part system for on-going professional learning are designed to guide the work in MC² partner districts across New Mexico. Component 1: Summer Professional Learning (SPL) MC² MathLab™: Supports classroom practice by studying elements of a Standards-Based Learning Environment (SBLE), Launch/Explore/Summarize (LES) lesson plan model, discourse/questioning, and Number Talks; Deepens teacher pedagogical and content knowledge aligned with the Common Core State Standards in Mathematics (CCSS-M)

• Math Institute: Open to a subset of teachers who attend MathLab[™]; Designed to develop teacher mathematics content knowledge required of CCSS-M, cultivate pedagogical practices for improved classroom learning, and engage participants in deepening their own math content knowledge

Component 2: Ongoing Support during Academic School Year

- **Collaborative Teaching and Learning Cycle (CTLC):** Collaborative, non-evaluative, 3-hour process where teachers plan a lesson, observe/record student learning, reflect/debrief on work of the team, and brainstorm new ideas to incorporate into their classroom practice
- **Classroom-Based Support Customized to School Needs:** MC² Mathematics Education Specialists work alongside teachers in the classroom



All About Discovery!™

Mathematically Connected Communities, MC² New Mexico State University P.O. Box 30001, MSC-3R Las Cruces, NM 88003

MC² Capacity-Building Model 2017-2018

The goal of Mathematically Connected

structures for ongoing, job-embedded

Communities (MC²) is to improve mathematics

professional learning experiences that 1) build

district capacity for creating support systems and

The components of this interconnected, three-

learning for students in grades K-12 through

teacher content knowledge and pedagogical skills for effective teaching and 2) promote

Program Goals

professional learning.

Capacity-Building Model



Mathematically Connected Communities

- **Professional Learning Community (PLC):** Facilitates Hord & Summers' research-based school improvement model to increase leadership capacity, embed professional learning into daily work, create positive school cultures, develop accountability, and boost student achievement
- Mathematics Content and Pedagogy Workshops: Grade-band workshops (K-2, 3-5, 6-8, HS) on selected math topics in partnership with the New Mexico Public Education Department
- Onsite Follow-up Tailored to District Needs: MC² Mathematics Education Specialists work alongside educators outside of the classroom
- Online Resources: Provide K-12 teachers with a connection to colleagues and support for
 professional learning through monthly eNewsletters, Edmodo pages, video-conferencing, and
 online office hours with mathematicians and/or MC² staff; Additional resources include but are not
 limited to webinars, YouTube Channel videos, and website materials

Component 3: Leadership for Instructional Improvement

- Summer Leadership Academy: Two-days of professional learning held during MathLab[™] to increase district/school leader capacity to develop action plans that include professional learning for all math teachers and to provide the Support Surround needed including structures for ongoing teacher collaboration, scheduling and allocating resources, knowing what to look for in math classrooms, providing feedback to teachers for continued growth, and monitoring
- Principals Professional Learning Community (PPLC): Connects administrators as they support teacher implementation of effective practices learned during MC² Summer Professional Learning; Grounded in MC² Leadership Framework and Six Strategies for Change and Implementation Practices. Learning design includes:
 - o Online PPLC Monthly Meetings
 - Customized support for interested principals (in-between online sessions)
 - Wednesday Blast! (weekly reflection questions and research tip)
 - o Catch-up webinar for principals who did not attend Summer Leadership Academy
 - Fall and Spring Academies
- Teacher Leadership Cadre: Builds network of teacher leaders who study and enhance their teaching practice while serving as professional learning leaders at their school sites and districts; Provides structure for teacher leaders to develop content and pedagogical knowledge and leadership skills; Teacher Leaders design and facilitate learning during MathLab[™] and Institute
- **Principal Leadership Cadre:** Strengthens MC² model for systemic change; establishes school culture of professionalism, collaborative support, and high expectations for math teaching/ learning; Designed *Leadership Framework* to support other principals in fostering teacher professional math learning and children's conceptual understanding of mathematics