

Policy Brief Math Policy and Practice

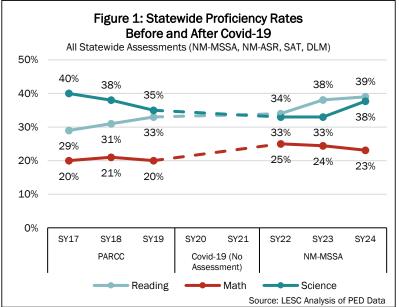
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Mathematics achievement is vital for students' in-school and long-term success, but only one in four students is proficient in math in New Mexico. Proficiency rates also differ significantly when data is disaggregated across student characteristics and grade levels. Figure 1: Statewide Proficiency Rates Before and After Covid-19, below, shows statewide proficiency rates across core academic subjects. Differences in student outcomes can be seen in Figure 2: Math Achievement Gaps, and Figure 3: Percent Proficient by Grade Level, both shown on the next page.



Key Takeaways

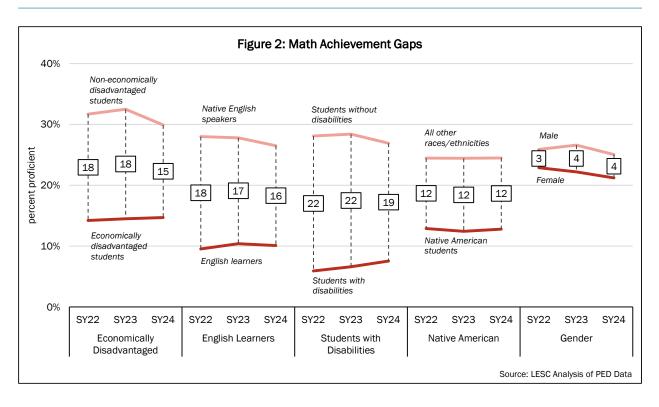
- Math proficiency remains low statewide, with persistent gaps by student group and grade level (Pages 1-2).
- Recent state policies nationwide focus on early screening, interventions, and math-specific professional development (Pages 4-6).
- High-quality math instruction requires both content knowledge and effective pedagogy, but teacher preparation varies widely (*Pages 9-11*).
- A systems-level state policy approach—grounded in vision, governance, educator preparation, and instructional quality—is essential to improve math outcomes in New Mexico (Pages 7-8; 13-14).

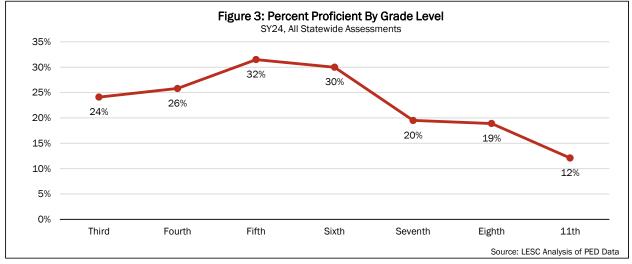
New Mexico is not alone in its declining math outcomes. There has been concern for many years about how students across the United States (U.S.) are performing in math both nationally and internationally. Results from the 2022 Programme for International Student Assessment (PISA), an international exam that measures reading, mathematics, and science literacy of 15-year-olds, found reading and science results in the U.S. held steady between 2018 and 2022, while mathematics achievement declined significantly during the same period.

On the most recent PISA assessment, the U.S. scored 26th out of 81 countries in math, a drop that reflects not only lower average scores but also an increase in the percentage of students performing at the lowest proficiency levels. For comparison, the U.S. ranked sixth in reading and 10th in science among participating countries. As students in the U.S. have consistently fallen behind on international assessments, it has triggered deliberate conversation about what can be done across all levels and branches of policymaking to improve math outcomes.

This brief builds on LESC's long-term study of mathematics (see **Figure 4: LESC Review of Math** for a history of LESC math work to date) and summarizes key findings to offer recommendations on high-impact policy levers that could result in a more cohesive mathematics system. By improving the mathematics system in New Mexico, the state could ultimately have better prepared teachers, clearer student supports, and ultimately, improved student outcomes.





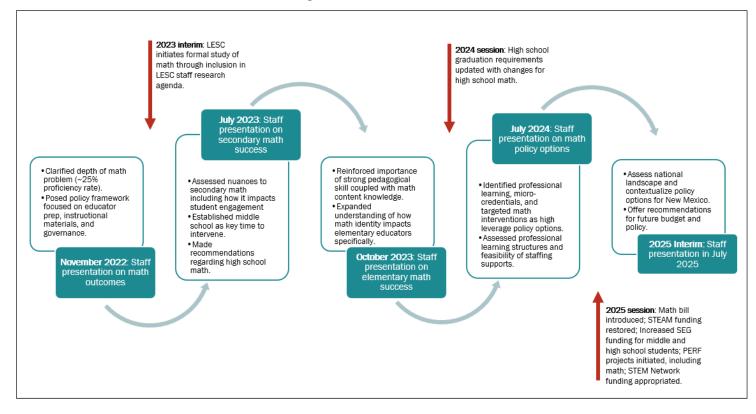


Review of LESC Work to Date

LESC's efforts to define and articulate a comprehensive math approach began in November 2022, when staff presented a review of math data, practices, and initial considerations to improve math following staggering drops in student performance following the Covid-19 pandemic. This triggered LESC's inclusion of math in its research agenda for the 2023 and 2024 interims, prompting three policy briefs during that time, each identifying discrete elements of the system that were impacted through corresponding policy changes such as updating high school graduation requirements during the 2024 session and reinstating funding for science, technology, engineering, arts and math during the 2025 legislative session. **Figure 4: LESC Review of Math**, shown below, summarizes these efforts and corresponding policy and budget decisions to date.



Figure 4: LESC Review of Math



National Math Research and Policy

The current state policy conversation has largely centered around options to support math instruction that mirror state approaches in crafting policy towards a "science of reading." What has complicated this, however, is a lack of universal consensus on a "science of math" that is analogous to the established science of reading. How math is learned and taught requires a complex interaction of core numeracy skills, mastery of concepts in a linear and sequential way, and interventions to address deficits that recognize the complexity in teaching math. At the same time, math is inherently inquiry-based, demanding approaches that blend procedural fluency with conceptual understanding and problem-solving skills. Given these complexities, a nationally unified framework that completely parallels the nation's literacy efforts remains elusive.

Despite this, there is a substantial body of research about effective math instruction that can inform policy and is already underway in many state's legislative efforts. The National Council of Teachers of Mathematics' *Principles to Actions* outlines eight essential teaching practices that emphasize reasoning, representation, and conceptual understanding alongside procedural fluency. <u>Research</u> from MDRC, a national nonprofit, nonpartisan organization that conducts rigorous studies of programs and policies, further highlights the importance of supporting instruction across distinct developmental domains—such as number sense, operations, spatial reasoning, and measurement—especially in early and elementary grades.

The Role of State Policy. State legislative policy can factor into mathematics success in four primary ways:

- Allocating funding and resources;
- Ensuring well-developed methods to approve instructional materials;
- Directing professional learning and development expected of educators; and
- Providing mechanisms to drive interventions and supports.





Primary levers of state policy aligned with these functions can then be focused on improving the quality of instruction (for example, reviewing teacher preparation standards or requiring professional learning of current educators), aligning state systems for a cohesive approach (for example, ensuring funding is used for high quality instructional materials), or providing for assessment and intervention tactics to support students (for example, creating and funding tutoring programs, or creating methods to identify students in need).

Effective Math Teaching Practices

The National Council of Teachers of Mathematics' *Principles to Actions* outlines eight research-based teaching practices that are foundational to high-quality math instruction. These practices focus on engaging students in reasoning, making sense of mathematical ideas, and building conceptual understanding alongside procedural fluency. They include:

- Establishing mathematics goals to focus learning
- Implementing tasks that promote reasoning and problem solving
- Using and connecting mathematical representations
- Facilitating meaningful mathematical discourse
- Posing purposeful questions
- Building procedural fluency from conceptual understanding
- Supporting productive struggle
- Eliciting and using evidence of student thinking

While these practices represent instruction at the classroom level, and are not policy directives, state policy can play a supportive role by creating conditions that make it more likely teachers can adopt and sustain them. For example, policies that promote the use of high-quality instructional materials, require or fund aligned professional learning, and encourage collaboration and data-informed teaching can help bring these practices into classrooms more consistently. In this way, state policy does not prescribe pedagogy but can strategically support an environment where these practices thrive.

Recent State Policy

In the last few years, state lawmakers have increasingly introduced legislation to address the nation's concerning math outcomes. In 2025 alone, the National Conference of State Legislatures (NCSL), a national nonpartisan organization that supports state legislatures, reported there were 146 bills related to math introduced across 16 states. Of these, 31 bills were adopted or enacted. While not exhaustive, some of the most pertinent legislation in recent years is summarized below:

- Alabama passed <u>Senate Bill 171</u> in 2022, creating a postsecondary mathematics task force to develop guidelines for early childhood and elementary math instruction. The legislation also requires schools identified as low-performing in math to participate in professional learning specified by the state's department of education.
- Arkansas passed <u>Senate Bill 294</u> in 2023, requiring monitoring and intervention plans for thirdthrough eighth-grade students who fall below grade level in math. The bill also directs its state education secretary to engage with stakeholders with expertise in early numeracy.
- Colorado passed <u>House Bill 1231</u> in 2023, requiring the department of education to annually publish and periodically update a list of evidence-informed math curricula and assessment options. The list must be developed in consultation with educators and math experts and revised at least every four years.
- Florida passed <u>House Bill 7039</u> in 2023, requiring supports for kindergarten through fourthgrade (K-4) students identified with a deficiency in mathematics or dyscalculia, including parent notification and district-level monitoring. The bill also directs the department of education to publish lists of approved math interventions, programs, curricula, and supplemental materials, and to make legislative recommendations on teacher preparation and math professional development.



- Indiana passed <u>House Bill 1634</u> in 2024, addressing both early and middle school math. The bill mandates placement of middle school students who meet proficiency benchmarks into advanced math courses, with a parent opt-out provision. It also requires numeracy screening for kindergarten through second-grade (K-2) students and review of teacher preparation programs, with the potential loss of accreditation for programs that do not meet expectations.
- Iowa enacted House File 784 in 2025 to make several changes across its education system to support math. The bill includes requirements for the state department of education to: 1) Develop and distribute family-centered resources to support math knowledge at home; 2) Provide teachers with evidence-based professional development related to high-quality math instruction; 3) Develop and distribute a comprehensive state mathematics plan to schools; and 4) Develop and publish a list of valid and reliable mathematics screeners. The legislation also requires higher education institutions to include math methods in their teacher preparation programs and sets expectations for teacher candidates to demonstrate competency in math as a condition of licensure. Finally, the bill mandates that schools assess students in kindergarten through sixth grade at least three times each year. Students identified as "persistently at risk" must be assessed every other week, provided with math supports and interventions, and assigned a personalized mathematics plan developed in consultation with their parents.
- Kentucky passed <u>House Bill 162</u> in 2024 to establish the Kentucky Numeracy Counts Act. The law mandates **math screening** for kindergarten through third-grade (K-3) students, **intervention plans** for those with identified needs, and evidence-based math instruction in teacher preparation programs. It also funds **professional development and coaching** for early grade math educators.
- Louisiana passed House Bill 321 in 2025, requiring teacher certification applicants to either complete specified coursework in foundational numeracy or complete state-approved training. It expands professional development mandates to all kindergarten through third-grade (K-3) math teachers and requires public school authorities to assign numeracy coaches to support these grades. The bill allows stipends for numeracy training completed outside normal work hours or delivered through job-embedded models.
- Oklahoma passed <u>Senate Bill 140</u> in 2025, enacting the Oklahoma Math Achievement and Proficiency Act. The law requires universal math screening three times annually, classroom use of evidence-based instruction, and math interventions. It mandates scientifically based math training for candidates seeking alternative or emergency elementary teaching certificates, creates a statewide mathematics revolving fund, directs the department of education to adopt approved screening tools, and institutes new district reporting requirements.
- Texas passed <u>House Bill 2</u> in 2025, which is a comprehensive school finance reform bill that includes components related to math. The bill requires screeners for K-3 students, progress monitoring, evidence-based literacy and math interventions, and professional development academies for math and reading interventionists.
- Virginia passed <u>House Bill 938</u> in 2022 requiring its board of education to convene a group of stakeholders to advise its General Assembly on ways to promote excellence in math instruction.
- West Virginia passed <u>House Bill 3035</u> in 2023 to address both literacy and numeracy development. The law requires the state board of education to establish approved kindergarten through grade three (K-3) screening, and/or benchmark assessments. The bill also requires elevation of a multi-tiered system of supports for intervention delivery.

Review of legislation in other states reflects a growing consensus around key strategies to address declining math achievement and early numeracy gaps. While each state varies in its approach, several consistent policy actions are emerging across legislative efforts, as shown in **Figure 5: Common Themes in Recent Math Legislation**, displayed below:



Figure 5: Common Themes in Recent Math Legislation

Universal Screening and Early Identification

• Many states with recent policy changes—including lowa, Florida, Kentucky, Texas, and Oklahoma—now require universal math screening in early grades (K-3 or K-6), with many mandating multiple screenings per year. Some states (Oklahoma, Florida) also require screening for dyscalculia. These screeners serve as early warning systems to identify students at risk for long-term math difficulties.

Tiered Interventions and Individualized Support Plans

• Most states have embedded some form of multi-tiered system of supports (MTSS) or equivalent response frameworks. Laws in lowa, Oklahoma, and Kentucky mandate the development of individualized math intervention plans for students deemed persistently at risk, while Arkansas and Florida require structured interventions, including high-dosage tutoring, remediation blocks, and regular progress monitoring.

Emphasis on High-Quality Instructional Materials and Evidence-Based Programs

• States like Colorado and Florida require departments of education to maintain approved lists of math curricula, screeners, and interventions. These lists are often tied to funding eligibility or intervention requirements and must be developed in consultation with experts.

Support for Educator Professional Development and Preparation

• Many states (Texas, Alabama, Louisiana, for example) are investing in long-term professional learning through math academies, coaching programs, and required training in math pedagogy. Several states also require revisions to teacher preparation programs to ensure new teachers demonstrate math competency and receive training in foundational numeracy instruction.

Use of Math Coaches, Specialists, or Interventionists

 At least five states reviewed explicitly support or require the use of math-specific professionals to assist with implementation of interventions. Alabama mandates math coaches statewide, while Texas and Louisiana support Math Interventionist Academies or certification-based stipends. These staffing supports reflect a broader recognition that high-quality instructional improvement requires embedded expertise.

Parent Engagement and Notification Requirements

• States such as Florida and lowa require parental notification when students are identified as at risk in math, and some (lowa, for example) mandate family consultation in developing personalized intervention plans. These provisions aim to bring families into the learning and support process more intentionally.

Integration with Broader School Improvement and Accountability Systems

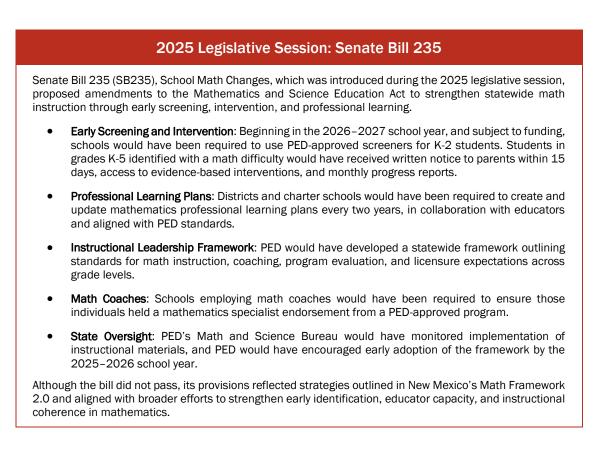
• Several states tie math supports to broader systems-level planning. For example, Arkansas requires districts to report on math intervention delivery, and Oklahoma established a statewide mathematics fund with district accountability mechanisms. These systems support sustained implementation and policy coherence.

Together, these trends suggest states are moving beyond generalized calls for math improvement toward structured, systems-level approaches that combine early identification, targeted support, educator capacity building, and curricular alignment. While implementation quality will vary and differ across state contexts, the legislative direction signals growing alignment between research and policy in mathematics education. This is promising as the research base for strong math instruction is well identified, and what has been missing most from the discourse is how to operationalize and scale effective strategies to all teachers and in turn, students.

Despite this momentum, long-term evaluation of state legislative efforts is not yet available and may not show impact for several years. As many of these policy proposals have been enacted quite recently, it will take ongoing monitoring and review to understand how discrete policy choices impact students, teachers, and math outcomes.

If lessons from structured literacy implementation, alongside existing learning science discourse, are any indicator, many of these efforts could take seven to 10 years to show measurable and sustained impact on student outcomes.





New Mexico's Levers Toward Action

Considering national and New Mexico-specific context, the existing research base on how to improve math outcomes, and current policy and budget feasibility, LESC staff have identified four policy levers that most lend themselves to productive state action in mathematics, specific to New Mexico.

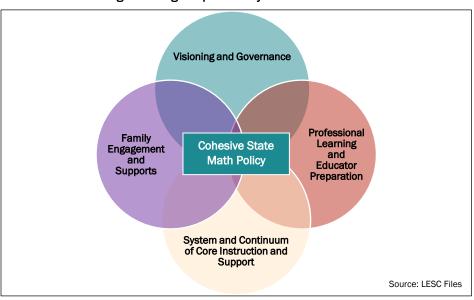


Figure 6: High-Impact Policy Lever Focus Areas



Each of these areas reflects not only where state-level action can be most effective, but also where coherent, sustained policy can support long-term systems change. While individual math programs or targeted interventions can yield short-term gains, sustained improvement in math achievement, particularly for New Mexico's students who have the lowest math outcomes, requires aligning supports across instructional quality, educator capacity, student learning conditions, and leadership structures.

- Foundationally, advancing a strong vision and governance structure for mathematics at the state level ensures alignment across the system (from the Legislature to PED to districts and schools), coherence across initiatives, and the long-term investment needed to support systemic reform. Governance and visioning levers allow the Legislature to define expectations, coordinate resources, monitor implementation, and hold the system accountable for student and teacher outcomes.
- Second, strengthening educator preparation and professional learning ensures both new and current teachers are equipped to deliver math instruction grounded in deep content knowledge and effective pedagogy. Research continues to show teachers' math content knowledge and their confidence in teaching mathematics are key predictors of student success, particularly in the early grades where foundational numeracy is built.
- Third, supporting a system and continuum of core instruction allows schools to deliver consistent, high-quality math instruction and respond to student needs through layered academic supports. The state's multi-layered system of supports (MLSS) framework provides an existing structure to scale this work, particularly when aligned with high-quality instructional materials and formative assessment practices. A strong system should include improving Tier 1 instruction while also making sure there are adequate supports for interventions when needed and across all grade levels: elementary, middle, and high school, each of which requires specific instructional strategies for both core instruction and meaningful intervention.
- Finally, **engaging families and caregivers** in meaningful ways strengthens students' math identity, reinforces high expectations at home, and bridges learning across school and community contexts. Research and national exemplars highlight family engagement—especially when culturally and linguistically responsive—can play a pivotal role in narrowing early achievement gaps and promoting long-term academic resilience.

Together, these four levers offer a blueprint for building a statewide mathematics system that supports excellent, equitable instruction and measurable improvement in student math achievement.

Visioning and Governance

Advancing a strong statewide vision for mathematics provides the foundation for systemic reform, aligning the efforts of the Legislature, the Public Education Department (PED), school districts, and educators. The <u>New</u> <u>Mexico Math Framework 2.0</u>, developed by PED, calls for system leaders to cultivate coherence across policies, programs, and instructional practices, emphasizing leadership must be both instructional and collaborative in nature. PED has begun this work by outlining a unified direction in the updated framework, identifying principles for rigorous instruction, and embedding these principles into initiatives like the adoption of high-quality instructional materials, the use of NM DASH for continuous improvement planning, and the development of professional learning pathways.

Legislative governance levers, such as funding for sustained professional learning, codifying expectations for math instruction, and requiring statewide reporting on progress, can ensure this vision is implemented consistently and with accountability. In particular, the framework emphasizes the role of shared leadership structures, where teachers, principals, and system leaders are collectively responsible for improving student outcomes. A strong governance model helps ensure that state resources and policy efforts reinforce, rather than fragment, this coherent approach to math improvement.

Further, existing state structures such as the state's Math and Science Advisory Council (MSAC), and recent state action in which the Legislature funded a statewide science, technology, engineering, and mathematics (STEM) network could lend themselves to a sound governance structure. MSAC, for example, includes practitioners with



expertise in math from around the state, and the council advises PED on changes that could be beneficial to improve math outcomes. The STEM network also calls for regional hubs and has been scoped by PED to focus specifically on math in its initial development.

Professional Learning and Educator Preparation

Teacher preparation and ongoing professional learning remain critical levers for improving student math outcomes in New Mexico. The Math Framework 2.0 emphasizes that effective math instruction requires deep content knowledge, culturally and linguistically responsive practices, and the ability to support mathematical discourse and conceptual reasoning. These skills also require a high-quality teacher workforce.

In New Mexico, PED has launched efforts such as microcredentialing for elementary math educators, in partnership with the Math and Culture Connection (MC²) at New Mexico State University, to build this capacity. These microcredentials, known as NUMeROS, are aligned with both the framework and the eight effective math teaching practices outlined by the National Council of Teachers of Mathematics (NCTM). PED is using some portion of public education reform fund (PERF) appropriations for math (\$13.5 million for FY26 through FY28) to also support the NUMeROS project and expand the number of teacher who have access to the training. PED reports it is also investing in job-embedded coaching, including the deployment of math content specialists and summer math institutes that combine student enrichment with teacher learning.

Despite these efforts, variability in teacher preparation programs and limited opportunities for in-depth, sustained professional development remain challenges. Strengthening policy requirements for math-specific coursework in teacher prep programs and scaling high-quality, practice-based professional learning statewide would help ensure all educators, especially those in early and elementary grades, are equipped to build foundational numeracy and support all learners.

Institution	Traditional Licensure Programs	Alternative Licensure Programs	
Central New Mexico Community College (CNM; Albuquerque)	Not offered	Elementary, Secondary, Special Education, Early Childhood	
Cooperative Educational Services (CES: Albuquerque)	Not offered	Elementary, Secondary, Special Education, Education Leadership	
Eastern New Mexico University (ENMU; Portales)	Bachelor's degree offered Programs offered for Early Childhood, Elementary, Secondary, Special Education, Blended Elementary/Special Education, Elementary with Bilingual/ESL, School Counseling, Educational Administration	Elementary, Secondary, Special Education	
New Mexico Junior College (NMJC; Hobbs)	Not offered	Elementary	
New Mexico Highlands University (NMHU; Las Vegas and Rio Rancho)	Bachelor's degree offered Programs offered for Early Childhood, Elementary, Dual Special Ed & Elementary, Secondary, Special Education, Educational Leadership	Elementary, Secondary, Special Education	
New Mexico Institute of Mining and Technology (NMT; Socorro)	Minor in Secondary Education; No standalone bachelor's degree offered	Elementary, Secondary	
New Mexico State University (NMSU; Las Cruces)	Bachelor's degree offered Programs offered for Agriculture and Extension, Early Childhood, Elementary, Family and Consumer Science, Music, Physical Education, Secondary, Special Education, Educational Leadership	Agriculture and Extension, Elementary, Secondary, Special Education	
Northern New Mexico College (NNMC; Española)	Bachelor's degree offered Programs offered for Elementary, Early Childhood	Elementary, Secondary, Special Education	
San Juan College (SJC; Farmington)	Not offered	Elementary, Secondary, Special Education	
Santa Fe Community College (SFCC; Santa Fe)	Not offered	Elementary, Secondary, Special Education, Early Childhood	

Table 1: New Mexico Educator Prep Programs



University of New Mexico (Albuquerque)	Bachelor's degree offered Programs offered for Early Childhood, Elementary, Art, Music, Physical Education, Secondary, Special Education, Educational Leadership	Elementary, Secondary, Special Education	
University of the Southwest (Hobbs)	Bachelor's degree offered Programs offered for Early Childhood, Elementary, Secondary, Special Education, Educational Leadership	Elementary, Secondary, Special Education	
Western New Mexico University (Silver City)	Bachelor's degree offered Programs offered for Career and Technical Training, Early Childhood, Elementary, Secondary, Physical Education, Special Education, Educational Leadership		

Source: PED

As shown in **Table 1: New Mexico Educator Prep Programs**, above, New Mexico has 13 approved educator preparation programs (EPPs). These programs are divided into two main types: 1) A traditional pathway; and 2) An alternative licensure pathway. All 13 programs offer alternative licensure programs, which are typically geared toward candidates who already hold a bachelor's degree and seek a streamlined path into teaching. Of the 13 programs, nine offer traditional licensure programs, which usually involve completing a bachelor's or master's degree in education, including coursework and student teaching. Although both traditional and alternative programs result in pathways to become a licensed teacher in New Mexico, the academic requirements differ.

Current Traditional Educator Prep Requirements. The Legislature has established general course requirements for licensed teachers to meet through state law but has left specific educator preparation program course requirements up to PED to develop. According to <u>Section 22-10A-6 NMSA 1978</u>, individuals seeking traditional licensure in elementary, special, early childhood, or secondary education must complete a minimum of 41 credit hours in the college of arts and sciences that include:

- Nine semester hours in communication;
- Six semester hours in mathematics;
- Eight semester hours in laboratory science;
- Nine semester hours in social and behavioral science; and
- Nine semester hours in humanities and fine arts.

In addition to these course requirements, a candidate seeking an elementary license is required to complete six hours of reading courses, and a person seeking a secondary license is required to complete three hours of reading courses in subject matter content. Further, state law specifies PED shall require, prior to initial licensure, no less than 16 weeks of student teaching, a portion of which shall occur in the first 30 credit hours taken in the college of education and shall be under the direct supervision of a teacher and a portion of which shall occur in the student's senior year with the student teacher being directly responsible for the classroom.

Across traditional educator preparation programs, general math credit requirements range from six to nine credit hours, which fulfill the general education or specific degree requirement, as well as three credits in math pedagogy. For example, UNM requires six credits of general math, but offers a dedicated course focused on teaching mathematics in K-8 classrooms. Pre-service teachers may also pursue a math concentration. NMSU, embeds math pedagogy in its integrated K-8 methods and offers enrolled students both a math concentration and endorsement option. ENMU requires 12 credits in math focusing on three content courses for specific grade bands, as well as a course in math pedagogy. NMHU, USW, and NNMC require six math credits in a content area and at least three in math pedagogy. WNMU offers a class designed to help teacher candidates pass the math content assessment; however, recent legislation (Laws 2025, Chapter 146) amended the School Personnel Act allowing applicants for a Level 1 license to complete a teacher portfolio in lieu of the math content assessment.

Alternative Licensure Requirements. Alternative licensure is different. <u>Section 22-10A-8 NMSA 1978</u> specifies that to qualify for a Level 1 alternative license in New Mexico, a person must meet the following criteria:

• Hold a bachelor's degree and pass a state-approved subject-area exam; or



- Hold a master's degree that includes at least 12 graduate credit hours in the subject area; or
- Hold a doctoral or law degree;

And, the individual must also:

- Pass the New Mexico teacher assessments, including the science of teaching reading for elementary licenses (required after January 1, 2013); and
- Within two years of starting to teach, complete 12 semester hours of instruction in teaching principles from a department-approved program; or demonstrate, with school district or state agency support, that they meet department-approved competencies for Level 1 teachers aligned to the appropriate grade level.

These pathways are a core strategy in creating a more robust teaching workforce by allowing individuals to enter the profession through a variety of avenues. While important to the system, the differing requirements also raise questions about teachers' readiness to teach math, both from a content perspective in terms of candidates having strong math skills, and from a pedagogical perspective in terms of candidates knowing how to teach math. As the Legislature considers options, one recommendation that continues to appear in the math field, notably from MSAC, is to require all teachers to take at least three credit hours of a math methods course—this would impact alternatively licensed teachers the most as such a course is not required in all programs.

NCTQ Policy Levers to Support Educators

In June 2025, the National Council on Teacher Quality (NCTQ), a national nonprofit focused on ensuring all students have quality teachers, released a report summarizing five key policy levers for states to support teachers in successfully teaching mathematics. The recommendations, alongside NCTQ's analyses of how New Mexico fares in aligning to their recommendations, are included below:

1. Set specific, detailed math standards for teacher preparation programs.

NCTQ Rating of New Mexico: Mixed. The state provides clear, detailed guidance to teacher preparation programs about what to teach in core math content topic areas (numbers and operations; algebraic thinking; geometry and measurement; and data analysis and probability), but the state does not explicitly address math-specific pedagogy in standards for teacher preparation programs.

2. Review teacher preparation programs to ensure they provide robust math instruction.

NCTQ Rating of New Mexico: High. The state oversees its own program reviews, allowing it to gain adequate information about what future teachers are learning; New Mexico also requires the analysis of syllabi in the program review process.

3. Adopt a strong elementary math licensure test and require all elementary candidates to pass it.

NCTQ Rating of New Mexico: Poor. The state does not require all candidates to pass a licensure test and does not publish pass rate data.

4. Require districts to select high-quality math curricula and support skillful implementation.

NCTQ Rating of New Mexico: Mixed. The state provides a recommended list of high-quality math materials and funding for these materials, but does not require these are used in schools and does not require districts to publish which curricula they are using.

5. Provide professional learning and ongoing support for teachers to sustain effective math instruction.

NCTQ Rating of New Mexico: High. The state provides funding for professional learning for inservice teachers in math and aligns these opportunities with HQIM implementation but does not fund math coaches or specialists.

System and Continuum of Core Instruction

A coherent continuum of math instruction is central to providing all students with equitable access to rigorous, grade-level content and timely academic support. New Mexico's Math Framework 2.0 situates core instruction



within the multi-layered system of supports (MLSS), emphasizing that every student should receive universally designed, culturally responsive instruction aligned with the Common Core State Standards for Mathematics. High-quality instructional materials are a critical component of this system, and PED has expanded its list of state-reviewed high-quality instructional materials while supporting districts in their adoption through funding and technical assistance.

The framework also underscores the importance of formative assessment and data-informed decision making, which are core features of both MLSS and the NM DASH planning process. New Mexico schools are increasingly expected to use data cycles to identify student learning needs and to provide targeted Tier 2 and Tier 3 interventions—such as high-dosage tutoring or double-dosing in math—without pulling students out of core instruction. By aligning classroom practices, intervention models, and system-level planning tools, the state can build a more cohesive instructional system that supports every student in developing conceptual understanding, procedural fluency, and mathematical confidence.

Bolstering of core academic instruction is also common in recent state policy changes nationwide. **Table 2: State Examples of Student Interventions and Teacher Supports**, shown below, highlights the continuum of core academic instruction in Tiers 2 and 3. For these types of interventions to be successful, however, solid Tier 1 instruction must be in place. Therefore, while many state policy efforts focus on interventions, it is just as important to focus on increasing teachers' readiness to implement sound Tier 1 instruction.

State	Tier 2 (Targeted Interventions)	Tier 3 (Intensive Interventions)	Staffing Supports
<u>Alabama</u>	 Summer Mathematics Achievement Program for K-5 students with math deficiencies Mathematics coaches providing job-embedded support (modeling, co-planning) Professional learning facilitated through Office of Mathematics Improvement 	 State intervention for persistently low- performing schools Intensive coaching and external support via School Turnaround Academy 	Requires the use of mathematics coaches statewide Establishes an Office of Mathematics Improvement to oversee staffing and support
<u>Florida</u>	 Immediate, explicit math interventions for K-4 students with deficiencies or dyscalculia (before failing grades) Use of state-approved intervention programs, curricula, and supplemental materials, delivered by qualified teachers/tutors 	 Continued monitoring and adjustment of instruction District-developed individualized plans after each grading period 	 Authorizes districts to assign or contract with interventionists or specialists in math strategies Department of education publishes and maintains lists of approved intervention providers
<u>Arkansas</u>	 Math intervention plans for third through eighth- grade students not at grade level High-dosage tutoring (≥ 3 sessions/week, 1:1 or small group) Extended instructional time during or after school 	 Teachers holding high effectiveness or value-added scores District reporting on intervention types and student participation 	 Encourages staffing of highly effective teachers for intervention delivery Authorizes state-led training for coaches and tutors, but coaching not mandated
<u>Texas</u>	 Mandatory attendance in Math Intervention Academies for K-8 teachers, coaches, and interventionists by 2030–31 TEA-recommended intervention modules (23 routines, explicit instruction aligned to TEKS) 	 Additional instructional days grants for schools offering intervention days Math Interventionist Academies to build educator capacity 	 Math Interventionist Academies and professional development pathways for math specialists and coaches Intervention delivery tied to designated instructional roles
<u>lowa</u>	 Biweekly small-group instruction targeting skill gaps Biweekly progress monitoring via approved screeners 	 Co-developed Personalized Math Plans (PMP) with parents Intensified instruction (smaller group, diagnostic-based) Continued until benchmarks are met 	 Encourages districts to designate intervention teams including specialists Allows flexible staffing approaches for Tier 3 interventions, but no mandate for coaches
<u>Oklahoma</u>	 Individualized intervention plans within 30 days of a low screener result Structured tutoring/remediation during/after school 	 Dyscalculia screening; targeted supports Intensive tutoring (1:1 or small group) State-approved summer math academies Adaptive plan revisions and regular parent communication 	 Districts must assemble intervention planning teams, potentially including math specialists State board may fund additional staff through new mathematics revolving fund

Table 2: State Examples of Student Interventions and Teacher Supports



Family Engagement

Engaging families and caregivers as partners in math learning is a vital yet often underutilized strategy for supporting student success. The New Mexico Math Framework 2.0 highlights the importance of family engagement in developing students' math identities and reinforcing productive beliefs about mathematics. It encourages schools to share timely and specific information about student progress, offer culturally and linguistically relevant resources, and empower families to participate in academic decision-making.

PED supports this work through the New Mexico Engaged framework, which includes strategies for effective academic partnering during conferences and for fostering schoolwide engagement practices. In addition, the framework recommends educators promote math talk at home, support growth mindset messaging, and celebrate student thinking and problem solving in visible ways.

As the state continues to prioritize math improvement, policy can support this lever by funding math-specific family engagement initiatives, requiring districts to include family engagement plans in their school improvement efforts, and integrating family partnership training into educator professional development. When families are equipped and invited to support math learning, students benefit from a consistent, affirming learning environment across home and school.

Policy and Budget Recommendations

The Legislature should...

Policy Brief

- Codify expectations for math instruction, early identification, and intervention while also bolstering state efforts to create support and intervention systems in schools. Lawmakers could consider policy elements similar to those being implemented nationwide for universal screeners, family notification and support plans, and professional learning cycles aligned to the state's math framework. For these to be effective, however, schools must have the capacity to support students-early identification via screening in a school that may lack a math coach, for example, could result in students being identified, but not receiving adequate support, potentially furthering stigmatization rather than improved math outcomes.
- Require math methods coursework for all teacher licensure candidates, including those in alternative programs. Currently, alternative licensure pathways do not universally require math methods coursework. Mandating at least three credit hours would align with MSAC recommendations and could help ensure all new teachers enter the classroom with a foundational understanding of math pedagogy.
- Create statutory authority for statewide math coaching or interventionist models. Other states have codified roles for math coaches and interventionists, and New Mexico could follow suitpotentially leveraging regional support through the newly funded STEM network to create a system of training such coaches consistently.
- Require public reporting on district curriculum adoption and intervention delivery. New Mexico currently provides a recommended list of high-quality math curricula, but districts are not required to report what they use. Reporting could enhance transparency and support statewide instructional coherence.
- Closely monitor math initiatives funded through the public education reform fund (PERF). During the 2025 legislative session, the Legislature appropriated \$13.5 million to PED for FY26 through FY28 for implementation and evaluation of evidence-based math instruction. Initial review of PED's math plan indicates funding will support microcredentialing through the NUMeROS initiative, high quality instructional material monitoring, and an algebra initiative for middle school students. Close monitoring of implementation, uptake, and impact could allow the Legislature to determine which initiatives should be sustained, scaled, or adjusted.
- Continue standalone STEAM funding. Funding STEAM separately allows the state to prioritize math within interdisciplinary learning, while also supporting the broader STEM pipeline. This



complements efforts in early numeracy, high-quality instructional materials, and educator capacity building.

The Public Education Department should...

- Revise licensure requirements to reflect ongoing engagement with math content. PED should explore periodic renewal or microcredential requirements to ensure educators maintain and deepen their math content knowledge throughout their careers.
- Formalize pathways for math endorsement and specialist roles. PED could establish clear endorsement structures, especially for math coaches and interventionists, that align with the state's framework and are tied to professional development opportunities such as the NUMeROS microcredentials.
- Develop and publish implementation metrics aligned with the Math Framework 2.0. Publishing clear benchmarks for district and school engagement with the framework—such as curriculum adoption, professional learning participation, and intervention delivery—would promote shared accountability and could expand the role of the framework in supporting a statewide vision for math.

Educator Preparation Programs should...

- Require dedicated math methods coursework in all licensure pathways. Educator preparation programs could require both traditional and alternative licensure programs to include coursework focused on how to teach math, not just math content itself. This may require revision of program standards and oversight by PED.
- Align program curricula with the eight effective math teaching practices from NCTM. Programs could explicitly integrate strategies such as building conceptual understanding, promoting mathematical discourse, and using evidence of student thinking as NCTM shows these skills are especially critical for early numeracy development.

School Districts and Charter Schools should...

- Identify and invest in staff to serve as math coaches or interventionists. School districts and charter schools should proactively identify high-performing educators with math strengths—not only in content, but also in pedagogy—and support them in obtaining the necessary credentials or training to serve in specialist roles in their schools.
- Align MLSS implementation with the Math Framework 2.0. Schools should ensure Tier 1 core instruction is rigorous and universally designed, with Tier 2 and Tier 3 math interventions aligned to formative assessment data and scheduled without pulling students from essential instruction.
- Engage families as partners in math learning. Implement strategies to build parents' confidence in supporting math at home, including culturally relevant resources, communication about student progress, and collaborative development of intervention plans for struggling students.
- Assess patterns in data to understand high-impact times to intervene and support students in math. Statewide trends consistently find math achievement tends to rise through elementary grades, reach a high in fifth grade, and begin to decline starting in middle school grades. School districts and charter schools should assess their own data to determine if their outcomes match those of the state and if so, ensure support for middle grades as it is a particularly important time to intervene.

