-Station, and i-Ready), reading portfolios, the Read to Achieve test, and reaching a designated instructional reading level on the mClass assessment. Although these options provide much-needed local control and flexibility, they complicate the potential of the policy to meet its aim of ensuring that all third graders are proficient readers.

It is widely documented that reading comprehension is a multidimensional construct that is challenging to measure. Different assessments reflect different conceptualizations of reading comprehension.²¹ They also differ in their predictive relationships with other language and literacy skills that are measured for formative or diagnostic purposes.²² For example, some standardized reading comprehension measures are more highly correlated with word reading, while others are more highly correlated with vocabulary and higher-level language skills.

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The N.C. EOG is designed to assess specific grade-level standards. Attainment of Level 3 on the EOG is defined as having sufficient command of a subset of tested standards. There is no reason to assume that students who meet the state-approved cut-score for the alternative assessments have gained sufficient command of the N.C. Standard Course of Study in English language arts. This is not a critique of the rigor or validity of the alternative assessments. Nor is it an endorsement of the EOG as the best way to measure reading proficiency. Regardless of their quality, the alternative assessments are not guaranteed to be standards-aligned, and therefore are not measuring the same construct as the EOG.

The lack of a consistent definition of reading proficiency has broad implications across several aspects of the policy. Most obviously, with so many pathways to grade-level proficiency, the policy risks failing to achieve its central mission of reducing social promotion. Recent analyses suggest that students promoted based on performance on local alternative assessments may not be performing in fourth grade as well as those promoted by other means.²³ The inconsistency of these assessments also affects the quality of the intervention supports that a district might choose to implement. If a school or LEA is monitoring student progress on an alternative measure to make instructional decisions, they run the risk of implementing instruction that moves performance on that measure in the short term but does not effectively accelerate students' attainment of college and career readiness in the long term.

¹⁹ Oakhill, J., Cain, K., & Elbro, C. (2015). *Understanding and teaching reading comprehension: A handbook*. Routledge: New York, NY.

²⁰ For example, see: DeLuca, C., Klingner, D., Pyper, J., & Woods, J. (2015). Instructional rounds as a professional learning model for systemic implementation of assessment for learning. *Assessment in Education: Principles, Policy & Practice*, 22(1), 122-139.

²¹ Fletcher, J.M. (2006). Measuring reading comprehension. *Scientific Studies of Reading*, 10(3), 323-330.

²² Cutting, L.E., & Scarborough, H.S. (2006). Prediction of reading comprehension: Relative contributions of word recognition, language proficiency, and other cognitive skills can depend on how comprehension is measured. *Scientific Studies of Reading*, 10(3), 277-299.

²³ Weiss, S., Stallings, D.T., Porter, S. (November 2018). *Read to Achieve: Where should we go from here? Additional outcomes, analyses, and suggested next steps for the evaluation of North Carolina's Read to Achieve initiative*. North Carolina State University College of Education. Available at: <https://www.fi.ncsu.edu/projects/rtai/>

The policy demands effective use of formative and diagnostic assessment data to precisely pinpoint students' difficulties and to make sound instructional decisions.

Summary

Lawmakers have made early literacy achievement a top priority with the establishment of the Read to Achieve program. Educational research can provide helpful suggestions for what it will take to achieve the goals of the legislation. These suggestions will help re-focus the policy on the important goal of ensuring that the proper expertise and resources are in place to support literacy development in every school and LEA, rather than on testing and promotion requirements.

As detailed above, the policy can be improved by re-configuring the intervention supports that are offered, not just for retained students, but for all vulnerable readers in grades K-3. This will require developing more coherent school-day intervention strategies, ensuring that every LEA has access to materials, training, and resources necessary to intervene in evidence-based ways, and increasing access to intensive out-of-school programs, including summer camps. Summer reading camps should be re-designed to reflect more realistic expectations and to offer more intensively diagnostic instruction in specific areas that can, over the long term, improve overall reading performance.

In addition, the policy's goals depend on the availability of high-quality core classroom literacy instruction for every child. This will require an unprecedented state-wide effort to support the professional development of teachers and school leaders through evidence-based methods that promote deep changes to educators' knowledge and practices, including coaching and collaborative, job-embedded training. Educators will need learning opportunities to enhance their implementation of evidence-based K-3 literacy instruction. They will also need to hone their assessment expertise in order to effectively use the diagnostic and formative assessments required in the policy. There will also need to be specialized professional development provided for teachers who take on interventionist roles in summer camps and who work with retained students in their third and fourth grade classrooms.

Finally, policy makers will need to clarify the goal of the Read to Achieve initiative by establishing a more consistent definition of reading proficiency across the many assessments that LEAs might opt to use. There are many good reasons to have multiple assessments available for districts. No single measure of reading fully captures the range of skills that students need to develop as they learn to comprehend and think critically about texts. In-depth examinations of the state-approved alternative measures are needed to better understand their alignment with the version of reading comprehension that is measured on the EOG and required for long-term success in the N.C. Standard Course of Study.



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