

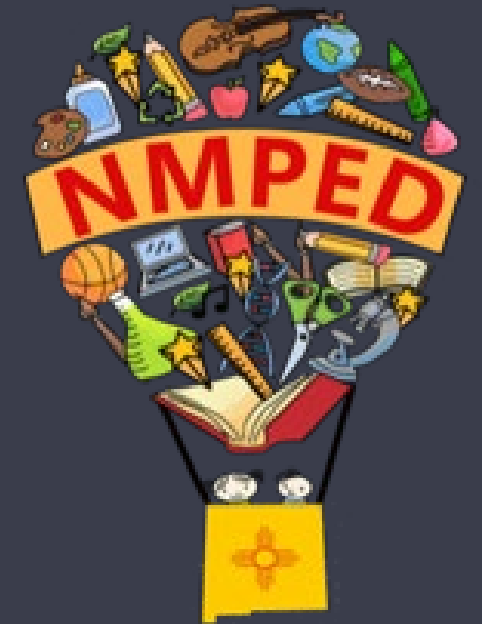
*Presentation for the Legislative Education Study Committee*

# **PED Math Initiatives**

Shafiq Chaudhary, Director  
Math and Science

*July 24, 2025*

*Investing for tomorrow, delivering today.*



*A Presentation by the  
New Mexico Public  
Education Department*

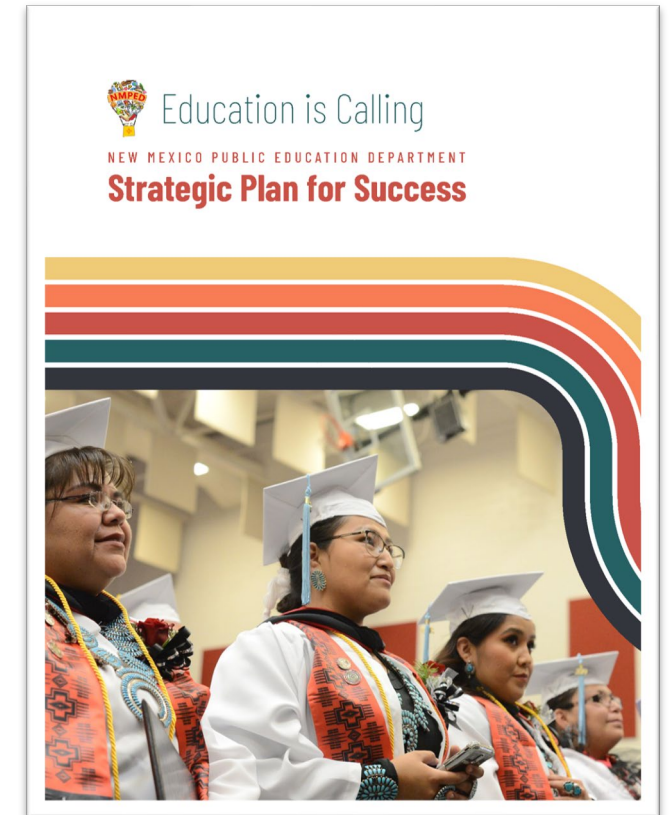
# Topics

- Current mathematics initiatives
- Future mathematics initiatives



# Goal II: Accelerate Mathematics Achievement

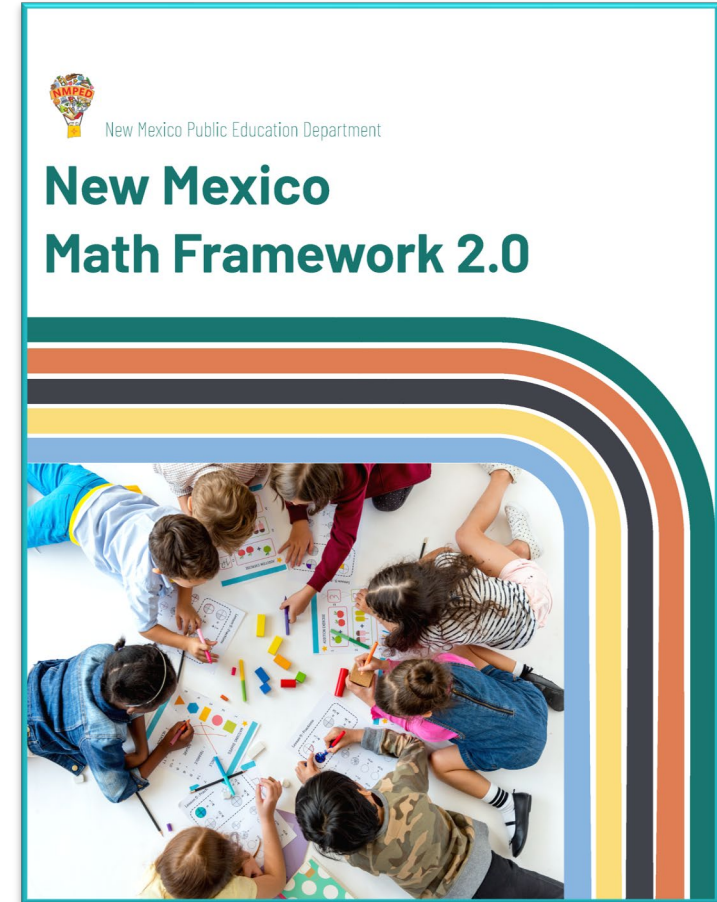
Strategies	
1	Improve mathematics proficiency for all students
2	Provide elementary teachers professional development to support mathematics instruction
3	Reduce mathematics content area teacher vacancies
4	Boost adoption of high-quality instructional materials for mathematics
5	Ensure all educator preparation programs are fully aligned with the principles and best practices of teaching mathematics



# Framework of Systemic Support

## Critical Components

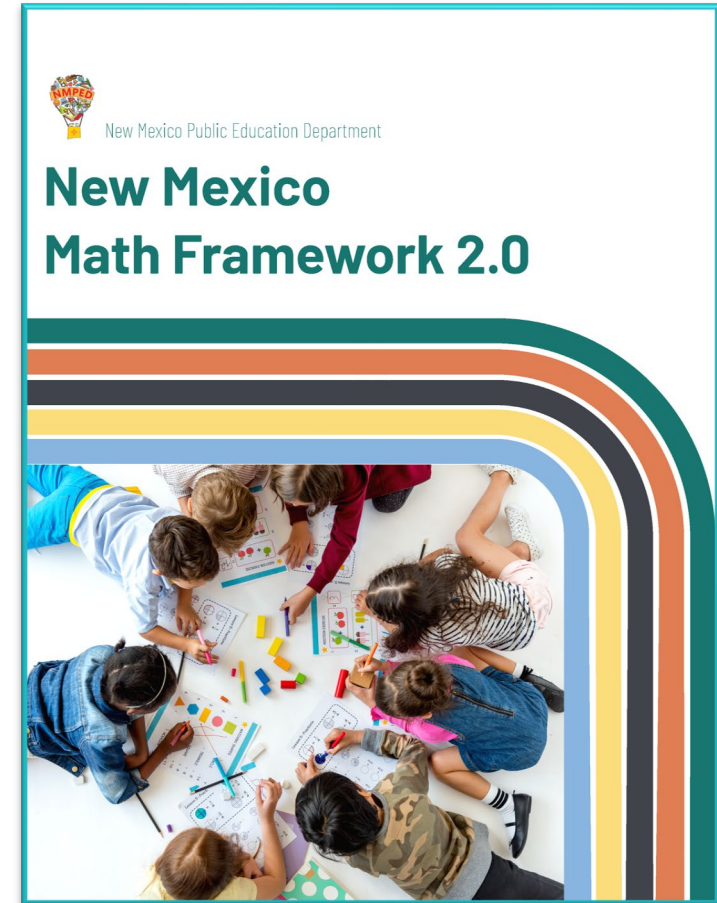
- Leadership
- Core Instruction
- Assessment for Learning
- Professional Learning
- Families and Communities



# Framework of Systemic Support

Common vision of improved student outcomes in math

- Enhanced, ongoing capacity building
- Targeted student supports
- Implement high quality math programming, including instructional materials



# Current PED Initiatives

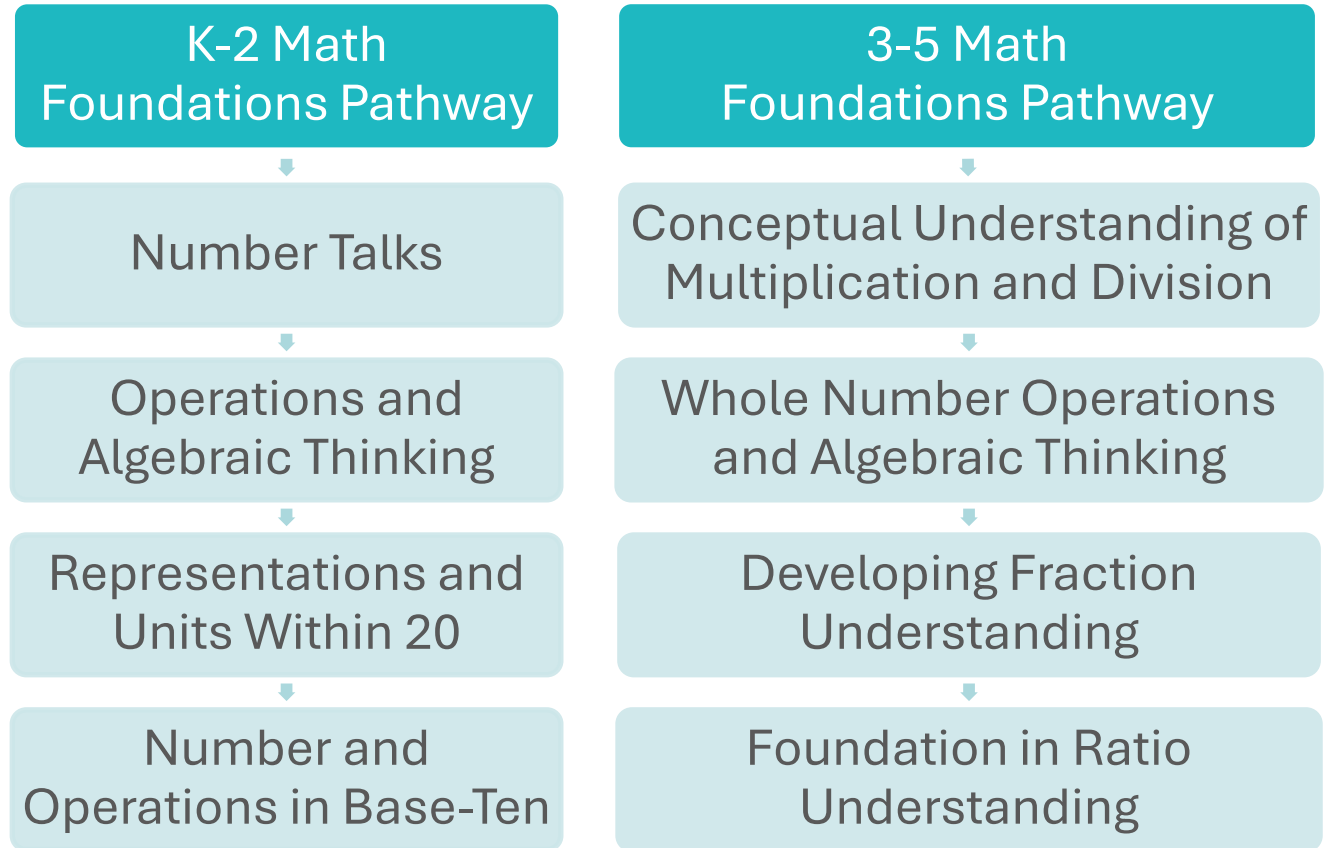




# NUMeROS:

## *Numeracy Unlocks Math Rigor in Our Students*

- Grade K-5 focus
- Builds content and pedagogy
- Engage in 60 hours of professional learning:
  - Build content knowledge
  - Refine instructional practice
  - Analysis of student learning
- Aligned parental resources



Additional funding in SEG to support substitute/stipends for teacher training is recommended.

# Focus on Algebra

- Effective pedagogy emphasizing algebraic thinking and concepts in middle school progression leading to Algebra I
- Support systemic and sustainable schoolwide conversations to analyze instructional practices
- Supports for engaging in job-embedded professional learning towards student-centered instruction



The University of Texas at Austin  
Charles A. Dana Center

WHO WE ARE   OUR WORK   OUR IMPACT

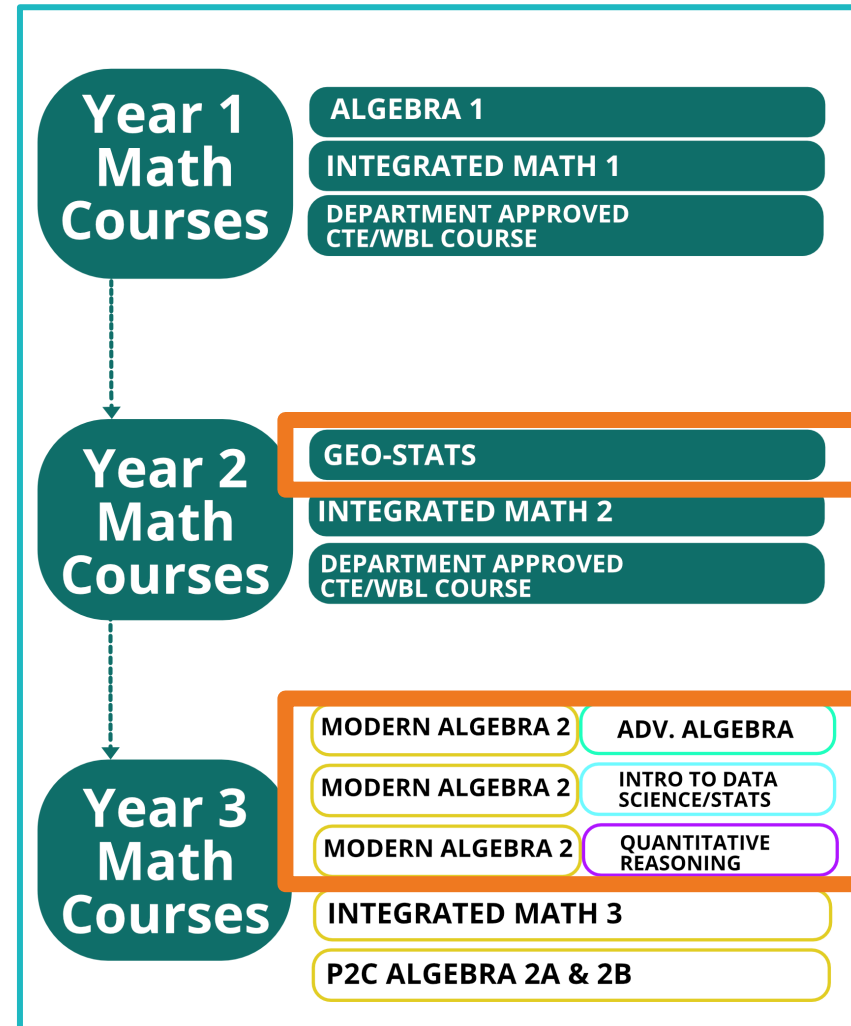
HOME > BLOG > FOCUS ALGEBRA TRANSFORMING MATH EDUCATION NEW MEXICO

Focus on Algebra: Transforming Math Education in New Mexico



# Re-Envisioned High School Math Pathways

- Recommendations from NM math community
  - Individualized learning paths
  - Diversifying mathematics education
  - Real-world application and student engagement
- New math courses are available for utilization in SY2025–26
- Algebra II and Geometry phased out by SY2028–29



# Math Support Strategies

- Implementing HQIM is foundational for quality instruction
  - Success requires sustained effort from teachers and leaders
- Math labs refine understanding of early mathematics skills
  - Targeted support through guided discovery opportunities



## New math materials all add up at Vista Grande Elementary

By Tracy Goldizen Apr 29, 2023



From left, Vista Grande Elementary fifth graders Kain Lopez, Jixie Cardenas, Harrison Boyd, Finn Northness and Elsie Story talked about their math experiences. (Gary Herron/Observer)

By Tracy Goldizen

## Finding right math teaching technique shows results for NM schools

By Barbara Davidson / StandardsWork and Peter Coe / Education consultant Oct 30, 2023 Updated Dec 3, 2024 2 min to read

# Future Math Initiatives



# Math Legislation

A comprehensive multi-faceted, systemic approach inclusive of:

- Monitor annual, ongoing professional learning plans submitted by local educational agencies
- Early support for students struggling with targeted interventions and ongoing progress monitoring, including screeners
- Parental notification with resources
- Leverage math coaches in high need areas
- Robust preparation requirements for alternative licensure candidates
- Automatic enrollment in Algebra 1 in middle school

# Thank you!

## **For Questions**

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# Appendix: Focus on Algebra Impact Video

 The University of Texas at Austin  
Charles A. Dana Center

## Focus on Algebra

Professional Learning Sessions  
New Mexico



# Appendix: Focus on Algebra Two-Year Schedule

## Two-Year Schedule



### Focus on Algebra: Cohort 3

Professional learning events details and [expectations for participation](#)

Dates	Offerings	Participants	Topics
Summer 2025	4-day Summer Math Academy, in-person  Confirmed July 21–24, 2025 Albuquerque, NM	Teachers Instructional Coaches (or C&I Staff)	<ul style="list-style-type: none"> <li>Deepen understanding of the progression of knowledge and skills necessary for student success in Algebra 1;</li> <li>Develop strategies for equitable student engagement in the Standards for Mathematical Practice (SMPs) to support student social-emotional learning (SEL) and positive mathematics identities for teachers and students;</li> <li>Leverage the NM Instructional Scope for Mathematics (NMIS-M) 2.0 and high-quality instructional materials (HQIM) to prioritize content and standards for mathematics success in Grades 6-9;</li> <li>Develop coaching and leadership skills through sample cases of classroom practice and structured tools (Coaches and Administrators)</li> </ul>
	2-day Summer Math Academy, in-person  Confirmed July 23–24, 2025 Albuquerque, NM	Administrators	
School Year 2025–26	2-day Fall Workshop, in-person  Sept 2025 Regional Venues (TBA)	Teachers Instructional Coaches (or C&I Staff)	<ul style="list-style-type: none"> <li>Develop mathematics learning goals to focus instruction and provide just-in-time supports for accelerated learning and access to grade-level content;</li> <li>Support teacher SEL and establish a plan for job-embedded coaching (Coaches)</li> </ul>
	Job-embedded coaching, six, virtual 90min support sessions  Sessions are Tuesdays:  9:30–11:00amMT or 4:00–5:30pmMT	A. Teachers Instructional Coaches (or C&I Staff)	

Last Updated 5.7.2025

# Appendix: NUMeROS

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- [K–2 Math Foundations Pathways](#)
- [3–5 Math Foundations Pathways](#)

# Appendix: High School Math Pathway Courses

- Working Group Report: [\*Making the Case—Re-Envisioned High School Math Pathways\*](#)
- Course Overviews
  - [Geo-Stats](#)
  - [Modern Algebra 2 – Semester 1](#)
    - ✓ [Advanced Algebraic Concepts – Semester 2](#)
    - ✓ [Intro to Data Science and Statistics – Semester 2](#)
    - ✓ [Quantitative Reasoning – Semester 2](#)
- Re-Envisioned High School Math [Pathways PED Implementation Plan](#)
- [Dana Center Mathematics Pathways](#)