

## **NMPMSE Meeting - Minutes**

**Friday, May 13, 2005**

**O'Donnell Hall, Room 103, NMSU, Las Cruces, NM**

**&**

**Room 209, Santa Fe Community College, Santa Fe, NM**

**Present in Las Cruces:** Claudia Ahlstrom, PED; Barb Austin, NM Tech; Pat Baggett, NMSU; Pleddie Baker, Vista MS; Barbara Brazil, NM First; Tom Gruszka, WNMU; Wanda Guzman, LCPS/NMSU; Jack Jekowski, ITP; Kathe Kanim, NMSU; Barbara Kimbell, UNM; Cathy Kinzer, NMSU; Doug Kurtz, NMSU; Michael Morehead, NMSU; Harry Schulte, NMSU; Rick Scott, NMSU; Ted Stanford, NMSU; Karin Wiburg; NMSU; Linda Zimmerman, NMSU.

**Present in Santa Fe:** Carlos Atencio, Northern Network; Sharon Dogruel, The Education Center; Vicente LLamas, ASTME; Kurt Steinhaus, PED; Kristin Umland, UNM.

### **Call to Order:**

The meeting was called to order (or at least started amidst the hubbub of conversations) by Vicente at 1:03 pm.

### **Introductions:**

Attendees at both the Santa Fe and Las Cruces locations introduced themselves. This is the first time that the NMPMSE met via ITV.

### **Agenda Items:**

1) MSP Reports.

a) NMSU:

- i) Karin reported on the status of the MSPs, including the upcoming summer academies in Las Cruces, Carlsbad, and Northern New Mexico (El Rito). An attempt is being made this year to better integrate the Mathematics and Education parts in each of the academies. (<http://mc2.nmsu.edu/academy/upcoming.htm>)
- ii) Karin also reported on the Gadsden Mathematics Initiative (GMI) and the progress that is being made in closing the gap in test scores between students in the Gadsden district and students in the state of New Mexico. (See below.)
- iii) Further, Karin reported that MathStar is sponsoring a lesson study leadership conference June 1-3, 2005.
- iv) Information about MC<sup>2</sup> (NMSU's MSP) can be found on their website (<http://mc2.nmsu.edu/>). The website indicates that areas of the state that partner with NMSU.
- v) It was also reported that there is a desire to work more with administrators, possibly hosting a conference on building learning capacity.
- vi) Vicente added that the Center for Excellence in Teaching has expressed a desire to partner with an MSP.

- b) UNM:
    - i) Kristen Umland was stuck in traffic. Sharon Dogruel later reported for Kristin that they were still seeking participants for their summer academy (<http://www.math.unm.edu/~umland/LaMeta/LaMeta.htm>).
  - c) PED:
    - i) Claudia Ahlstrom reported that funding was available for Years 2 and 3. Continuing MSPs include NMSU's MC<sup>2</sup> and UNM's cohorts. A second cohort will be started at UNM. New MSPs include the WNMU MSP and the San Juan College MSP. Funding for the MSPs were \$1.0 million for Year 1, \$1.5 million for Year 2 and \$1.8 million for Year 3.
    - ii) It was also reported that the New Mexico MSPs are being viewed favorably at the national level.
- 2) Planning for the State Math & Science Town Hall/Summit.
- i) Barbara Brazil guided the group through a PowerPoint presentation on the New Mexico First Process. After giving a short history of New Mexico First Barbara outlined and discussed the mission and process.
    - (1) Mission:
      - (a) Promote civil debate.
      - (b) Value diversity.
      - (c) Seek meaningful solutions.
      - (d) Improve the quality of the state.
      - (e) Educate and inform citizens.
      - (f) Make a difference.
    - (2) Process:
      - (a) Convening: Involve a cross-section of the NM community.
      - (b) Intelligence: Use a background research paper.
      - (c) Design: Design questions that target specific outcomes.
      - (d) Choice: Use consensus.
      - (e) Change: Form an implementation team.
    - (3) Why does the process work?
      - (a) Involves NM First, NM leaders, and NM citizens.
      - (b) No institutional agenda.
      - (c) Bi-partisan involvement.
      - (d) Civil debate.
      - (e) Diverse group.
      - (f) Work to implement change.
      - (g) Inform citizenry.
  - ii) Jack presented one of his innovative maps illustrating the linkages among the components of the town hall process. (*see below*)
  - iii) The Town Hall/Summit is planned for November 17-19, 2005 at the Glorietta Conference Center in Glorietta, NM. Rick Scott and Steve Sanchez have been working on the background research paper. Two items needing discussion were the content of the background research paper and the list of invitees. The number of participants is limited to 120.

- iv) To discuss the content of the research paper the group was divided into pairs to think about what the main focus of the Town Hall/Summit should be. Ten minutes for discussion was suggested by Rick. Twenty-five minutes later the subgroups reported.
- (1) Santa Fe group (who worked as a single group of 5 or 6, instead of in pairs): Use the Town Hall/Summit as a basis for communication of STEM issues; specific products and/or results are needed; and a student voice is needed.
  - (2) Jack Jekowski & Barbara Kimbell: Focus on science and mathematics education (engineering and technology follow these); P-12 focus along with College of Ed and Arts & Science; follow up professional development plans; BIA/public school interface is missing; more of the transitions need to be addressed, e. g., between grade levels or between science and math; need to disaggregate the data.
  - (3) Karin Wiburg & Barbara Brazil: Focus should be on what works to improve mathematics and science learning in the classroom.
  - (4) Wanda Guzman & Mike Morehead: Alignment of middle and high school curriculum; what are the learning expectations; why are students not learning; understand and address issues that pose barriers to learning; understand what the data tell us about achievement before the Town Hall/Summit.
  - (5) Cathy Kinzer & Pat Baggett: Student achievement/learning is key; broader measurements of student learning; also, focus on the role of technology in learning.
  - (6) Barb Austin & Kathe Kanim: Understand the characteristics of those who are teaching; Barb also mentioned another report on Recommendations for Teacher Education (something about Finding Holes).
  - (7) Linda Zimmerman and Tom Gruszka: Shoot for a goal for NM to be 4<sup>th</sup> from the last instead of the usual 2<sup>nd</sup> from last (or wherever we are); focus should be on student achievement/learning.
  - (8) Claudia Ahlstrom & Ted Stanford: Raise the professionalism of teaching.
  - (9) Doug Kurtz and Harry Schulte: Doug admitted that their group talked about something completely irrelevant to the topic of discussion, but he did think that student learning was important, and that the transition to the workforce should be added to the transition theme.
  - (10) Rick Scott and Pleddie Baker: I'm sure this subgroup said something important, but all I heard was something about "international studies", as I must have been daydreaming (probably about drinking margaritas). Luckily, at this point it was time for a break!
- v) BREAK!!!
- vi) Misc. items that I wrote down.
- (1) Rick summarized the above discussion as hearing the two main themes of transitions and student learning.
  - (2) Jack mentioned the biotechnology and nanotechnology efforts emphasized by the Governor and the possible tie-in with the action-oriented items.
  - (3) Karin mentioned the resource, "Everything Needs to be Aligned."
- vii) Other suggestions:

Presentations on Thursday night and Friday lunch: Governor, Sen. Bingaman, Diane Denish, or Ray Orbach or Peter Faletra from DOE Office of Science, from ed policy like David Berliner, or Eloy Rodriguez (Cornell).

- (1) Need policy people to hear outcome presentations.
  - (2) Need a poster room to exhibit current projects from across the state for the purpose of networking; possibly have the exhibits in the room where socializing will take place.
  - viii) Discussion of the invitation list. Rick distributed a list of names, which included current members and current non-members of the NMPMSE, as a starting point for discussion. (See attached file Town Hall Handouts.) Suggestions for modifying the list included, from some, the need for representation from rural school districts and public schools, including principals, superintendents, and math/sci teachers; and, from others, the need for proportional representation and a need for emphasizing the role of teachers. (*Note: The problem of “proportional” apportionment over the set of positive integers is an “unsolved” problem. This problem is a popular topic of discussion in contemporary texts on Liberal Arts Mathematics, using the history of the apportionment of the US House of Representatives as a prime example. Good luck, Rick! – sec.*)
- 3) Board Elections.
    - a) Vicente announced that Elwyn will no longer serve on the Board, but that Jerry Everhart will serve to represent ENMU.
    - b) Also, Kurt and Vicente are stepping down as co-presidents. Jack Jekowski and Barbara Kimbell have accepted the invitation to serve as Interim Co-Presidents.
    - c) Starting June 1<sup>st</sup>, Kurt will be working in the Governor’s office on the PreK initiative.
  - 4) Other.
    - a) I heard no “others.”
  - 5) Announcements.
    - a) Claudia reported that the PED is in the process of tweaking the math standards; an emphasis will be placed on weaving in the process standards to relate better to the state assessments.
    - b) Other announcements:
      - i) Pleddie Baker announced that the Future Educators of America (FEA) Conference will be in the Fall at ENMU.
      - ii) John Selden announced that he will be teaching a course on Mathematical Proof this Fall at NMSU.
      - iii) Cathy Kinzer announced that the State Math/Science Conference, *New Visions for Math and Science: Soaring to Greater Heights!*, will be at the Roswell Convention Center, Nov 2-4 ([education.nmsu.edu/nmctm/news.html#current](http://education.nmsu.edu/nmctm/news.html#current)).
      - iv) Claudia Ahlstrom reported that the State Math Standards are being revised: mainly to weave the process standards into the content standards. Send suggestions to [cahlstrom@ped.state.nm.us](mailto:cahlstrom@ped.state.nm.us).
  - 6) Next meeting time & place will be suggested by the new Interim Co-Presidents.

Respectfully (well, almost) submitted,

Tom (with some help from Rick and Jack)

# Gadsden Math Initiative

## Results....

### Percent of Gadsden Students Scoring Proficient or Advanced In Mathematics on State Criterion Referenced Tests

	1999-2000	2002-2003	2003-2004
4 <sup>th</sup> Grade	19%	40%	48%
8 <sup>th</sup> Grade	7%	38%	41%

## Town Hall Concept

### Why are we having the Town Hall (Purpose)?

- Overall low achievement in meeting State Standards and Benchmarks
- Achievement gaps (from a cultural and economic perspective?)
- Particular student difficulties at transitions: elementary-mid, mid-high, high-college (grade to grade as well as between math and science teachers/departments and between M&S and other disciplines).
- BIA to public school and vice versa transitions
- Workforce needs not being met (various studies including NNSF Science and Engineering, as well as new BHEF study – local, state and federal government, labs, and private sector).
- Difficulties encountered in implementing reforms envisioned by external organizations

### Need to Link



### Why are we having the Town Hall (Purpose)?

- What recommendations from past projects still need to be implemented? (do this in background report)
- What do the data tell us about achievement? (do this in background report)
- What state-level policy changes (additions or deletions) could help to improve STEM Ed in NM?
- What district-, school-, and classroom level changes could help to improve STEM Ed in NM?
- How can we raise expectations without increasing drop-out rates?
- How can professional organizations, teacher unions, parent/community organizations, business/industry/national labs (including new focus on STEM P.D. within DOE community) better contribute to improving student success in STEM education? (This is too BIG a task!)
- What challenges do we still face in providing professional development for math and science teachers and should we face them?
- What research needs to be done on the practice of STEM education in NM, who should do it, what resources and partnerships are needed?

These are critical elements that allow focus and management of the research report