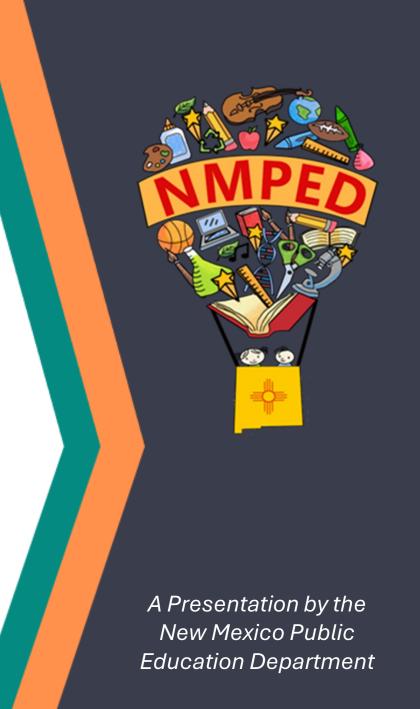
Presentation for the Legislative Education Study Committee

Solving the Math Problem

Shafiq Chaudhary, Director, Math and Science Bureau Public Education Department

July 24, 2024

Investing for tomorrow, delivering today.

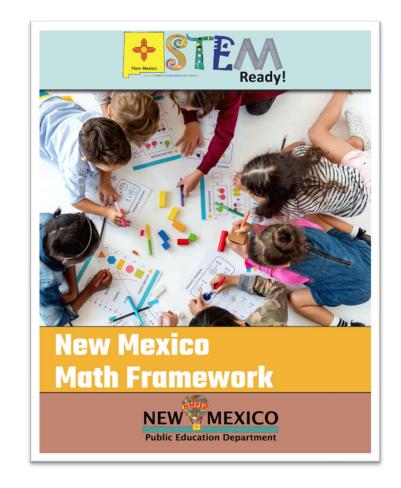


Math Community Priorities

- Improve student outcomes in math
- Support high quality math programming
- Strategically allocate resources into the system
- Work toward a common vision







Investing for tomorrow, delivering today.

Supporting Math Programming

NUMeROS

- Partnership with Mathematically Connected Communities at New Mexico State University
- Year-long pilot of micro-courses with 30 educators
- Natural refinement of instructional practice — learning, applying, reflecting

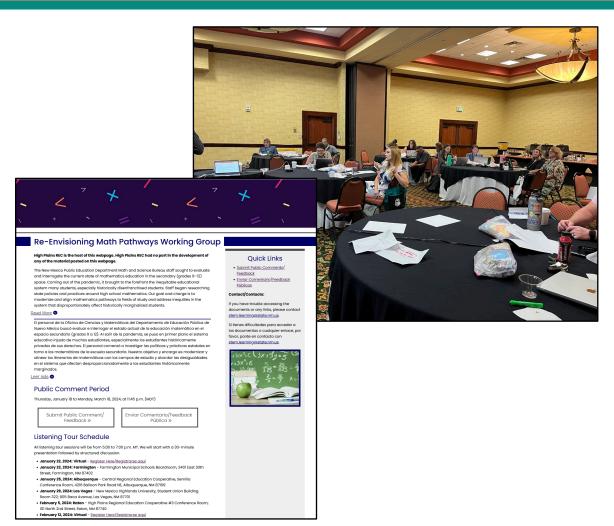
Focus on Algebra

- Developed in partnership with Charles A. Dana Center
- Effective pedagogy emphasizing algebraic thinking and concepts in middle school progression leading to Algebra I
- Support systemic and sustainable schoolwide conversations to analyze instructional programs

Supporting Math Programming

Re-envisioned High School Math Pathways

- Working group of math community members
- Recommendations to modernize
 Algebra II and Geometry
- Release recommendations in
 October



Math Coaching through High Quality Instructional Materials

| | e aba Eternemary eeneet | | | r oood Etomontary oonoot | | | |
|---|-----------------------------------|-----------------------|-----------------------|--------------------------|-----------------------|-----------------------|------------------------|
| Core Action 1: Standards-aligned instruction, content, and rigor | BOY-IPG | MOY-IPG | EOY-IPG | | BOY-IPG | MOY-IPG | EOY-IPG |
| | Core Action 1: 67% | Core Action 1: 94% | Core Action 1: 94% | | Core Action 1: 69% | Core Action 1: 97% | Core Action 1: 100% |
| Core Action 2: Effective instructional strategies Core Action 3: Students engaging in math practices and lessons | Core Action 2: 26% | Core Action 2: 40% | Core Action 2: 65% | | Core Action 2: 30% | Core Action 2: 67% | Core Action 2: 87% |
| | Core Action 3: Core Action 3: 41% | Core Action 3: 63% | | Core Action 3: 20% | Core Action 3: 65% | Core Action 3: 83% | |
| | Overall: 37% | Overall: 55% | Overall: 72% | | Overall: 41% | Overall: 75% | Overall: 89% |

Cuba Elementary School

Pecos Elementary School

- Funding appropriated by the legislature supported dedicated math coaches in two schools
- Teachers in these schools received coaching through the school year in Core Actions 1, 2, and 3
- Trained observers ranked teachers in the Core Actions at the beginning, middle, and end of the school year (BOY, MOY, and EOY)

Legislative Considerations

- Legislative lever for math professional learning
- Funding for math professional learning
- Recurring public school support funding for mathematics and STEM more broadly

Thank you!

For Questions

Shafiq Chaudhary, Director, Math and Science Bureau Shafiq.Chaudhary@ped.nm.gov (505) 231-7368

