



# Scientifically Connected Communities

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# Scientifically Connected Communities

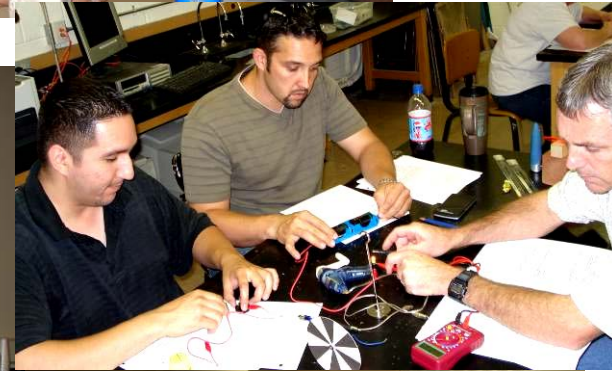
## Vision

- To increase scientific interest, participation, and achievement for *all* students by providing professional development for K-12 educators that promotes & supports science standards-based inquiry learning in the classroom



# SC2 Goals

- Provide teacher professional development & classroom support that promotes inquiry-based teaching strategies
- Increase teachers' science content knowledge
- Establish a professional network where teachers can share best practices



# The Impact of SC2

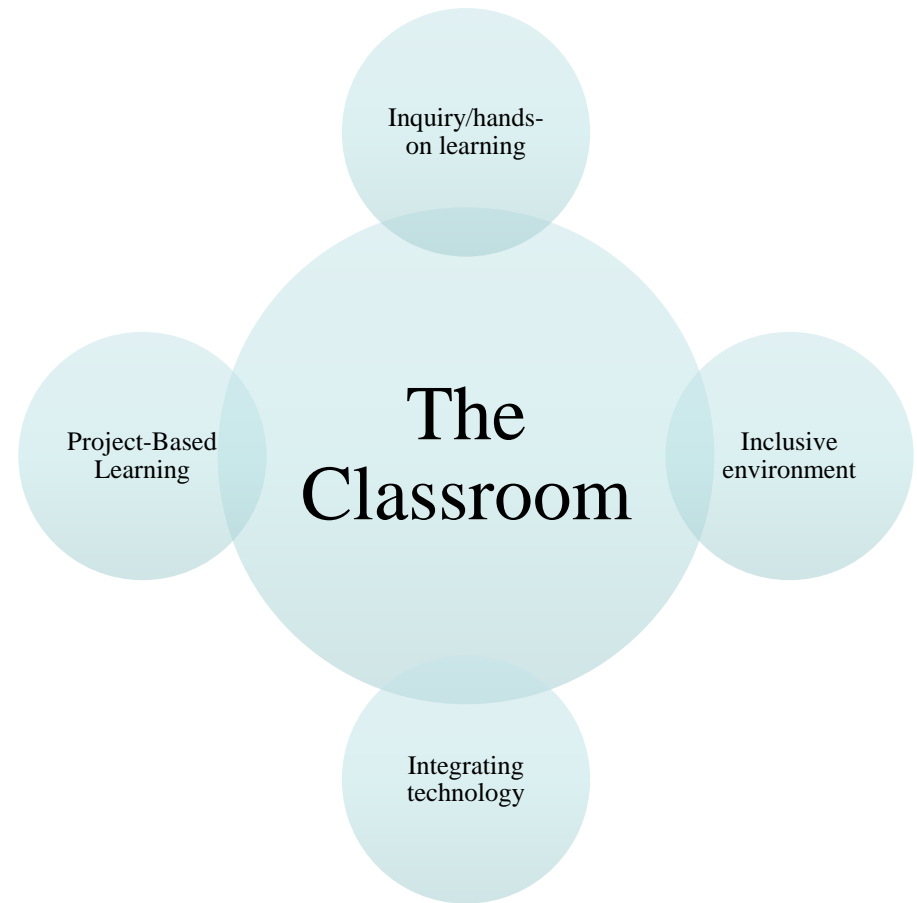
Pre and post survey analysis reflect a positive impact on teachers' participating in SC2

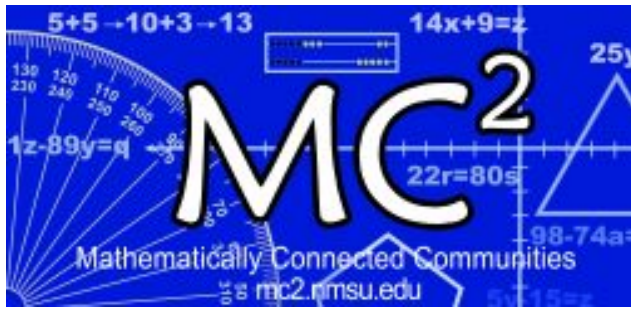


- After PD, teachers increased their understanding of project-based learning by 49%.
- Additionally, teachers recognized the importance of creating an inclusive environment for all students, including integrating culture in the classroom

# The Impact of SC2

- The most important STEM concept teachers learned during the 2017 SC2 Summer Institute is the integration of technology in the classroom.
- Teachers reporting that they will implement Project-Based Learning in their classroom, after PD, **increased by 70%**
- Teachers reporting that they will implement inquiry/hands-on activities in their own classroom, after PD, **increased by 81%**

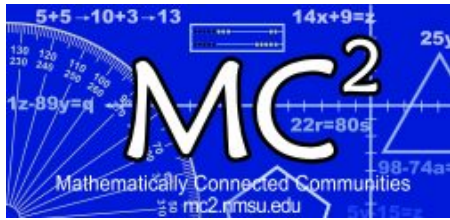




# Mathematically Connected Communities



<http://mc2.nmsu.edu>

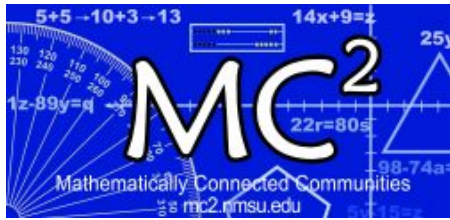


# Mathematically Connected Communities

Federal and state funded partnership of mathematics educators, K–12 teachers, mathematicians, and school administrators from districts across the state of New Mexico

**Goal:** The goal of MC<sup>2</sup> is to improve the mathematics learning for students in grades K–12 through professional learning that

1. Builds teacher mathematics knowledge and pedagogical skills for effective teaching and
2. Promotes district capacity for creating support systems and structures for educator ongoing, job–embedded professional learning

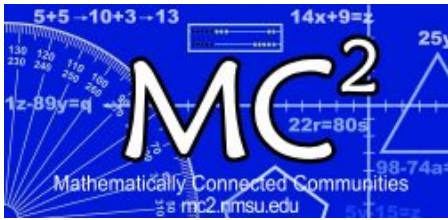


# Mathematically Connected Communities

## Factors Affecting Improvement in Student Learning

- Development of teacher pedagogical content knowledge in CCSS-mathematics
- Implementation of learning from research-based professional development in K-12 classrooms
- Principal support in practicing new instructional strategies
- School-based structures for collegial support and continuous learning



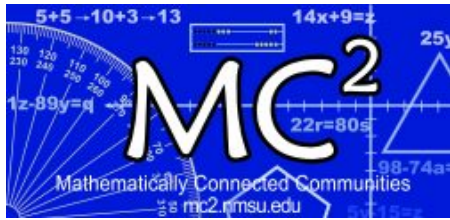


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## Professional Learning Models

- Summer MathLab and Math Content Workshops
- School-based support in PLC and classrooms
- Classroom Materials
- Principal Math Leadership Development
- Teacher Leader Cadre



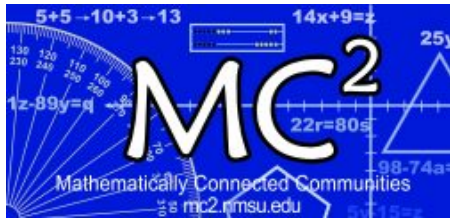


# Mathematically Connected Communities

## Longitudinal Results from Summer Professional Development

Teacher knowledge, confidence, and use of student based learning environments, number talks, effective classroom discourse, questioning, and standards-based lessons showed significant increase from summer, fall, and winter survey results.

Survey results verified by classroom observation data.



# Mathematically Connected Communities

## Funding Considerations

- Federal MSP funding no longer available after 2018. Additional funds required to provide summer professional development in math.
- Funds currently being sought through U.S. Dept. of Education
- Districts and State providing limited funds (above federal funds) to support ongoing professional learning in mathematics



# CORE

Collaborating for Outstanding Readiness in Education

[www.core-nmsu.org](http://www.core-nmsu.org)

**DIRECTOR: Rocio Benedicto**  
[rojustus@nmsu.edu](mailto:rojustus@nmsu.edu)





Collaborating for Outstanding Readiness in Education



### **Vision**

Our vision is for all children in K-3 classrooms to have a strong academic foundation that supports continuous success as a 21st century learner.

### **Our Mission**

Our mission is to assist in improving outcomes for students in New Mexico schools by collaborating with classroom teachers and school leadership to strengthen academic foundations in kindergarten through 3rd grade students.



- **CORE** is a team of dedicated educators which include National Board Certified Teachers, Instructional Specialist, and award winning administrators.
- **CORE** collaborates with educators to improve classroom instruction in reading, writing, math and positive behavior interventions for all students, with an emphasis on students with Special Education needs.
- **CORE** supports principals in strengthening their instructional leadership in order to achieve greater outcomes for students, especially those in the lowest quartile of academic achievement.



# Results Driven Accountability Project

## **Title I and SPED Bureau of the New Mexico Public Education Department (PED)**

1. Improve reading achievement for students in the lowest quartile in grades K-3 as evidenced by Istation.
2. Increase the use of evidence-based practices (school improvement categories on the site visit tool)
3. Increase student achievement in reading and mathematics as measured by PARCC assessments
4. Reduce the number of special education referrals
5. Increase the use of Positive Behavioral Support Systems
6. RDA is written into the State Systemic Improvement Plan to increase literacy proficiency of Special Education Students

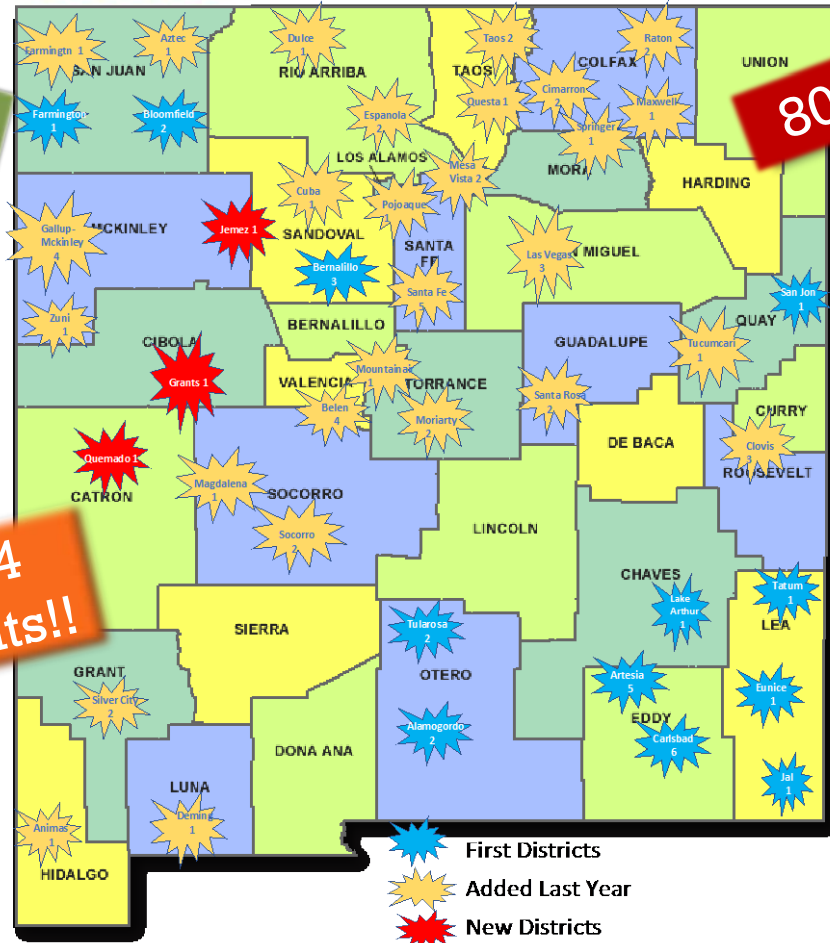


CORE™

42 Districts!

80 Schools!

22,504 Students!!

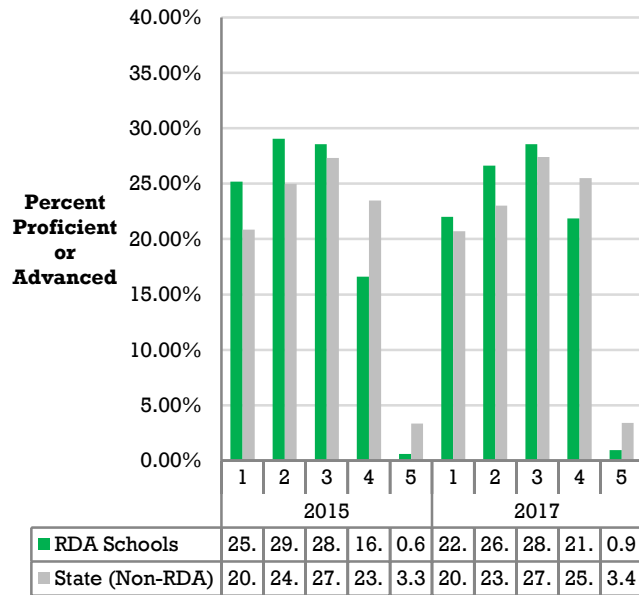


2017-2018

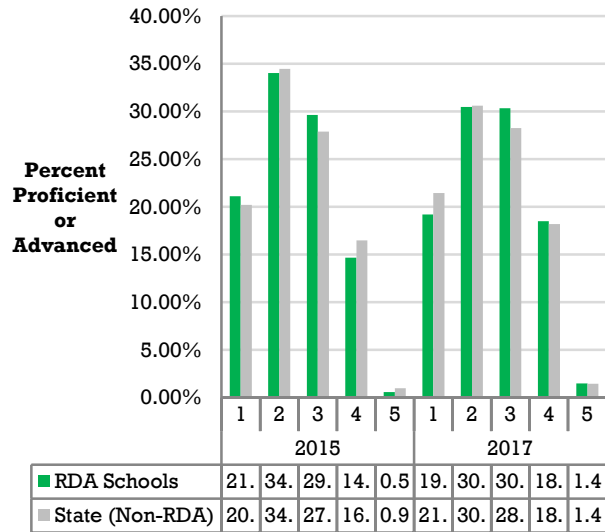
- **CORE** works with 80 D and F schools in 42 districts throughout New Mexico (20,000 students)
- **CORE** schools are located predominantly in Title I rural, Native American communities/schools
- **CORE** is currently leveraging technology to support real-time and virtual coaching.



### Comparing Distributions: ELA - RDA vs State



### Comparing Distributions: Math - RDA vs State



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## Currently Applying for Funding for the following projects

- Impact of the CORE TCC Coaching Model;
- The reflective praxis of teachers using virtual coaching for instructional change;
- The effect of professional learning on instructional interventions in math and reading;
- Improvement of Classroom Instruction for Novice Teachers through Mentoring and Reflective Praxis.

