

## **NEW MEXICO PARTNERSHIP FOR MATH AND SCIENCE EDUCATION MINUTES**

DATE: Friday, May 28, 2004 1:30-4:30 PM

PLACE: EPSCoR Offices, 801 University SE, Albuquerque

Participating: Pleddie Baker, Tom Cummings, Franny Dever, Terry Dunbar, Brian Every, Michael Garcia, Jack Jekowski, Barbara Kimbell, Steve Peralta, Richard Reif, Rick Scott, Larry Schuyler, Kristin Umland

### 1. Reports on State Math and Science Partnerships (MSPs)

Two MSPs have been funded in NM through the Public Education Department with flow through money from the USDOEd. For the first year, two have been funded and are focused on Middle School Math teachers.

Rick Scott reported on the MSP from NMSU that is being called “Mathematically Connected Communities (MC2)”. It is a partnership between the College of Education, Math Dept, and several school districts. It includes 3-week summer academies in Las Cruces and Carlsbad that focus for 2-weeks on mathematical topics that the participants have indicated are challenging them. In the third week the teachers will present lessons to kids based on the math they looked at during the first 2 weeks. There will be follow-up during the academic year using a lesson study format. MC2 is also supporting the development of a Masters of Arts in Teaching (MAT) Middle School Math online to give access to teachers throughout the state. Other activities will be the development of web resources for middle school math and assistance in preparing for the Middle Level Math NM Teacher Assessment. Wanda Guzman ([wguzman@nmsu.edu](mailto:wguzman@nmsu.edu)) is the Project Coordinator and Lisa Snow ([lisnow@nmsu.edu](mailto:lisnow@nmsu.edu)) will be the Coordinator based in northern NM. Further information is available at [mathstar.nmsu.edu](http://mathstar.nmsu.edu).

Kristin Umland provided information on the UNM MSP. Their program is inspired by the Vermont Math Institute ([http://www.emba.uvm.edu/~gross/vmi\\_summary2.html](http://www.emba.uvm.edu/~gross/vmi_summary2.html)). Six courses are being designed to give middle school teachers powerful experience with significant mathematics. They are working with Albuquerque Public Schools and the Gallup-McKinley Independent School District. There will be two courses during their summer academy and one course a semester during one weekend a month follow-ups. They still have 11 openings for this summer. Linda Martin from TVI is one of the individuals working with Dr. Umland on the courses. More information is available from [umland@math.unm.edu](mailto:umland@math.unm.edu).

### 2. Possible State Science Summit

Richard Reif led a discussion on a pre-proposal that the Partnership has forwarded to NASSMC for possible funding from the USDOEd for a State Science Summit. Suggestions related to a possible State Science Summit included relating it to the State Science Plan that is being developed, use data collected from focus groups conducted by EPSCoR, consider a series of regional summits to maximize participation from outlying areas, development of a clear vision of the kinds of participation expected from the public, business/industry, government, and education sectors. Further plans will be made once we hear back from NASSMC on the USDOEd funding decision.

### 3. Web Dissection Study (“Froggy” Bill)

Richard Reif outlined the inquiry that he is doing related to House Joint Memorial 8 “requesting the Public Education Department to study virtual anatomy as an acceptable alternative to animal dissection to fulfill academic class requirements.” He indicated that his search is looking

at costs, student learning, hazards, and cultural considerations. He wants to do a survey of current practices in NM, but is constrained by a September 1 deadline. Several members commented in the significant learning that can occur in relation to dissection activities. The Joint Memorial was sponsored by Rep. Mimi Stewart and apparently has support from a group called the Animal Protection Voters.

#### 4. Northern Network Conference on NSF-Math Curricula

Franny Dever indicated that the Northern Network would be having a conference on the use of NSF-supported math curriculum in Santa Fe on June 22 and 23. This effort developed out of the work that the NSF ARC Center has been doing in New Mexico. The ARC Center is a collaboration between the [Consortium for Mathematics and Its Applications](#) (COMAP) and the three National Science Foundation supported elementary mathematics curriculum projects: *Investigations in Number, Data, and Space*, *Everyday Mathematics*, *Math Trailblazers*.

#### 5. NASA Explorer Schools in New Mexico

Pleddie Baker reported that the two NASA Explorer Schools in New Mexico, To'hajiilee-He School in Canoncito and Vista Middle School in Las Cruces, have had a good first year. They were 2 of the 50 chosen from across the nation for the first round. Unfortunately, no school from New Mexico has been chosen for the second round. Vista Middle School designed their school Yearbook around the theme of being a NASA Explorer School.

#### 6. Future Educators of America (F.E.A.)

Pleddie Baker reported that the Future Educators of America (F.E.A.) organizations are enjoying some success, particularly in Las Cruces. Las Cruces Public Schools has arrangements with NMSU through which students in F.E.A. Teacher Pathways programs earn dual credit. Fourteen graduates of high schools in Las Cruces will be entering NMSU in the Fall already having earned credits towards a teaching degree. The next statewide F.E.A. Conference will be held at the College of Santa Fe on November 19, 2004, and ENMU has already committed to hosting the conference in Fall of 2005. There are also plans to develop regional F.E.A. conferences at various locations throughout

#### 7. Other Announcements

Jack Jekowski reported that two recent documents from NSF document the extent of the crisis in mathematics, science and engineering education:

[www.nsf.gov/sbe/srs/nsb0407/start.htm](http://www.nsf.gov/sbe/srs/nsb0407/start.htm)

[www.nsf.gov/sbe/srs/seind04](http://www.nsf.gov/sbe/srs/seind04)

He also pointed out that the Albuquerque Math, Science and Technology Partnership had concluded that three ingredients were 1) improved teacher education, professional development and curriculum; 2) public understanding and awareness; and 3) performing the right kinds of educational research to guide instruction. They were pleased that national reports have come to similar conclusions.

#### 8. Next NMPMSE Meetin

Tentative Time and Place: August 6, 1:30-4:30, Sevilleta National Wildlife Refuge