BEST NC Business for Educational Success and Transformation

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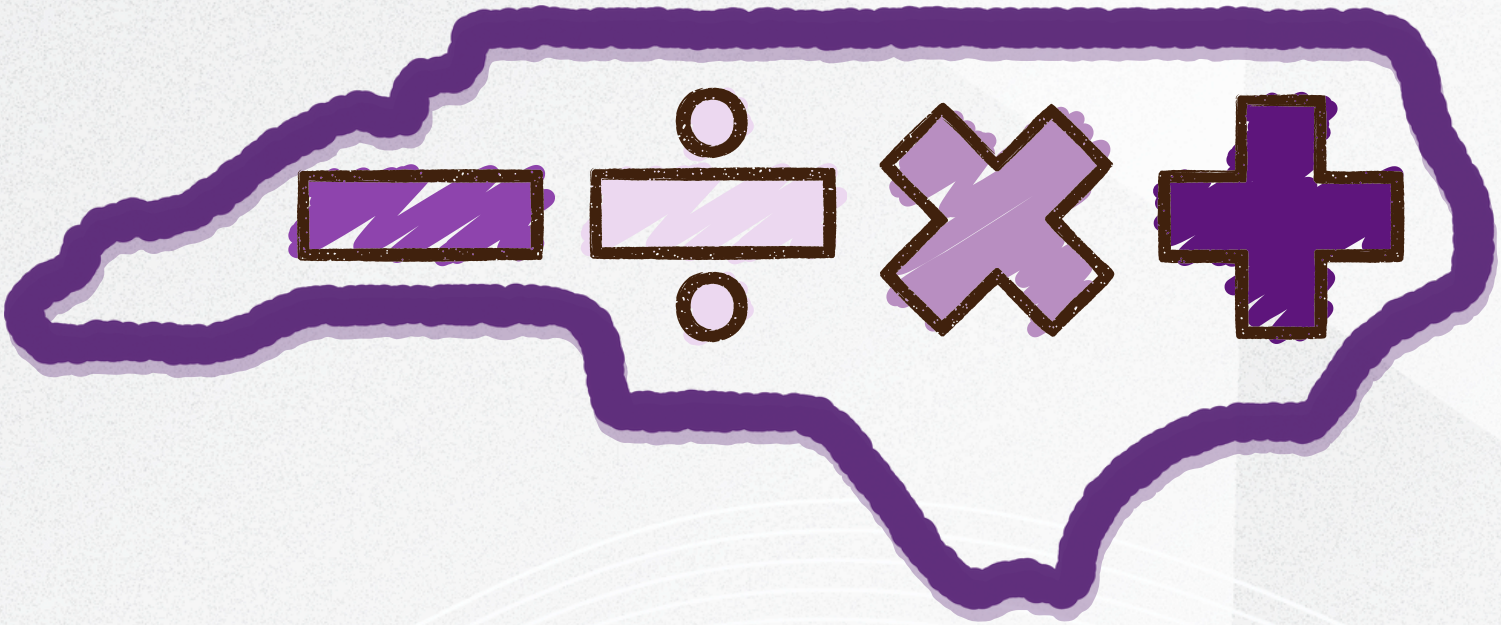
North Carolina Counts on Math

Designing a Shared Vision for K-5 Math



Final Report

2026

North Carolina Counts on Math

Designing a Shared Vision for K-5 Math

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Acknowledgment

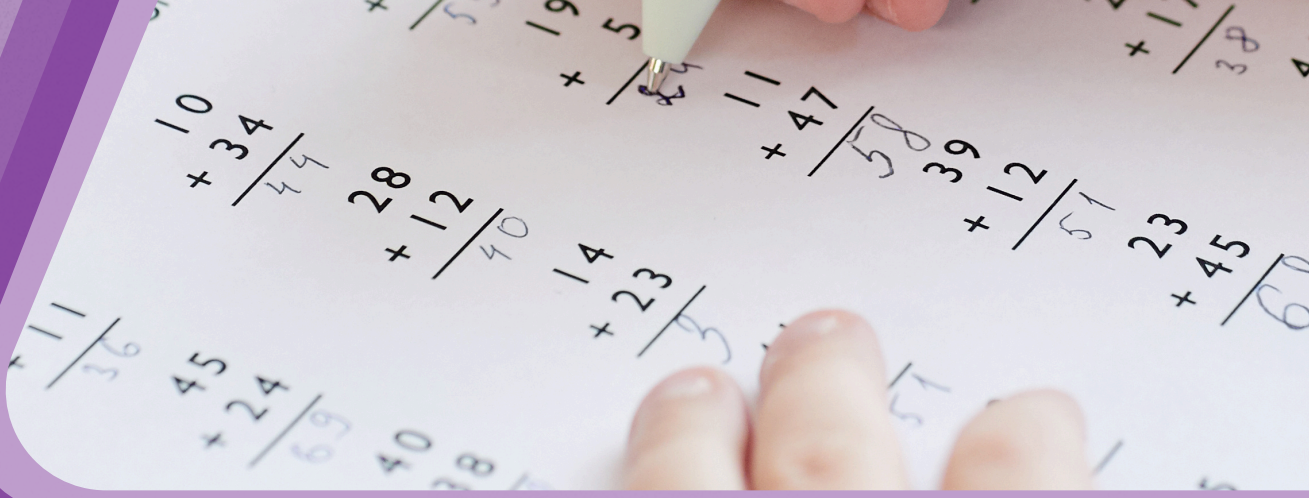
This report summarizes the research, interviews, and collaborative discussions of the North Carolina Counts on Math Working Group as it examined the current conditions of mathematics instruction across the state and identified opportunities for improvement. We are deeply grateful to the working group members and advisors, the team at Watershed Advisors, members of the North Carolina General Assembly, North Carolina Governor Josh Stein and his staff, North Carolina State Superintendent of Public Instruction Mo Green, the North Carolina Department of Public Instruction, the State Board of Education, and the many school districts , local school boards, and educator preparation programs that generously shared their time, expertise, and insights. Their collective contributions made this work possible and strengthened the recommendations presented in this report.

BEST NC Business for Educational Success and Transformation

BEST NC is a non-profit, non-partisan coalition of business leaders committed to improving North Carolina's education system by convening, informing, and engaging state leaders to identify and advance improved education policies, programs, and initiatives. BEST NC envisions a North Carolina in which every student graduates with the knowledge, skills and behaviors to succeed in a competitive global economy. Our mission is to unite an engaged and informed business perspective to build consensus toward dramatically transforming and improving education in North Carolina.

WATERSHED ADVISORS

Watershed powers governments with the vision, talent, and insight to conceive of high-value education and workforce ideas, and then to make those visions an enduring reality for children, families, and workers across entire geographies. Launched in 2021, Watershed was founded by former leaders of the Louisiana Department of Education, whose nearly decade-long tenure was defined by nationally recognized innovation in early childhood education, curriculum and preparation, college and career pathways, student assessment, and school accountability. Watershed is a woman-owned and woman-led organization.



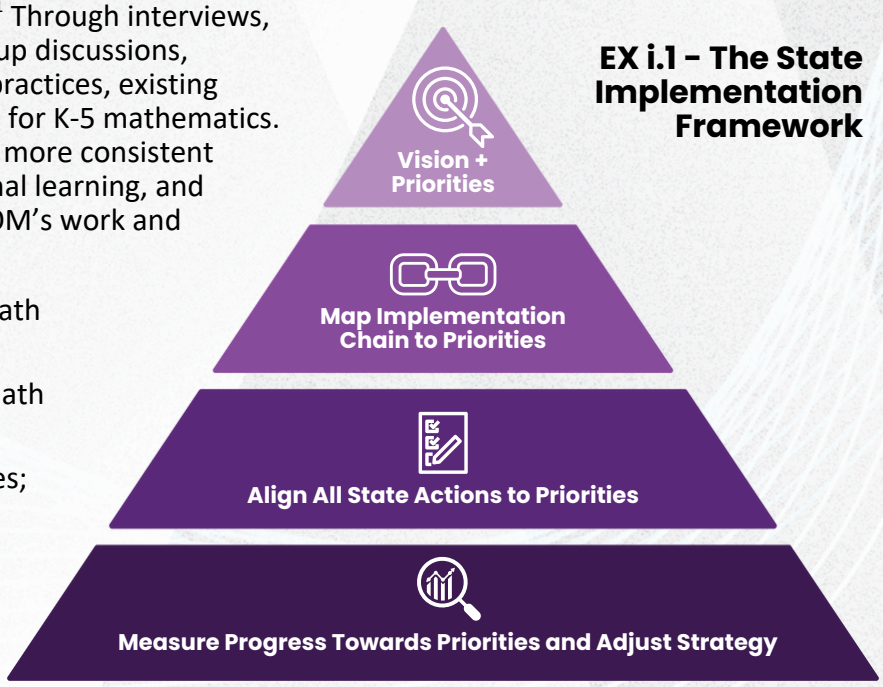
INTRODUCTION

As North Carolina continues to seek opportunities to improve its public schools, the state stands at a pivotal moment in mathematics education. BEST NC, partnering with the education consulting firm Watershed Advisors, convened the North Carolina Counts on Math (NCCOM) working group consisting of a cross-section of state and local mathematics educators, policymakers, and stakeholders to examine current conditions in K-5 mathematics and to identify opportunities for improvement. This work coincides with several ongoing developments including national trends in student performance on NAEP, how technology is rapidly reshaping student learning and instruction delivery, and North Carolina's comprehensive review of its mathematics standards. Taken together these factors provide important context for examining how early mathematics instruction is currently structured and supported across the state.

With an intentional focus to support the implementation of K-12 education policy into practice at the classroom level, the State Implementation Fund (SIF) grant supported the establishment of the North Carolina Counts on Math (NCCOM) Working Group. Over a three month period, the Working Group revealed a statewide consensus: improving K-5 math instruction is essential to preparing students for long-term academic and success.[1] Through interviews, landscape analyses, and working group discussions, participants examined instructional practices, existing initiatives, and system-level supports for K-5 mathematics. The process highlighted the need for more consistent approaches to curriculum, professional learning, and support. These insights framed NCCOM's work and recommendations for next steps:

- Thoroughly Examining the K-5 Math Landscape in North Carolina;
- Setting a Shared Vision for K-5 Math Instruction in North Carolina;
- Identifying Key K-5 Math Priorities;
- Providing Clarity on HQIM Authority; and
- Developing Shared Implementation Recommendations.

EX i.1 - The State Implementation Framework



The NCCOM Working Group included key education stakeholders including*:

- District-based and School-Based Mathematics Leaders;
- Teachers, including Advanced Teaching Roles (ATR) School-Based Leaders;
- Mathematics Specialists from the North Carolina Department of Public Instruction (NC DPI);
- Faculty from Education Preparation Programs (EPP);
- Mathematics Education and Education Researchers;
- Representatives from Local Education Agencies (Public School Units);
- Members of the North Carolina General Assembly (NCGA);
- Members of the North Carolina State Board of Education;
- Representatives from the Governor's Office;
- Intermediaries; and
- North Carolina Business Leaders.

**See full Working Group Member and Advisor lists in Appendix A on page 21.*

Implementation Strategy Summary

The NCCOM Working Group proposed an implementation plan structured around a phased cohort-based model designed to align levels of implementation support with district readiness. This approach recognizes that districts vary widely in their existing capacity and experience.[2]

Cohort 1 would include districts with higher levels of readiness to implement the core components of the proposed implementation plan from the outset of the pilot, and provide initial learning that will shape statewide tools and guidance for later cohorts. Cohort 2, launching one year later, would include districts with moderate levels of readiness that would build capacity as statewide infrastructure and regional support teams mature. Finally, Cohort 3 would include districts that are beginning their High-Quality Instructional Materials (HQIM) onboarding at a time when statewide systems, tools, and expectations are fully developed.

Each year of the proposed rollout has a specific focus designed to build coherence and momentum. The first year emphasizes foundational infrastructure, including the development of statewide tools, cross-divisional alignment, and district readiness assessments. The second year expands the pilot by bringing in additional districts, refining implementation guidance, and deepening integration of Advanced Teaching Roles into mathematics coaching structures. The third year focuses on statewide refinement, aligning professional learning, Multi-Tiered System of Supports (MTSS), and data systems into a coherent mathematics improvement framework. By the final year, the state shifts to full-scale implementation by finalizing tools, assessing readiness across all regions, and completing evaluation activities that inform long-term planning.

This phased approach is intended to support North Carolina's long-term efforts to strengthen mathematics instruction. Key goals include establishing a unified statewide instructional vision for K-5 mathematics, ensuring that all learners have access to high-quality and research-aligned resources and teaching practices, and increasing teacher confidence in delivering consistent, high-quality math instruction.

The model is also intended to strengthen coherence across DPI divisions and district instructional teams so that policies, tools, and professional learning reinforce one another. Ultimately, the cohort model builds durable statewide systems capable of sustaining improvement over time and positions North Carolina for full statewide rollout of the NCCOM model over a three-year period.

I. LANDSCAPE ANALYSIS:
The State of K-5 Math in North Carolina

At the onset of the project, a landscape analysis was conducted to understand how mathematics instruction is currently implemented across North Carolina and to identify where variation exists in curriculum, professional learning, assessment, and support systems. The analysis also sought to clarify the additional conditions and cross-system structures that need to be developed in partnership across agencies and stakeholders, to support consistent, high-quality instruction at statewide scale.

Interviews with individuals in various math instruction roles across the state highlighted that students' mathematics learning experiences and opportunities vary substantially across districts.[3] Teachers often lack access to coherent, standards-aligned, high-quality instructional materials, and many report low confidence in teaching mathematical concepts conceptually rather than procedurally. The landscape analysis revealed three primary areas of concern: A) Fragmentation of math initiatives and resources; B) Wide variability in instructional and curriculum quality; and C) Educators lack precise information to make instructional decisions. The NC Department of Public Instruction (NCDPI) continues to make meaningful progress and is actively working to address these challenges through strengthened guidance, coordinated initiatives, and the development of tools and supports aligned to support math instruction statewide.

A. Fragmentation of Math Initiatives and Resources

Existing state initiatives, including the K-12 Math Standards revision, a UNC-system educator preparation math framework pilot, and multiple math instructional approach projects, demonstrate a strong interest in strengthening mathematics instruction. However, these initiatives operate independently, creating a fragmented environment where instructional expectations vary across, and in some cases within, districts.[4]

The NCCOM Working Group responded to this fragmented landscape by drafting a shared statewide vision for mathematics, clarifying the practices required across system levels, and designing a comprehensive improvement strategy built on High-Quality Instructional Materials (HQIM), curriculum-based professional learning (CBPL), the Advanced Teaching Roles (ATR) coaching model, and aligned state policy levers. This introduction lays the groundwork for understanding both the urgency of the present challenge and the promise of the statewide approach described in subsequent sections.

B. There is Wide Variability in Instructional and Curriculum Quality

The NCCOM landscape analysis revealed significant and consequential variation in the quality of K-5 mathematics instruction across North Carolina.[5] This variability occurs not only between districts, but also between schools and classrooms within the same district. Differences in instructional quality are driven by uneven access to standards-aligned curriculum; inconsistent teacher preparation in mathematics, content, and pedagogy; variation in pacing and instructional expectations; unequal availability of instructional coaching and professional learning; and a lack of common expectations for the types of activities that should be included in mathematics lessons to support students' learning.

Data indicated that many K-5 teachers rely heavily on teacher-created materials or unvetted resources from online sources rather than on coherent, standards-aligned instructional materials.[6] While these resources are often selected with good intentions, their use results in fragmented instructional sequences, inconsistent representations of mathematical concepts, and limited opportunities for

students to build understanding across grade levels. Without a shared foundation of common resources, instruction frequently emphasizes procedures over reasoning, limiting students' opportunities to engage in activities related to conceptual understanding, problem solving skills, and mathematical discourse.[7]

Teachers consistently reported that this lack of coherence leads to student misconceptions. When concepts are introduced inconsistently or without a clear progression, students may appear to succeed procedurally while lacking deep understanding.[8] As these gaps accumulate, students enter later grades with unfinished learning that is difficult to build upon. Many teachers also shared that they feel underprepared to teach mathematics conceptually, particularly in areas such as place value, whole number computations, fractions, and mathematical modeling. This challenge is compounded by limited access to sustained, content-specific professional learning that is directly connected to the materials teachers are expected to use.

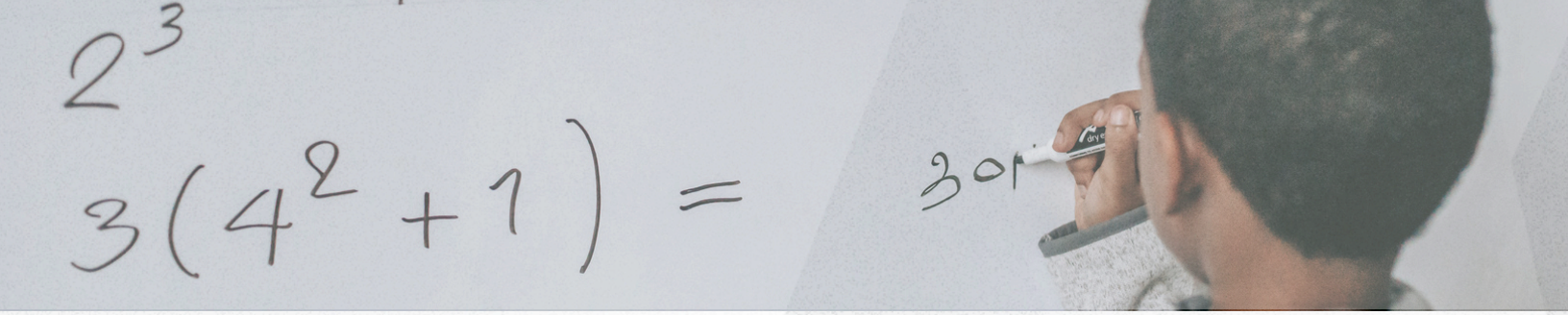
> **High-quality instructional materials (HQIM) are essential to improving this aspect of math instruction. HQIMs must be aligned to state standards, grounded in coherent learning progressions and intentionally designed to develop the four strands of mathematical proficiency: real-world problem solving, procedural fluency, conceptual understanding and productive disposition.[9]**
>
> *Tim Flatley, Policy Director, Math, ExcelinEd*

District leaders echoed these concerns, noting that while many districts are engaged in well-intentioned math initiatives, misaligned investments and inconsistent instructional messages often dilute implementation and result in little to no meaningful improvement in learning opportunities or student outcomes. Districts often manage multiple programs, vendors, and professional learning models simultaneously, which can create confusion for educators and limit the impact of any single initiative. This may lead to districts with greater capacity being able to build stronger systems, while districts with fewer resources struggle to do so.

The analysis also surfaced clear inequities in student access to rigorous mathematics instruction, in which "students use mathematical language to communicate effectively to describe their work with clarity and precision."[10] Some districts have made progress through strong curriculum adoption, coaching structures, or targeted initiatives, while others remain under-resourced and unable to sustain high-quality implementation. A review of existing state investments demonstrated meaningful promise but highlighted how these efforts often operate in parallel rather than as part of a cohesive system. As a result, students' access to high-quality math instruction depends too heavily on where they live rather than on consistent statewide expectations.

Taken together, these findings underscore a central conclusion of the NCCOM landscape analysis: Without statewide coherence in curriculum, professional learning, coaching, and instructional expectations, variation will continue to shape student learning experiences. A unified, standards-aligned approach is necessary to ensure that every student in North Carolina – regardless of zip code, has access to high-quality, conceptually rich mathematics instruction that prepares them for long-term success.

> **North Carolina has the opportunity to ensure every classroom is equipped with high-quality, standards-aligned materials that empower teaching and learning.[11]**
>
> *State Board of Education HQIM Presentation*



C. Educators Lack Precise Information to Make Instructional Decisions

A critical challenge facing mathematics instruction in North Carolina is the lack of clear, timely insight into where students are academically from a statewide view. Across districts and grade levels, teachers, school leaders, and district staff consistently reported that they do not have a reliable, shared understanding of which mathematical standards and clarifying objectives students have mastered and where significant gaps remain.[12] This limits their ability to tailor instruction and target interventions that are truly responsive to individual student needs.

In many classrooms, teachers rely on a patchwork of commercial curriculum-based assessments, teacher-or district-created assessments, unit tests, NC Check-ins, observations, and end-of-grade data to gauge student understanding. While each of these data sources provides some insight, they are often disconnected, delayed, or insufficiently aligned to standards and/or curriculum.[13] As a result, educators may know that a student is struggling but lack precise information about which concepts, skills, or prerequisite understandings are missing. This ambiguity limits teachers' ability to effectively target instruction, intervention, and practice.

Effective mathematics instruction depends on understanding student learning at the level of individual standards and clarifying objectives. Teachers need to know not only whether students can complete tasks, but whether they have developed conceptual understanding, procedural fluency, and the ability to apply mathematics across contexts. Without this clarity, instructional decisions are often based on averages or assumptions rather than on evidence of mastery. Students may move forward without fully understanding key concepts, while others may repeat content they have already mastered, leading to disengagement and inefficiency.[14]

This challenge is especially pronounced when it comes to prerequisite skills. Mathematics concepts are often thought about in terms of learning progressions in which predecessor skills in earlier grades provide a foundation that is essential to learn mathematics effectively in later grades earning. When educators lack visibility into which predecessor skills students have mastered, gaps persist and compound over time.[15] By the time students reach more complex topics, such as fractions, ratios, or multi-step problem solving, unaddressed gaps can significantly limit their ability to access grade-level content. Ensuring that students are prepared for the next level of math coursework requires intentional monitoring of mastery across standards and across years.

Educators also emphasized that the absence of clear, actionable mastery data makes it difficult to differentiate and personalize learning opportunities. Meeting each student's unique learning needs requires knowing where to accelerate instruction, where to provide additional practice, and where to intervene with targeted support. Without consistent, standards-aligned data systems, differentiation becomes reactive rather than strategic, and opportunities to close gaps early are missed.

These findings point to the need for a more coherent approach to assessment, data use, and instructional feedback, one that allows teachers to see, in real time, where students are in their learning journey and to ensure that data are used appropriately to inform instruction and student supports. Clear visibility into student mastery of standards and key predecessor skills is foundational to ensuring that all students receive the instruction and support they need to succeed in mathematics and to enter the next level of coursework confident and prepared.

II. VISION: A Shared K-5 Vision for Math in North Carolina

Vision + Priorities

North Carolina's shared vision for K-5 mathematics instruction is grounded in the findings of the NCCOM working group discussions and landscape analysis described in this report. This vision responds to persistent challenges in the current system, including wide variability in instructional quality, limited visibility into student learning, and inconsistent access to coherent curriculum, assessment, and support.

Because mathematics learning is cumulative, gaps in mathematics understanding can persist and compound over time, undermining student confidence and readiness for more advanced coursework. In response, the state has articulated a clear, student-centered vision for rigorous, coherent, and engaging mathematics instruction in the early grades – building strong foundations that support success in secondary mathematics, postsecondary pathways, and long-term economic opportunity.[16]

For educators, this vision requires and depends on access to high-quality instructional materials, curriculum-aligned professional learning, coaching, and actionable data. At the system level the vision calls for alignment across curriculum, assessment, professional learning, coaching and policy. Rather than relying on isolated initiatives, this approach is designed to support a coherent framework that can be implemented consistently across districts.

North Carolina's Shared Vision for Math

The Vision: Every North Carolina Student in grades K-5 will have access to rigorous, coherent, and engaging research-based mathematics instruction that builds the knowledge, confidence, and durable skills needed for immediate success in elementary math and future accomplishments in secondary math and the workforce.

Specifically:

- Students will learn from well-prepared teachers and teacher-leaders equipped with standards-aligned, high-quality instructional materials, sustained professional learning that ensures effective implementation, and accessible student data.
- Math learning experiences will emphasize rigor, integrating conceptual understanding, procedural fluency, and the ability to apply mathematics in meaningful real-world contexts.
- Learners' needs will receive responsive standards and curriculum-aligned supports that empower both students and teachers to act on data, whether for intervention or enrichment.
- Families and stakeholders will be meaningfully engaged as partners in students' learning, equipped with accessible resources and clear communication to support learning beyond the classroom.

The Goal: North Carolina's sustained commitment to this vision will establish strong mathematical foundations in the early grades, making the state a national leader in NAEP math performance and equipping students with skills for lifelong success.

Map the Implementation Chain to Priorities

III. PRIORITIES: North Carolina Counts on Math – Improving K-5 Math Instruction

The NCCOM initiative began with a simple but urgent premise: North Carolina's students deserve a unified, consistent approach to mathematics instruction that reflects evidence-based practices, clear expectations, and equitable access to high-quality teaching. The findings of the NCCOM Working Group, drawn from statewide interviews, landscape analyses, educator surveys, national research, and working group consensus, indicated that the state's existing system is too fragmented to meet this goal. Instructional materials varied widely, professional learning was inconsistent and often disconnected from daily classroom practice, and many educators lack sustained, content-specific coaching.

In response, the NCCOM Working Group established a shared vision: Every student in North Carolina will learn mathematics through conceptually rich instruction grounded in High-Quality Instructional Materials (HQIM), supported by curriculum-based professional learning (CBPL), sustained through North Carolina's already established Advanced Teaching Roles (ATR), and reinforced by coherent state policies, assessments, and statewide leadership structures.

The proposed implementation recommendations described in this report operationalize this vision by transitioning from planning to comprehensive implementation. This includes launching three cohorts of pilot districts, building regional support structures within NCDPI, establishing a statewide numeracy screener, aligning Multiple Tiers of System Support (MTSS) with math instructional systems, and developing multi-year guidance, tools, and data systems that reinforce coherence. Through these proposed recommendations, North Carolina would build both the local and statewide capacity needed to ensure high-fidelity, consistent implementation in classrooms.

During the NCCOM Working Group meetings, four key NCCOM priorities emerged:

1. HQIM Is a Critical Element of Statewide Math Instruction.

High-quality instructional materials serve as the foundation of effective math instruction.[17] Standards-aligned materials can create consistent expectations, reduce variability, support conceptual teaching, and provide structure for every layer of the instructional system – from professional learning to assessment to coaching (see Recommendation A).

2. Leadership and Teacher Training Through ATR is Essential for High-Fidelity Implementation.

ATR educators ensure protected time for collaborative planning, data analysis, lesson internalization, and instructional coaching, including curriculum-based professional learning, creating the daily conditions required for deep improvement[18] (see Recommendations B and C).

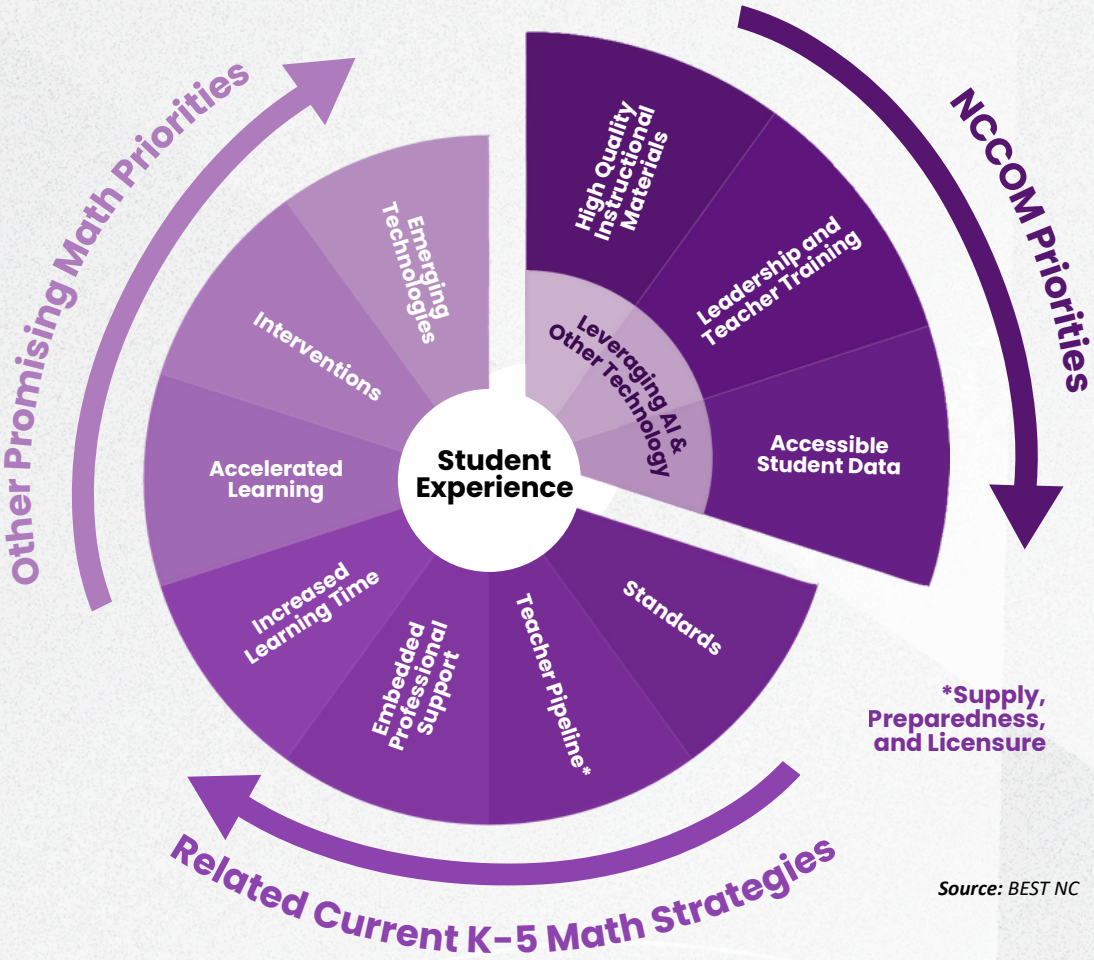
3. Accessible Student Data That Are Aligned to the State Standards is Critical for Educators to Make Instructional and Student Support Decisions.

One of the most persistent challenges identified by educators is the lack of clear, valid, and real-time information about where students are in their learning journey.[19] While teachers use multiple data sources, these sources often fail to provide precisely which standards students have mastered and where gaps remain (see Recommendation D).

4. AI and Other Emerging Technologies Should Be Leveraged to Support Educators.

New AI-powered data analysis tools have the potential to synthesize information from multiple sources including student work, screeners, HQIM-embedded assessments, and classroom performance to identify precise areas of strength and need. These tools can help educators quickly determine whether a student has mastered a concept, needs additional practice, or would benefit from targeted intervention. By making student learning visible and actionable, AI gives teachers the clarity they need to provide the right support at the right time (see Recommendation E).

EX III.1 - NCCOM Priorities and Other Related Strategies in Relation to Student Experience



Source: *BEST NC*

These priorities define what statewide improvement in mathematics instruction requires: strong curricular foundation, embedded instructional leadership, clear insight into student learning, and aligned supports. They inform the implementation framework and policy recommendations that follow.

Ultimately, NCCOM envisions what statewide transformation looks like when the state commits to aligned policy, consistent implementation supports, and a shared instructional vision. The work ahead is ambitious, but the implementation recommendations create the systems, structures, and leadership capacity necessary to ensure that every child in North Carolina receives rigorous, conceptually rich mathematics instruction that prepares them for success in school, career, and life.

IV. NEXT STEPS: K-5 Implementation Chain

What is the NCCOM Implementation Chain?

A major accomplishment of the NCCOM Working Group was the development of the NCCOM implementation chain, a clear, role-specific framework that describes how each layer of North Carolina's education system contributes to high-quality math instruction statewide. The chain is grounded in the understanding that meaningful instructional change for students only happens when every level of the system performs its part in a tightly aligned sequence.

Instructional improvement is not the responsibility of any single entity; the implementation chain outlines how responsibility is distributed and connected. Each level is assigned a set of actions, and each depends on the effectiveness of the levels before and after. When roles are aligned, instructional change can occur consistently and at scale. The chain begins with the student experience, then moves outward through teachers, instructional leaders, school leaders, district teams, regional support staff, DPI divisions, the State Board of Education, and the General Assembly. Together these roles share the responsibility and link practice to policy and infrastructure.

EX IV.1 - The Implementation Chain

The implementation chain includes the most important educator actions required at every level of the system to enact the priorities. These actions are concrete, specific, and observable.



For **students** to achieve the vision, they need to receive different instruction from their teachers.

For **teachers** to use different instructional practices, they need support from their **principals, ATR teachers, and vendors**.

For **principals** to support strong instruction, their **districts** need to have a clear plan for instruction and support.

For *districts* to understand and plan for strong math instruction, the **state** needs to set a vision and define best practices.

Starting with the Student Experience

The implementation chain begins with students and the core vision for what instruction should look like in North Carolina classrooms. In the visual that introduces the chain, students are shown at the far left with the message that for students to achieve the state's math vision, they must receive different – and more effective – instruction than they do today.

Under this vision, mathematics instruction should be a coherent progression rather than a disconnected sequence of procedures. Instruction should emphasize sense-making, conceptual understanding, and the application of mathematical reasoning along with the development of procedural fluency. This focus on the student experience establishes the logic for the rest of the chain: The student experience cannot change unless the adults around them change their practice.

Teachers: Delivering Strong, Consistent Instruction

Immediately to the right of students in the chain are teachers. Teachers play a central role in the implementation chain; they are responsible for translating statewide expectations into daily

practice. Their responsibilities are presented in detail, outlining the daily instructional behaviors needed to improve student learning. Teachers are expected to:

- Use high quality instructional materials (HQIM) with fidelity;
- Collaboratively plan math lessons and units with colleagues;
- Administer and interpret early numeracy screeners;
- Use curriculum-embedded formative assessments and student work to make real-time instructional adjustments; and
- Plan for interventions and personalized supports using the tools and structures provided by the district.

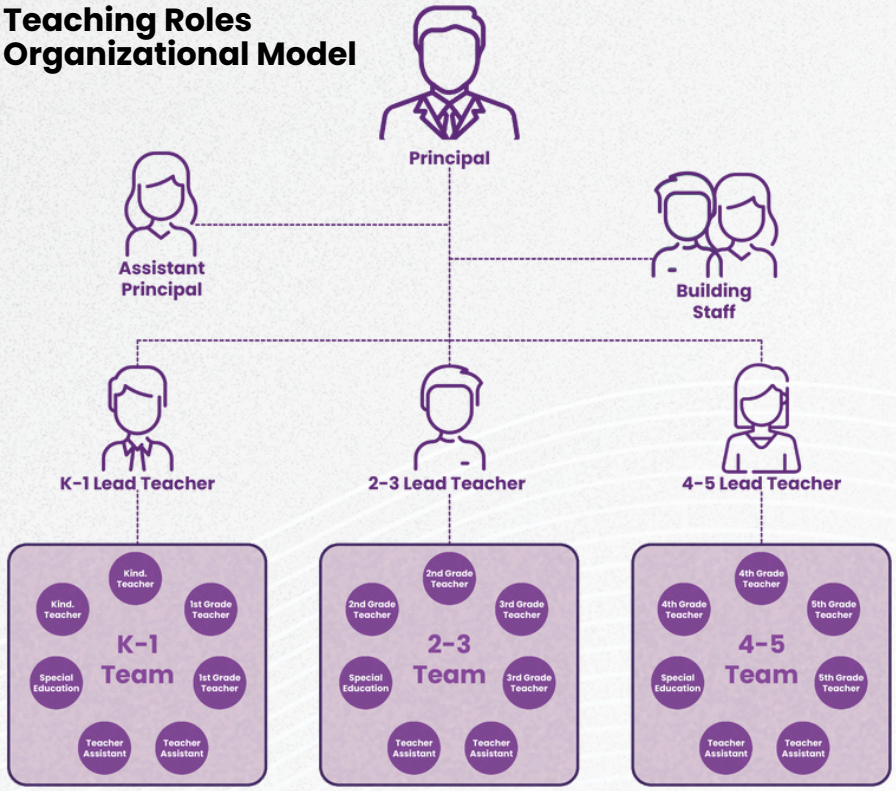
Teachers' role-specific actions span across the pilot framework's three priority areas: using HQIM, interpreting accessible student data, and participating in curriculum-based professional learning. Together, these details illustrate what "strong instruction" looks like in practice (see Recommendations A and D).

The implementation chain recognizes these expectations cannot be met through individual effort alone. Teachers require curriculum-aligned professional learning, time for collaboration, and embedded coaching.

Leveraging Advanced Teaching Roles for Implementation Fidelity

The chain identifies the Advanced Teaching Roles (ATR) framework as the most scalable and effective mechanism available to North Carolina for supporting fidelity of HQIM implementation. ATR structures – including Adult Leadership (AL) teacher, referred to in Opportunity Culture as Multi-Classroom Leaders (MCLs) – enable schools to provide embedded instructional coaching, model lessons, facilitate Professional Learning Communities, and support weekly planning aligned to HQIM.

EX IV.2 - Advanced Teaching Roles Organizational Model



250,000+

Students with Increased Access to Effective Educators Thanks to Advanced Teaching Roles (ATR)

500+

Schools (1/3 of NC Public Schools) Using ATR to Reimagine Their Organizational Structures

Working group discussions highlighted that traditional coaching models are often under-resourced, inconsistent, or stretched across multiple subjects. ATR, by contrast, establishes clear staffing structures that create protected time for coaching cycles, collaborative planning, lesson internalization, and student work analysis. ATR leaders can support early-career teachers, guide intervention planning, and ensure classroom-level coherence (see Recommendation C).

Because ATR already exists in many North Carolina districts, and statewide expansion is underway, the model provides the backbone for the NCCOM pilot. By integrating ATR into the implementation recommendations, the state ensures that high-fidelity implementation is possible in a wide range of district contexts. This approach also supports sustainability, as ATR is embedded in staffing models rather than dependent on external coaches (see Recommendation C).

ATR/MCL Instructional Leaders: Sustained, Job-Embedded Coaching

Next in the implementation chain are educators in Advanced Teaching Roles (ATR). Their responsibilities are presented in a dedicated section that describes them as the engine of daily instructional support. They are expected to:

- Facilitate collaborative planning around HQIM in PLCs;
- Provide model lessons and co-teaching support;
- Conduct regular observation and feedback cycles using a common tool;
- Guide teachers in analyzing screeners, student work, and formative assessments; and
- Support data-driven decisions across core instruction and interventions.

These actions emphasize that high-quality materials alone are insufficient; teachers need expert, ongoing coaching to translate those materials into strong core instruction (see Recommendations A, B, C, and D).

School Leaders: Creating the Conditions for Implementation

School leaders play a critical role in determining whether instructional improvements are sustained over time. The chain then turns to school leaders, whose responsibilities are detailed in a sequence of action steps. Principals are expected to:

- Implement structures that allow ATRs and teachers to collaborate across schools and/or districts – such as protected PLC time and regular MTSS meetings;
- Use valid student learning data to shape school improvement strategies;
- Build and sustain instructional teams led by highly effective math educators; and
- Create master schedules that allow ATR teachers to work directly with their teams during instructional blocks and planning times.

This portion of the chain underscores that even strong teachers and coaches cannot succeed without the right systems, schedules, and expectations in place at the school level (see Recommendation C).

District Instructional Teams: Ensuring Coherence and Support

District instructional teams are responsible for translating statewide guidance into coherent, actionable systems for schools. Further along the chain is the district level, where responsibilities shift toward system design and alignment. District leaders are asked to:

- Select high-quality math curriculum from a vetted statewide list;
- Adopt a K–3 numeracy screener aligned with the state's math vision;
- Develop a comprehensive professional learning calendar for teachers, ATR lead teachers, and principals;
- Ensure that all educators participate in curriculum-based professional learning and assessment training; and
- Recruit, support, and retain strong math teachers and ATR educators.

Local school district leaders and practitioners describing their role in HQIM, assessment, and professional learning reinforces the central theme: Districts must set clear expectations, procure aligned tools, and ensure the right supports reach every school (see Recommendations C and D).

NC DPI Math Consultants: Connecting Local Practice to Statewide Expectations

The chain also includes math consultants who serve as a bridge between the state agency and local districts. Their role is to help districts interpret state guidance, monitor fidelity of implementation, and troubleshoot barriers that arise during rollout. Although less detailed than other levels, their inclusion in the chain reflects their importance in sustaining consistent statewide practice.

NC DPI Divisions: Setting the Vision and Providing Aligned Tools

Divisions at the NCDPI are responsible for establishing statewide direction and ensuring that guidance, tools and supports are aligned with that direction. At the state level, the responsibilities expand from implementation to statewide strategy. The chain emphasizes that state leadership must (see Recommendation D):

- Set a clear vision for math instruction and define high-quality practices;
- Provide vetted options for numeracy screeners and tech-enabled tools;
- Develop statewide observation tools, PLC protocols, and data use expectations;
- Align professional learning to the math vision and HQIM; and
- Streamline guidance to avoid contradictory or duplicative resources.

State Board of Education: Anchoring Policy and Oversight

At the top of the chain sits the State Board of Education. In the visual representation, the Board appears as the final link, responsible for setting the policies and regulatory conditions that guide DPI and districts. The Board's responsibilities include:

- Adopting math standards and instructional materials policies;
- Approving guidance and regulations that reinforce HQIM and data-aligned practices;
- Ensuring coherence across divisions, initiatives, and statewide expectations; and
- Providing the policy framework that enables consistent implementation.

North Carolina General Assembly: Enacting and Funding Math Education Policy

The General Assembly ensures that North Carolina's math transformation efforts are sustained over time. Its primary function is to establish and reinforce statewide commitments by:

- Maintaining stable funding over multiple budget cycles;
- Supporting cohort-based implementation timelines;
- Preserving cross-divisional work at DPI;
- Protecting the capacity of regional support teams; and
- Codifying key elements of NCCOM that must persist regardless of administrative changes.

Through these actions, the General Assembly helps institutionalize the statewide shift toward rigorous, conceptually rich math instruction supported by HQIM and ATR leadership structures.

Taken together, the roles in the implementation chain create a fully connected system in which every layer depends on the one before it. The chain makes clear what each actor is responsible for, how those responsibilities support the actors that follow, and how even small breakdowns at any level can weaken implementation across the entire state. By mapping these relationships, the implementation chain offers a unified theory of action for improving mathematics instruction statewide – linking student learning, classroom practice, school and district systems, regional support structures, state-level guidance, and State Board policy into one coherent, mutually reinforcing framework (see Recommendation C).

Enabling Conditions

The NCCOM Working Group surfaced these system conditions through interviews, landscape reviews, working group discussions, and statewide readiness analyses. The implementation recommendations begin building the conditions necessary for long-term, statewide transformation.

Instructional Coherence Across the State

One of the most consistent findings from the NCCOM Working Group was the lack of statewide instructional coherence. Teachers described receiving conflicting guidance from various initiatives, divisions, and vendors, making it difficult to implement math instruction consistently. To scale improvement effectively, North Carolina must establish HQIM-aligned statewide guidance, articulate clear pacing and unit expectations, align professional learning systems, reduce dependence on teacher-created materials, and ensure consistent MTSS math practices. Together, these conditions create predictable, coherent instructional expectations across classrooms statewide (see Recommendation A).

Strong District-Level Leadership and Infrastructure

District curriculum and instruction teams are essential to successful math implementation, yet their capacity differs widely across the state. To create the conditions necessary for high-quality, consistent instruction, districts need dedicated math instructional leadership roles, coaching structures that integrate Advanced Teaching Roles, PLC routines grounded in high-quality instructional materials, collaborative planning calendars, and dependable systems for progress monitoring and data-driven meetings. Together, these elements strengthen district-level support and ensure coherent implementation across schools (see Recommendations A, B, and C).

School-Level Systems for Collaboration Planning and Coaching

Schools are the engines of instructional implementation, and the NCCOM Working Group made clear that even when districts offer strong guidance, the strength of school-level systems ultimately determines success. Effective schools protect weekly PLC time; rely on ATR-led lesson internalization routines; maintain tight alignment among instruction, intervention, and assessment; and use consistent observation and feedback cycles to improve practice. In implementation

recommendations, these structures will be directly reinforced and supported through expanded ATR roles, ensuring that strong district guidance is translated into effective daily instruction (see Recommendation C).

Teacher Preparation, Recruitment, and Retention

Teacher preparation programs frequently fall short in equipping candidates with the math content knowledge and conceptual instructional skills they need, and the NCCOM Working Group interviews confirmed that many early-career teachers enter classrooms without confidence in teaching mathematics. Strengthening teacher-level readiness requires aligning EPPs with HQIM and conceptual math expectations, providing robust onboarding for new teachers, ensuring access to ongoing curriculum-based professional learning, embedding coaching through Advanced Teaching Roles, and offering clear statewide guidance on effective elementary math instruction. Together, these supports enhance teacher effectiveness and contribute to a more stable, better-prepared workforce across North Carolina (see Recommendation A).

Community Engagement and Family Partnership

Families and communities are essential partners in strengthening students' mathematics learning, yet they often receive limited information about what students are learning and how to support them. Building strong community partnerships requires transparent communication about the state's math vision, family-friendly screener reports, at-home resources aligned to high-quality instructional materials, and regional supports that help families engage meaningfully with their child's learning. Implementation recommendations will include the development of communication tools to reinforce these conditions and deepen family involvement statewide (see Recommendation D).

Internal Coherence Within the State Education Agency (NC DPI)

NCDPI is the anchor for statewide coherence, yet the NCCOM Working Group showed that divisions frequently operate independently, leading to the potential of inconsistent messaging to districts. Achieving true coherence requires cross-divisional implementation teams, unified guidance documents, aligned state policies, centralized communication protocols, and regional teams that help ensure consistent implementation across the state. Implementation recommendations will formalize these structures and strengthen NCDPI's capacity so North Carolina can scale its math reform efforts effectively and sustainably.

Together, these enabling conditions form the backbone of a sustainable statewide mathematics transformation. Without them, even the most promising strategies remain fragmented and dependent on local capacity. With them, North Carolina positions itself to deliver high-quality math instruction to every student.



Why Implementation Matters

The recommendations for implementation are intended to provide the structural bridge between North Carolina's current mathematics landscape and a future in which every child receives consistent, rigorous, conceptually grounded mathematics instruction. The long-term benefits of the NCCOM Working Group's implementation recommendations will lead to statewide instructional coherence, educator workforce stability, economic competitiveness, and student opportunity.

Coherence Across Classrooms and Districts

The NCCOM working group recommendations establish a unified statewide approach to K-5 math instruction built on HQIM, curriculum-based professional learning, and ATR-driven coaching cycles. This coherence reduces the massive variation that currently exists between schools and districts (see Recommendations A, B, and C).

Strengthening Teacher Confidence and Expertise

Teachers consistently report a lack of math-specific preparation and limited ongoing support as barriers to strong math instruction.[20] Implementation recommendations address this by building a system of ongoing coaching, aligned PLC structures, embedded planning routines, and curriculum-based professional learning (see Recommendation B).

Supporting Early Identification and Intervention

The proposed statewide numeracy screener ensures that students who struggle in early grades are identified quickly.[21] Combined with MTSS-aligned intervention guidance and data cycles, implementation recommendations help prevent long-term math difficulties (see Recommendation D).

Stabilizing the Educator Workforce

By strengthening professional learning, coaching, and leadership opportunities, implementation recommendations improve teacher working conditions and support retention. ATR roles offer structured pathways for leadership without leaving the classroom, strengthening the instructional workforce statewide (see Recommendation C)

Increasing Student Success and Access

Consistent implementation of strong instructional materials and practices leads to deeper conceptual understanding, improved problem solving, and increased access to grade-level work. This reduces opportunity gaps that disproportionately impact rural students, students of color, and low-income communities.

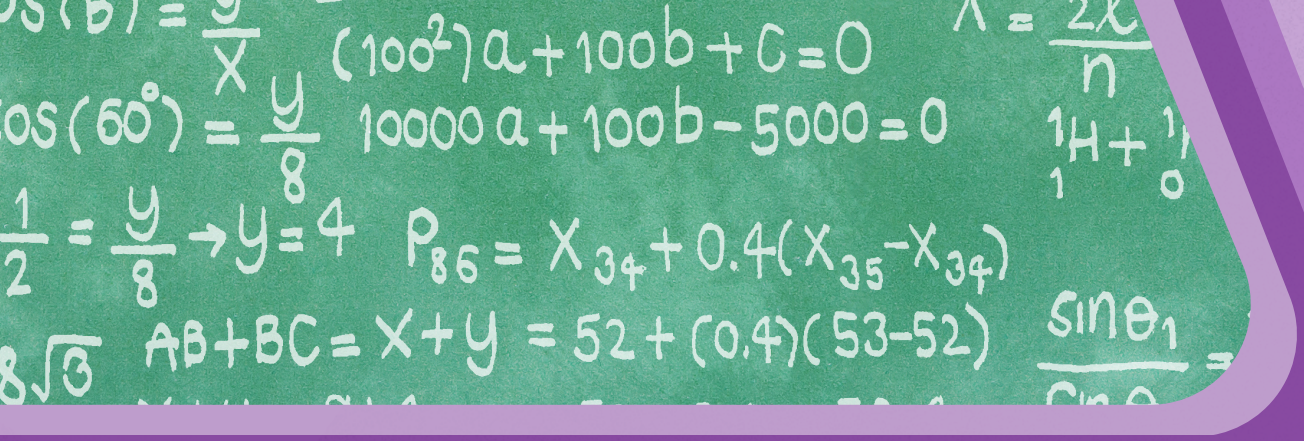
Building Long-Term State Capacity

Implementation recommendations construct statewide systems, including guidance documents, regional supports, data infrastructure, and evaluation routines, that will serve North Carolina for decades. These systems outlive grant cycles and ensure sustainability.

Strengthening North Carolina's Future Workforce

Math proficiency in elementary school predicts high-school course-taking, college readiness, and long-term earnings.[22] By improving early math instruction, implementation recommendations directly contribute to the state's economic future and workforce competitiveness.





V. ALIGNMENT: Utilizing State Policy Levers to Support High-Quality Mathematics Instruction

Statewide mathematics transformation requires a coherent and durable set of policies that reinforce the instructional shifts proposed under NCCOM. The NCCOM Working Group analysis and implementation plan design surfaced a comprehensive policy agenda that spans curriculum, assessment, licensure, professional learning, data systems, and leadership structures. These recommendations ensure that strong classroom practice is supported, not undermined, by statewide systems and policies.

A comprehensive statewide strategy for improving mathematics instruction requires more than strong classroom practices; it requires a coherent and durable set of state policy levers that reinforce – rather than contradict – the instructional shifts educators are being asked to make.

The implementation recommendations developed through NCCOM (see Section VI) will present an opportunity to unify these policy levers so that standards, curriculum guidance, assessments, professional learning, staffing structures, and data systems operate in concert. Six core categories of state policy levers were identified during the Working Group process. Together, they form the policy backbone required to support coherent, statewide implementation of high-quality mathematics instruction.

Standards-Aligned HQIM and Instructional Framework

Clear, rigorous, and well-aligned standards are the foundation of statewide coherence. While North Carolina's math standards provide a strong starting point, Working Group members consistently noted that they are not interpreted or implemented consistently across districts. Pacing expectations vary widely, and some districts rely on local crosswalks or resources that do not fully reflect the intent or rigor of the standards. These inconsistencies contribute to uneven instructional quality and expectations for students.

To address this, the implementation recommendations call for modernizing the state's instructional materials policy to explicitly support the adoption and implementation of high-quality instructional materials. This includes the potential of developing a state level HQIM process that could establish and maintain a vetted list of HQIM for mathematics, provide statewide pacing guidance aligned to the major work of each grade, and integrate HQIM directly into statewide instructional guidance. Clarifying expectations around the appropriate role of teacher-created materials - ensuring they supplement rather than replace HQIM – will further reduce fragmentation and strengthen alignment to standards (see Recommendations A and G).

State Board of Education Rules and Guidance

The State Board of Education plays a central role in setting policies related to instructional materials, district support, licensure, and accountability. Guidance can be siloed across divisions, creating confusion for districts about expectations for HQIM, curriculum-based professional learning, and instructional flexibility. Implementation recommendations emphasize the need for cohesive, cross-divisional guidance that embeds HQIM expectations, strengthens curriculum-based professional learning, clarifies the role of Advanced Teaching Roles, and aligns expectations across Exceptional Children, MTSS, K-5 Literacy, Digital Teaching and Learning, and Student Support Services. Unified guidance reduces conflicting signals and reinforces consistent instructional priorities statewide (see Recommendations A and F).

Assessment and Accountability

North Carolina's current assessment landscape includes End-of-Grade tests, early-grade diagnostics, and MTSS-aligned progress monitoring tools, but these components operate without full coherence. The Working Group found wide variation in formative assessment practices, heavy reliance on multiple local screeners, and weak alignment between assessment data and HQIM lesson structures. As a result, assessment data often fails to inform instruction in meaningful ways.

Implementation recommendations propose introducing a statewide K-5 numeracy screener with defined timelines and reporting expectations, and alignment to HQIM scope and sequence. Modernizing formative assessment guidance will ensure assessments reinforce conceptual understanding rather than procedural test preparation. Integrated data dashboards that connect screener data, HQIM assessments, and MTSS information will further support consistent, data-informed decision making across districts (see Recommendations A, D, and G).

Funding and Fiscal Structures

Inconsistent and insufficient funding emerged as one of the most significant barriers to high-quality math instruction. Many districts lack dedicated funding for HQIM, professional learning investments are not consistently aligned to curriculum, and schools often lack resources for the coaching and collaboration required for strong implementation. To address these gaps, implementation recommendations include aligning professional learning investments to HQIM providers, exploring braided funding models to support Advanced Teaching Roles, strengthening state support for district pilots and readiness activities, and using the statewide HQIM list to streamline procurement and reduce inequities in access.

To make these funding strategies effective at scale, it is equally important to invest in NC DPI's capacity to lead and sustain this work. Expanding NC DPI's role in mathematics instruction, particularly in areas such as curriculum guidance, HQIM vetting, professional learning alignment, data systems, and district support, requires adequate staffing and dedicated resources. Without sufficient personnel to coordinate across divisions, support implementation, manage statewide tools, and provide technical assistance to districts, even well-designed funding models will fall short of their intended impact. Strategic investment in NC DPI staffing and infrastructure ensures that state-level guidance is coherent, responsive, and durable, enabling districts to translate funding into consistent, high-quality mathematics instruction across North Carolina (see Recommendation A).

Human Capital and Professional Learning Policies

Teacher licensure, educator preparation requirements, micro-credentials, and coaching expectations shape classroom practice, yet the Working Group identified significant variability in how teachers and leaders are prepared to teach mathematics. Math preparation in educator preparation programs is inconsistent, professional learning is often disconnected from curriculum, and principals frequently lack training in conceptual math instruction.



The implementation recommendations address these gaps by strengthening elementary math coursework requirements in teacher preparation programs, establishing statewide expectations for curriculum-based professional learning, creating a mathematics licensure endorsement or micro-credential for instructional leaders, clarifying ATR coaching competencies, and aligning principal preparation standards to include conceptual mathematics leadership. Together, these actions ensure that preparation and ongoing development reinforce the instructional shifts central to NCCOM (see Recommendation B and C).

Data Systems, Monitoring, and Continuous Improvement

Statewide transformation depends on strong systems for monitoring implementation and using feedback to improve practice. The Working Group found that districts lack consistent structures for collecting implementation data, walkthrough tools vary widely, and many fail to capture math-specific instructional practices. In response, implementation recommendations call for statewide walkthrough and PLC tools, implementation rubrics aligned to HQIM and ATR, evaluation partnerships to support continuous improvement, and the deployment of AI-enabled data tools that help educators identify student mastery and learning gaps in real time (see Recommendation E).

Each of these policy levers – standards, SBE guidance, assessment, funding, human capital, and data systems – operates at a different layer of the educational ecosystem. When they are misaligned, implementation falters and district burden increases. When they are intentionally aligned, instructional coherence becomes possible. The NCCOM Working Group analysis and the policy alignment embedded in the implementation recommendations ensure that North Carolina's statewide math strategy is not only well designed but fully supported by the policy environment required for long-term, sustainable transformation. (see Recommendation F).



Progress! NCCOM Provides Clarity Around HQIM Authority

A legal analysis commissioned by BEST NC and conducted by McGuireWoods LLP concludes that North Carolina already has substantial authority to shape the quality of instructional materials used in public schools. That authority is grounded in the North Carolina Constitution, state statutes, and case law, and it defines the roles and limits of the State Board of Education, the Superintendent, the Department of Public Instruction, and the General Assembly in requiring, recommending, or incentivizing the use of high-quality instructional materials (HQIM). Please scan the QR code to read the full report.

Governance Framework

North Carolina's constitutional and statutory structure establishes distinct but complementary roles for state education entities, creating a framework in which instructional quality expectations are set at the state level and implemented through DPI.

- The State Board of Education holds constitutional authority to supervise the public school system and set statewide expectations for curriculum, standards, and instructional materials.
- A 2016 statutory restructuring, upheld by the North Carolina Supreme Court in 2018, expanded the Superintendent's authority over operations and funding while preserving the State Board's supervisory and policy-making role.

Authority Over Textbooks and HQIM

State authority is strongest when HQIM qualify as textbooks under state law, because textbooks are subject to a formal statewide adoption process.

- State statute requires the State Board to adopt a comprehensive plan of education that includes the standard course of study and an official statewide list of textbooks.
- North Carolina law defines "textbook" broadly as any systematically organized material that substantially covers the objectives of a course or grade, regardless of format.
- Many HQIM meet the definition of a textbook.
- When HQIM are adopted through the state textbook process and funded by the state, the State Board may require their use.

Role of the General Assembly and Overall Conclusion

While the state already has strong authority to promote HQIM, legislative action would be required to mandate HQIM more broadly when materials do not qualify as textbooks.

- The General Assembly could modernize statute to allow the state to require HQIM beyond the textbook category.
- Such legislation could better align statutory authority with the state's constitutional responsibility to supervise public education while preserving appropriate local flexibility.

In sum, North Carolina already has a strong legal foundation to advance HQIM. The state may require HQIM when they qualify as textbooks and are state-funded, may recommend and incentivize HQIM across all categories, and — with legislative clarification — could require HQIM more broadly. Together, these authorities provide a clear roadmap for achieving statewide coherence in instructional quality and improving student outcomes.

VI. NEXT STEPS: Implementation Recommendations for Sustainable, Scalable Math Instruction

The NCCOM Working Group believes that achieving statewide improvement in mathematics is possible in North Carolina, but it requires more than high-quality materials, coaching, and assessments. Sustained, systemwide impact depends on a set of enabling conditions that support consistent implementation across districts – regardless of size, location, capacity, or resources.

The central outcome of the NCCOM Working Group's work is a student-centered implementation plan designed to advance the state's K-5 mathematics vision. The NCCOM initiative marks a shift from analysis and design to coordinated, statewide action, translating a shared instructional vision into the structures and supports needed for long-term coherence, sustainability, and scale.

The proposed implementation plan moves beyond isolated strategies to focus on a small number of high-leverage elements that work together to improve instruction. While each component serves a distinct purpose, their effectiveness depends on being implemented as a coherent package aligned to a shared instructional vision and reinforced across classrooms, schools, districts, and state systems. The recommendations that follow outline a coordinated approach to aligning curriculum, professional learning, coaching, assessment, data use, and policy to support high-quality K-5 mathematics instruction statewide.

A. Advance the Use of High-Quality Instructional Materials (HQIM)

Participating districts will commit to selecting or continuing to use state-vetted, standards-aligned HQIM that are evidence-based and coherent across grades K–5. To support high-fidelity implementation, districts will be guided by HQIM Implementation Guides that provide program-specific pacing recommendations, lesson internalization templates, unit previews, walkthrough tools, and aligned professional learning materials.

These tools ensure consistency in instructional approaches, mathematical representations, and expectations for rigor, while reinforcing the appropriate role of teacher-created materials as supplements rather than replacements for HQIM. Together, HQIM adoption and implementation guidance establish a shared instructional foundation for teaching and learning statewide.

B. Anchor Professional Learning in Curriculum-Based Professional Learning (CBPL)

Professional learning will be anchored directly in adopted HQIM and curriculum to ensure relevance and instructional impact. Districts will implement curriculum-embedded professional learning structures, including unit previews, lesson internalization routines, practice-based rehearsal, and instructional modeling, supported through HQIM Implementation Guides and PLC and Coaching Toolkits.

These tools establish consistent expectations for collaborative planning, student work analysis, and instructional feedback, enabling educators to build deep understanding of both mathematical content and instructional practice. Anchoring professional learning in curriculum ensures that teachers are prepared for the specific instructional shifts required by HQIM and reduces fragmentation across professional learning offerings.

C. Expand and Leverage Advanced Teaching Roles (ATR)

The next phase of implementation will strengthen Advanced Teaching Roles (ATR) as the primary school-based coaching and instructional leadership model for mathematics. ATR educators will facilitate PLCs, lead lesson internalization routines, conduct observation and feedback cycles, and guide data discussions aligned to HQIM.

Implementation will be supported by PLC and coaching toolkits, district and regional implementation tools, and the Statewide Mathematics Instructional Playbook, which together provide shared expectations for coaching practice, instructional quality, and collaborative routines. Clear guidance and tools will help districts integrate ATR roles into their math improvement strategies and ensure sustained, job-embedded support for teachers.

D. Implement a Statewide K-5 Numeracy Screener

North Carolina will support the consistent administration of a statewide K-5 numeracy screener across pilot districts to enable early identification of unfinished learning and to strengthen alignment with MTSS. Implementation will be supported through statewide screener protocols and data tools, including administration manuals, timelines, cut-score guidance, sample dashboards, and structured protocols for data discussions. Districts and schools will receive guidance on linking screener results to classroom instruction, intervention planning, and progress monitoring, ensuring that assessment data meaningfully inform instructional decisions rather than functioning as a standalone compliance measure.

E. Integrate AI-Powered Data Analysis Tools

To improve visibility into student learning, the next phase will explore and pilot AI-powered data analysis tools that synthesize information from screeners, HQIM-embedded assessments, student work, and classroom performance. These tools will complement existing statewide screener data systems and help educators identify which standards and concepts students have mastered and where additional support is needed (see Recommendations D). When paired with clear instructional expectations from the Statewide Mathematics Instructional Playbook, AI-enabled tools can support more targeted, timely, and effective instruction while reducing the analytic burden on teachers and instructional leaders.

F. Align State Policy and Guidance to Support Implementation

State-level guidance across curriculum, assessment, MTSS, licensure, professional learning, and instructional leadership will be aligned to reinforce NCCOM priorities and reduce conflicting signals to districts. The Statewide Mathematics Instructional Playbook, HQIM implementation guidance, and district and regional implementation tools will serve as core reference points for coherent policy execution. This alignment ensures that state policies, tools, and expectations operate in concert to support high-quality mathematics instruction rather than fragmenting implementation across initiatives or divisions.

G. Launch Evaluation and Continuous Improvement Cycles

An independent evaluation partner will conduct both formative and summative analyses to examine implementation fidelity, instructional quality, teacher practice, and student outcomes across cohorts. Evaluation efforts will be supported by evaluation and continuous improvement tools, including readiness assessments, observational rubrics, HQIM implementation checklists, MTSS alignment tools, and educator surveys.

Findings will inform ongoing adjustments to tools, guidance, and supports, enabling continuous improvement and guiding decisions about statewide scaling and long-term sustainability.





CONCLUSION

North Carolina Counts on Math (NCCOM) represents one of the nation's most comprehensive statewide efforts to strengthen mathematics instruction. Built on the analysis, collaboration, and shared vision of the NCCOM Working Group, the initiative reflects a clear commitment to ensuring that every student – regardless of zip code or circumstance – has access to coherent, rigorous, and conceptually rich mathematics learning. As this report makes clear, meaningful improvement in math outcomes requires system-level alignment, not isolated programs or short-term solutions.

By prioritizing early mathematics, NCCOM advances both educational equity and long-term economic opportunity. Early math proficiency strongly predicts later academic success, postsecondary readiness, and workforce outcomes.[23] The initiative's focus on high-quality instruction, early identification of unfinished learning, and effective intervention systems is designed to ensure that students who have historically been underserved receive the instructional experiences necessary to thrive.

Equally important, NCCOM demonstrates the power of shared leadership. Educators, policymakers, higher education leaders, and state agencies worked together to articulate a clear instructional vision and develop implementation recommendations that build lasting capacity across the system. North Carolina now has a defined implementation chain, a multi-year cohort model, and aligned strategies – including HQIM adoption, curriculum-anchored professional learning, Advanced Teaching Roles, and a universal K-5 numeracy screener – that together establish the foundation for sustained improvement.

While the work ahead will require continued leadership, funding, and attention to implementation quality, the state now has the roadmap and momentum to succeed. North Carolina Counts on Math is not simply an initiative: It is a durable strategy for coherence, excellence, and opportunity, positioning the state to become a national model for improving mathematics instruction at scale.

Appendix

NCCOM Working Group

Name	Organization
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Dr. Ashton Clemmons	UNC System
Senator Kevin Corbin	NC Senate
Dr. Jackie Ennis	NC Independent Colleges and Universities (NCICU)
Senator Amy Galey	NC Senate
Senator Michael Lee	NC Senate
Representative Brandon Lofton	NC House
Dr. Janet Mason	NC State Board of Education, Member
Dr. Kelly Anne Mudd	ATR - District Leader (and former MS principal)
Representative Erin Paré	NC House
Dr. Maria Pitre-Martin	NC Department of Public Instruction (DPI)
Representative David Willis	NC House
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Dr. Debra Dowless	Public Schools of Robeson County
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Dr. Tammy Howard	NC Department of Public Instruction (DPI)
Tammy Lackey	NC Department of Public Instruction (DPI)
Sarah Lefebvre	Union County Public Schools
Maria Lord	NC House Staff (Representative Blackwell's Office)
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Amy Rhyne	Implementation Expert
Sneha Shah-Coltrane	NC Department of Public Instruction (DPI)
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Dr. Andrew Smith	NC Senate Staff (Senator Michael Lee's Office)
Harlan Solsbery	NC Senate Staff (Senator Chaudhuri's Office)
Leah Sutton	NC Department of Public Instruction (DPI)
Haley Catherine White	NC Senate Staff (Senator Galey's Office)
Dr. Freddie Williamson	2025 Superintendent of the Year
Rachel Wright Junio	NC Department of Public Instruction (DPI)
Melissa Wynne	Public Schools of Robeson County

Note: This report was shared with all members of the Working Group and Advisory Council for their review prior to publication. Please note that serving as a Working Group member, advisor, or reviewer does not imply endorsement of this report.

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> **Mathematics isn't about numbers, equations, computation, or algorithms; it is about understanding.**
>
> *William Paul Thurston, American Mathematician*

Designing a Shared Vision for K-5 Math in NC

The Vision: Every North Carolina Student in grades K-5 will have access to rigorous, coherent, and engaging research-based mathematics instruction that builds the knowledge, confidence, and durable skills needed for immediate success in elementary math and future accomplishments in secondary math and the workforce.

The Goal: North Carolina's sustained commitment to this vision will establish strong mathematical foundations in the early grades, making the state a national leader in NAEP math performance and equipping students with skills for lifelong success.

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