

**Minutes**  
**Math and Science Advisory Council**  
**New Mexico EPSCOR Office**  
**Albuquerque, NM**  
**September 17, 2010**

**Present:** Members and Alternates: Tomas Atencio-Pacheco, Phyllis Baca, Jamai Blivin, Mary Jo Daniel, Franny Dever, Len Duda, Lisa Durkin, Bob Eisenstein, Lorenzo Gonzales, Ashley Ivins, Joyce Kaser, Cathy Kinzer, Ellen Levy, Raymond Nance, Richard Nygren, Liz Shipley, Ted Stanford, and Kristin Umland. Staff: Claudia Ahlstrom, Pascal Buser, and Melissa Lomax  
Guests: Jack Jekowski, Anne Madsen, Frank Maestas, Rick Scott, Ed Spivak, and Kathryn Watkins.

**Agenda:**

Theme: Reflecting back and looking forward

Before you come: Please review “NM Project 2012 at a Glance” and “NM Project 2012 Findings and Recommendations”

0930-1000: Coffee and conversation

1000-1010: Welcome by the Math and Science Bureau (Melissa Lomax) and incoming Chair (Kristin Umland)

1010-1040: Introductions and establishing norms (Joyce Kaser)

1040-1100: Review of the MSAC charge and past work (Kristin Umland)

1100-1200: Dr. Sheila Hyde, Deputy Secretary of Education for Learning and Accountability

1200-1245: Lunch compliments of the LANL Foundation

1245-1315: Update from the Math and Science Bureau

- Implementation of the Common Core Mathematics Standards in New Mexico
- Adoption of the Next Generation Science Standards
- Upcoming Science Curriculum Material Adoption Process in NM
- 3.2% Reduction in Budget at the PED
- Academic Athletes
- Grant for Excellence in Economic Education

1315-1345: Where we are with New Mexico Project 2012? (Bob Eisenstein)

1345-1415: Mathematical Knowledge for Teaching: an international look at what mathematics elementary teachers know that engineers may not (Kristin Umland) (Item postponed because of time.)

1415-1430: Break

1430-1515: Identifying recommendations from NM Project 2012 that can be implemented in current budget climate; discussion of upcoming Science Standards revision and science adoption (small groups)

1515-1545: Reporting out of findings of small groups and assignment of people to workgroups (Joyce Kaser)

1545-1600: Evaluation and closure (Joyce Kaser)

### **Major Actions Taken:**

- Adopted the draft set of norms. Final copy will be available at next board meeting.
- Confirmed Kristin Umland as the chair for the 2010-2011 year.

### **Major Discussion Items:**

1. Kristin Umland and Rick Scott reviewed the organization's history and charge. The purpose of the MSAC is to advise the MSB.

2. The group participated in a telephone call with Dr. Sheila Hyde, Deputy Secretary, PED. There were four topics that the council had asked Dr. Hyde to address, and she added a fifth. They were:

- The use of SBA data to guide school improvement efforts;
- Reauthorization of ESEA;
- Insights into the state legislature and in relation to Project 2012;
- How we as a council can help Dr. Hyde and the PED; and (Dr. Hyde's topic)
- How the PED is reorganized during this transition.

Reorganization: There are two major instructional divisions: the P-20 Work Group which includes the MSB, HS redesign, early childhood, instructional materials and other Bureaus and the Student Success Work Group Title I, Bilingual Education, Student Nutrition, Student Services and other Bureaus. Dr. Hyde has a new organizational chart that she will provide to us but noted that it was not publicly available because for the time being it is an interim structure. One advantage to this approach is that it reduces the number of senior people. Dr. Hyde is unclear how long this reorganization will last.

Reauthorization: Nothing is going to happen this year. The blueprint is on the Ed.gov website: <http://www2.ed.gov/policy/elsec/leg/blueprint/index.html>. Dr. Hyde hopes that designations and AYP will change and that there will be more emphasis on growth models that are derived from a better balance of assessments. There is talk of looking to coordinate short cycle assessments across the state—currently different districts use a wide variety of assessments, making it difficult to compare across districts. She hopes to see more emphasis on tying student growth to the performance of students coming out of higher education and tying student growth to the performance of teachers and principals.

Access to data: Claudia Ahlstrom said that there are significant issues about who has access to data even within PED. Dr. Hyde suggested there is a problem with “holding teachers accountable” for data that they don’t have access to and indicated that some data will be available on the Data Dashboard. Also, WestEd and the Southwest Comprehensive Center are doing a review of the PED’s data capability within the IT division, IDEAL NM, and the Data Warehouse. Dr. Hyde said issues that need to be addressed are how we will implement the Common Core Standards and also align them to the assessments especially since there isn’t any money for this at the moment. She said there is a mood out there that we already test kids too much and it costs too much. USDE is looking at giving more flexibility to states. Richard Nygren suggested that this poses a continuity issue if we make significant changes to the assessments. A new study on the alignment of short cycle assessments has recently been published. This Phase II study is on the web. There is an effort to get a single identifier for students K-20. Reaction to Race to the Top decisions: We have a problem in the state regarding the distribution of highly effective teachers. There’s a real disconnect between RTTT and rural schools. Money is not the answer. The PED has not been aggressive in taking over schools, which put NM at a disadvantage in the RTTT competition.

MSAC support: Dr. Hyde said the Council can help her and PED and HED by contributing to the discussion on tying student growth to teacher and principal assessment and higher ed. Cathy Kinzer wondered what data will be used wrt looking at the impact of higher ed on student achievement. Dr. Hyde suggested that someone from the Council should be part of the data group. A question came up about how we measure “good” teaching. Dr. Hyde suggested that the council should have a task force or subcommittee related to assessment.

Reaction to call: Members indicated that the call was very worthwhile and hope that MSAC would continue to have access to Dr. Hyde or her successor.

Adjourned for lunch compliments of the LANL Foundation. Rick Scott invited the Council Members to the LANL Foundation’s 13<sup>th</sup> Annual Conference on Education to be held Monday October 11<sup>th</sup> at Buffalo Thunder Resort.

3. MSP staff reviewed items from the MSB report. One change is that M/S day at the legislature will be held March 11, 2011. (See attached copy.)

- Melisa Lomax reported on the Next Gen Science Standards.
- Pascal Buser said that there were three projects funded from the PD money from the state legislature: MC2, MSA, and the New Mexico Supercomputing Challenge/Project Guts.
- Discussion of having kids get recognition for academic activities akin to lettering in varsity sports. Liz Shipley described the work of the Next Gen Academy and that the NM Activities Assn working supports STEM activities, including science fair and Science Olympiad. She suggested that other organizations could be sanctioned by the NMAA. It would be good to get spots on TV related to this.
- Claudia Ahlstrom reported on the proposal to Excellence in Economic Education with IDEAL NM. The proposal was about developing a course in financial literacy that would

count toward HS students four years of math for graduation. It would be an online course. Funding is out of USDE.

- Jamai Blivin talked about how Wells Fargo and others would make good partners on this effort.
- Richard Nygren pointed out that the vacancy rate at PED is a big problem for getting things done.
- Claudia Ahlstrom reported on the item review process for the NM SBA. It was a big success with significantly more applicants than slots. This is a change from past years when it was hard to get enough people. Ashley Ivins said the timing was hard for many teachers as it was the first week of school.
- Claudia Ahlstrom reported on the process for revision of the New Mexico Entry Level Teacher Mathematics Competencies. She said an RFP went out for iTeachNM. No word about next year's funding amount for the MSP from USDE. Common Core was released June 2 and a group led by her put together a crosswalk between NM Math standards and the Common Core. Good news: All NM Standards aligned with something in common core, although sometimes at different grade levels. NM plans to adopt Common Core and only add wording about process standards/standards for Mathematical Practices.
- Pascal Buser talked about the Science adoption process.

4. Bob Eisenstein reviewed the history of the development of Project 2012 along with proposed and enacted legislation. He presented a list of Project 2012 recommendations for the MSAC's consideration for work during 2010-2011. First he suggested that we try very hard not to let the money for math and science professional development drop to zero (which almost happened last year). He also suggested that the Council should consider the following recommendations from Project 2012: Non-legislative actions: 1.2(b), 1.2(e), 1.3, 1.4, 1.5, 2.1(b), 2.1(e), 3.1(a), 3.1(b), 3.1(c), 3.1(e), 3.1(g), 3.1(h), 3.2(a), 3.3, 3.4, 3.5, 3.6(a), 3.6(b), 3.7, 3.8(a), 3.8(b), 3.9, 4.1(c), 5.1(a), 5.1(c), 5.3, 6.1(a), 6.1(b), non-financial legislative actions: 2.2, 3.1(c). Financial legislative actions: Funding Reading, Math, Science summer institutes, 5.1(b). This set the stage for the small group discussions later in the afternoon. The group agreed informally not to revise or rename Project 2012 at this point.

5. Mary Jo Daniel reported on the NM EPSCOR work on starting to organize a database of math/science projects around the state. The format will be like that of another EPSCOR state and will require people to fill in a form. Someone from the NM EPSCORE office will check periodically to see that the links are still active and will notify people when the info is out of date. Ed Spivak reported on his work in setting up a similar wiki-based structure and said he would turn his work over the Mary Jo. Jamai Blivin reported that Innovate+Educate also is working on a site like Facebook and Craigslist. These efforts can align with one another: Mary Jo will be the core. This project has been a long time coming. It is exciting that it is finally going to happen.

6. Jim Smith will be a new representative from the East Mountains area who is running unopposed. Someone from MSAC should contact him and attempt to garner his support for the MSAC's work.

7. The larger group (members and alternates) broke into three groups to discuss the ways that MSAC could support the implementation of Project 2012 especially in the current economic climate. Group 1 focused on pre- and in-service teacher education, Project 2012 Chapters 1 and 2. They suggested the following:

- PR about the competencies (Wimba session) and NM Project 2012.
- Use the teacher competencies as a lever: write a letter/document letting teacher preparation (or other STEM PD) people know about the competencies and ask them to come talk about how 2012 recommendations are/are not being addressed. Follow up with assessment conversation.
- Ask to revise the teacher assessment.
- Ask IHEs to meet and talk about how to assess these courses.
- Survey IHEs about how and what they teach.
- Invite someone from Highlands when in Santa Fe (etc.) come and tell us what is going at their institutions regarding the recommendations in Project 2012.
- Ask for people to document success stories to help paint a picture of what works in NM, and also share what didn't work so we know.
- Suggest that an administrative license requirement would be to observe/evaluate an inquiry-based classroom.
- MSAC could put together critical talking points/focal points for legislative session.

Group 1 members were Lorenzo, Ted, Claudia, Franny, Kathy, and Kristin, as chair.

Group 2 discussed standards, instructional materials, and distance learning, Project 2012 Chapters 3 and 4. They suggested the following:

- Address the EPSS request from Sheila Hyde. Suggest forming a work group; put out a call asking for input from around the state.
- Re: upgrading science labs. MSAC can draft a letter to facilities authority asking for a status report on this.
- Find a friendly legislator. Maybe Jim Smith (HS science teacher)?
- Math and science day: ask for a memorial highlighting excellence in STEM education.

Group 2 members were Ellen, Rick, Melissa, Ashley, Lisa, and Ray, chair.

Group 3 focused on using STE professionals, partnerships, and public support, Project 2012 Chapters 5, 6, and 7. They posed the following:

- Multiple aspects for folding on-going asset mapping via a technological vehicle for meaning searching, such as stem professional coordination with the teacher preparation, stem volunteer coordination with students and teachers, research links with stem profession.
- 6.1b importance of industry linking builds bridges to political structures.
- Three suggestions for technology: feedback area in the "Asset Mapping Program" with the ability to evaluate the site with comments; stand alone mentorship area in these assets, ability to add pictures. Create an advisory council for the all three "Asset Mapping Initiatives."
- Half-day session targeted group: How STEM professionals can support teacher prep (council members and invited guests).
- Can we dovetail with New Mexico Leadership Initiative?

Members were Liz, Barb, Jack, Len, Kathy, Pascal, Phyllis, Jamai, and Mary Jo, chair.

Additional comments that were made when the three groups reported out:

- Evaluate the hurdles to assessment: what is needed at (1) state policy level (2) district policy level (3) processes and procedures within schools and classrooms (4) technology: what hardware and software are needed. Some of these will require money but some won't. Let's focus on what we might be able to do now and not wait until the money comes in.
- It would benefit the council to have an up-to-date spreadsheet with information on the MSAC members and alternates including email, institutions, jobs/area of expertise.
- As we look at the inclusion of Engineering in the new science standards: (1) This may bring more business and industry as partners in improving STEM education. (2) There may be excellent overlap between engineering disciplines and the "critical thinking" theme in math and science standards. (3) Should engineering be coupled with science goal in the EPSS or not?
- We need to enable real task groups that have specific work goals as opposed to just "discussion areas." We should recruit non-Council members to help with the task groups.

8. Dates of Future MSAC Meetings: November 19, 2010, January 21, 2011, February 18, 2011, April 15, 2011, and May 20, 2011. (The May date needs to be confirmed.) Intel, NMSU have offered to host a meeting. Mescalero Apache Schools near Ruidoso have offered to host the May meeting (thanks to Ashley Ivins).

9. Plus/Deltas: Pluses were conversation with Sheila Hyde, working in small groups, focusing on moving 2012 forward, and our facilities. Deltas were needing more small group time and too much time sitting still.

10. Clarification of Roles of Regular Members and Alternates: As we start out a new year with some new members, here is a brief clarification about the roles of members and alternates. We'll review these guidelines at the next meeting in case there's any discussion.

- Only members can vote. Alternates may speak on an issue. They may be called on after all members have spoken.
- If a member is absent, an alternate will be appointed to take his/her place. If an alternate is sitting in for a member, he or she may vote on any issue that is being considered. To the extent possible, members are replaced in kind, e.g., an alternate from the private sector replaces a member from the private sector.
- A member who is late and does not call in will lose his/her seat to an alternate. Seats will be held until the morning break for members who do call to report that they will be late.
- Members sit at the table; alternates sit to the side.

***A reminder to all members: Please contact Kristin Umland if you are not going to be able to attend a meeting. Her e-mail is [kristin.umland@gmail.com](mailto:kristin.umland@gmail.com).***