



NEWSLETTER

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Inside this Issue

- 1 Lenses on Learning
- 1 MC² Partner Updates
- 2 Getting to Know the MC² Staff
- 3 Math Problem
- 3 Coaches Network
- 3 Web Resources
- 4 Principal's Corner
- 4 Q's & A's
- 4 Summer Academies - Reflections

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Mathematics Leadership Teams Make a Difference in Students' Math Achievement Across New Mexico!

Janice Bradley

For two years, District and School Mathematics Leadership Teams met across New Mexico for one purpose – create a coherent math program to support student achievement in mathematics. In Year One, 3 teams met 5-6 times and used Lenses on Learning to study and collect data on the current state of mathematics curriculum, instruction, assessment, equity, and professional development. Year One is a year of knowing. In Year Two, 5 teams met 4-5 times to take action – design and implement lessons using research based instruction, use formative assessment, and meet in Professional Learning Communities to assess impact. Year 2 is a year of doing – taking action. The result? Districts and schools who met as District or School Mathematics Learning Teams showed gains in student achievement.

What do we now know? When a team of thoughtful and dedicated district administrators, principals, teachers, counselors, and math coaches meet and learn together professionally in community, using purposeful goals and guided facilitation, students benefit. In 2011-2012, MC² will partner with over 10 schools' and districts' leadership teams.

After attending the 2011 mathematics academy/institute this summer, what changes do you envision happening in your classroom next year? "I will do more upfront planning: where do we need to land, anticipate problem areas; and end with reflections: did we get there (why or why not)."



2011 Las Cruces Leadership Session

MC² Partner Updates

Kristin Umland

The APS/MC²/La Meta Summer Academy ran June 6-17, 2011 and was a great success with nearly 100 teachers participating. We had three morning math sessions focusing on middle school geometry, Algebra 1, and functions in the high school curriculum. Participants chose one of these to attend for the entire two-week academy. All three of these sessions were tightly connected to the Common Core State Standards. We had 24 different afternoon sessions that lasted from one to eight days that participants chose from conference-style, including such topics such as

- *From Assessment to Instruction,*
- *First Days of School,*
- *A Closer Look at Common Core Middle School Standards,*
- *Lesson Study*
- *Algebra Tiles (Part I and Part II)*
- *Graphing Calculator sessions*
- *An In-depth Look at the Connected Math Program*

The sessions were planned collaboratively by 12 middle and high school coaches and three instructors from UNM and CNM. Participant evaluations were very positive and provided us with lots of ideas about how to make it even better next year!

Some Facts about Those Who Registered for the Summer 2011 Academies & Institutes

- There were 365 educators from 138 different schools in 34 districts who registered for the MC² 2011 Summer Math Academies, IMP Academy and La Meta Institutes.
- Eleven percent of those taught in a bilingual/dual language program; 14% were special education teachers.
- While 62% of those registered had Master's Degrees, only 9% of those degrees were in math or math education.
- In 2011, 41% of those registered had 5 years or less of experience teaching math.
- One fourth indicated that they were teaching a grade level for the first time in the 2010-2011 school year.

Getting to Know the MC² Staff

Lisa Matthews

I am the Co-Director of the MC² project with Wanda Bulger-Tamez, and my main role is to coordinate the professional development for teachers and MC² staff. I have been very fortunate to work with teachers and schools all over New Mexico, and have loved learning all about the students, teachers, and communities around our state. I have found that, even with all our differences, we face similar challenges in teaching and learning mathematics.



My interests in MC² include continuing to: work with the Vertical Alignment group and plan the mathematics for the summer academies;

learn more about the pedagogy topics (e.g., Formative Assessment, Cooperative Learning, etc.), and improve my coaching and facilitation practice. On a personal note, my son and I were residents of Mora, New Mexico, until July of this year, when we returned to southern New Mexico to live in the Las Cruces area. As many of you know, I am an avid elk and antelope hunter, but I'm also a knitter, have been doing yoga for over 25 years, I like to play video games with my son, and now that I've returned to warmer climes I'd like to resume being a gardener.

Wanda Bulger-Tamez

serves as a Co-Director of the MC² and MC²-LIFT (Leadership Institute for Teachers) projects. Wanda has been involved in various math professional development projects for over 15 years, including two years in Austin, Texas with the Southwest Educational Development Lab. Her passion for the work is to establish a support system for mathematics teachers across the state. Wanda's background includes a BA in Elementary Education with a math minor and MS in School Administration. Her teaching experience includes one year in elementary and six years in middle school, including teaching for the Las Cruces Public Schools.

Wanda lives in Doña Ana, New Mexico, has two grown daughters, and some of her hobbies include building and remodeling houses, hiking the Grand Canyon and traveling all over the world with her husband, Kenny Stevens.



Save The Date!

NCSM Fall Leadership Seminar

November 2, 2011
DoubleTree Hotel Albuquerque
Albuquerque, NM

Focus: *Tools & Strategies for Implementing the Common Core State Standards*
For all mathematics Teachers and leaders

For details visit:
<http://www.mathedleadership.org/events/fallseminars.html>

NCTM Regional Conference & Exposition

November 2-4, 2011
Convention Center
Albuquerque, NM

For details visit:
<http://www.nctm.org/conferences/default.aspx?id=27675>

A quick look at who is presenting:

Francesca Blueher, Tori Gilpin, Diana Fesmire & Dana Dawson,
Learn↔Reflect Reflection Session

Emmanuel A. Espinoza & Michelle Sterling-Rodriguez,
A Closer Look at Formative Assessment in Mathematics

Mark Franzak,
Building Mathematical Identity and Capacity in an Ability-Grouped Classroom

Tori Gilpin,
Teaching Math to Struggling Learners, Including Special Education Teachers

Tori Gilpin and Tomas Diego,
Teaching Math to Struggling Learners, Including Special Education Students

Kalle V. Jorgensen,
Digging Deeper into Data from New Mexico Standards-Based Assessments (NMSBA) & The Development of the Pythagorean Musical Scale

Mark Your Calendar
NCTM Regional
Conference
November 2-4 in
Albuquerque, NM
Early Bird Registration
Deadline October 3, 2011
at nctm.org

Math Problem

Free-Throw Problem *by the MC² Mathematicians*

Gina, who likes math and who can do mental math pretty well, plays for the 8th grade basketball team at her school. During one of the basketball games Gina was fouled while taking a shot. Even though she missed the shot she got to shoot two free throws. Going to the line to shoot the free throws Gina knew that so far this season she has made 78% of her free throws shots (using the usual rules for rounding). Gina missed the first free throw, but made the second one. Running back to play defense, Gina quickly calculated in her head that her free-throw shooting percentage had changed to 76% (after rounding).

From the information in this problem, can the number of free-throw shots made and the number of free-throw shots attempted this season by Gina be determined? If so, how, and what are they? If not, why not? *Give a convincing argument to someone who is skeptical of your answer.*

Coaching Network

Pat Carden & Kathe Kanim

The **Teacher Leadership Exploratory Consortium** has created standards for “critical leadership

roles that teachers play in contributing to successful school reform” (<http://tlstandards.weebly.com/>)

To view a rough draft of these standards take a look at:

http://tlstandards.pbworks.com/f/13852_TeacherLeaderStnds_HR.pdf

The entire article regarding the Teacher Leader Model Standards is in the *Journal of Staff Development*, June 2011, Vol 32, No. 3

(<http://www.learningforward.org/news/articleDetails.cfm?articleID=2277>)

These standards could help coaches focus their work and start great discussions about the pivotal role coaches/teacher leaders can play in the educational system.

Jim Knight Conference

On August 23rd and 24th, approximately 50 coaches and MC² staff from around New Mexico came together for a two day coaching conference. Jim Knight, nationally known Instructional Coach, presented on the “Big Four” and many other topics related to coaching.

If you are a math coach and are interested in being part of the network, please contact Pat Carden at pcarden@nmsu.edu.

Web Resources

- ⊕ Visit this website for some great information about proportional reasoning: http://www.ride.ri.gov/instruction/curriculum/rhodeisland/resources/resource-docs/MathUnit-Proporionality_v24.pdf
- ⊕ ***Should the Textbook Determine the Essential Skills We Teach?*** By Rick DuFour at <http://www.allthingsplc.info/wordpress/?p=2432>
- ⊕ The National Association of Elementary School Principals website (<http://www.naesp.org/>) includes the *Leadership Compass* archives (<http://www.naesp.org/leadership-compass-archives-0>) of many interesting articles such as ***Professional Learning Communities Impact Student Success*** at http://www.naesp.org/resources/2/Leadership_Compas/2007/LC2007v5n2a3.pdf



Continued from Page 2

A quick look at who is presenting at NCTM
(continued):

Cathy J. Kinzer, Janice Bradley and Lida Uribe, *Teachers as Learners*

Cathy J. Kinzer, Karin Wiburg and Lisa Virag, *Public School and University Partnerships for Learning*

Maria D. Mercado and Rocio Benedicto, *Inquiry-Based Approaches for English Language Learners (ELLs)*

Thomas P. Taney, *Make Spherical Geometry Fun and Engaging: Tessellate a Sphere*

Karen M. Trujillo & Milos Savic, *Math Snacks: Address Middle School Math Misconceptions Using Fun Animations and Games*

**NCTM EARLY BIRD
Registration Deadline
October 3, 2011**

Congratulations!

Rocio Benedicto was recently appointed to the El Paso Independent School District School Board in El Paso, Texas!

Principal's Corner

Patricia Carden

With the changes that are happening in education it is important to build a school environment that supports teamwork among the staff. Visit the following websites which offer activities on how to create this environment and why it is important to create a positive school climate:

<http://www.buzzle.com/articles/team-building-activities-for-teachers.html> and

<http://www.funteambuilding.com/teachers.php>

Questions & Answers

Q: Why are Professional Learning Communities (PLC) important?

A: In economic times like today, there is no better way for professional growth than a school PLC. With budget cuts that no longer support travel to conferences or sub days, PLC's offer a time and space for educators to study and learn about the students they work with. The difference between a PLC and a department meeting is that the PLC is a place to learn for educators. And there is no other place closer to the classroom than a working PLC.

Q: How do we make PLC time valuable?

A: One way to create a strong PLC is to create a common vision for the members. Start with envisioning a story the group would want to tell in May about a successful learning experience. Prioritize ideas and find one that the group can dig more into. A vision or story can be just one statement: We built confidence in math students. Agree on 1-3 actions to take. Actions can be gathering research, collecting student thinking, or observing each other's classroom after planning a lesson together. Select roles and responsibilities for members and times and dates to meet and bring in examples for a shared learning experience. During the year, reflect on the learning using evidence and identify next steps in order to reach the vision for May.

Thank you to everyone who provided information for this issue of the newsletter!

MC² Summer Academies - Reflections

Pat Carden

Another summer has come and gone with successful MC² summer academies held around the state. The week long math academies were attended by over 300 educators from around the state. The focus this year was proportional reasoning with vertical alignment in the morning session and pedagogy in the afternoon sessions. Topics in the pedagogy sessions included assessment, differentiation, ELL, and cooperative learning. At the end of each day, participants spent time building their story. They also spent time creating awareness of a reflection tool created by MC².

Soon session materials will be available on the MC² teacher resource webpage at

<http://mc2.nmsu.edu/community/teachers.htm>

Check periodically for updates.

Next Steps After 2011 Summer Academies

Participants requested additional and on-going professional development after the Summer Academies. They also wanted support for the changes they envision happening in their classrooms, schools, and districts. This support could take the form of a person to guide them, on-line communication, or Internet access to additional videos, research-based articles, or instructional materials. MC² plans to address these requests this coming school year.