

Math and Science Advisory Council Agenda  
January 9, 2014 1:00 PM – 4:30 PM Meeting  
NM Museum of Natural History & Science  
Albuquerque, NM

1. Call to Order

Hy Tran called the meeting to order at 1:15 and thanked Charlie Walter for the use of the conference room.

2. Introduction of Members / guests (roll call)

Mr. Karl Agar II  
Mr. Tomàs Atencio-  
Pacheco  
Ms. Phyllis Baca

Ms. Terri Nikole Baca  
Dr. John Bellum  
Ms. Selena Connealy  
Ms. Malva Knoll

Mr. Zachary Leonard  
Dr. Alexei A. Pevtsov  
Dr. Hy Tran  
Mr. Charles H. Walter

Absent: Ms. Thansewi Martinez, Ms. Patricia DiVasto, Ms. Ashley Ivins, Ms. Karen Kinsman, Dr. Richard Sonnenfeld, Dr. Nader Vadiiee

NM PED: Lesley Galyas, Marcia Barton

Guests: Richard Persinger, Rick Scott

3. Approval of Agenda (Additions / Deletions)

Hy proposed to change the agenda to move the committee reports immediately after the approval of the minutes in order to allow Richard Persinger to present the STEM Connector website early in the meeting. Phyllis made the motion, Charlie seconded and the motion was approved.

4. Approval of Minutes

The minutes were approved without discussion (Zach, Charlie).

7. Committee Reports

a. Summary of NM Math Science Partnership Collective Impact Team Reports, from NMPMSE meeting 12/13/13 (MSAC attendees at NMPMSE included P. Baca, T. N. Baca, S. Connealy, K. Kinsman, M. Knoll, H. Tran, and C. Walter)

- Hy summarized the report given by Kurt Steinhaus about the investment and policy committees. At the beginning of the year, Kurt organized a dinner for the CEOs of the big STEM employers (Intel, the labs, etc.) during which they would discuss ways to strategically impact STEM education in New Mexico. Kurt also reported about two or three potential STEM bills in the state legislature that would provide funding for Teacher Professional Development, STEM initiatives and perhaps even an organizing entity.
- Selena summarized the report given by Kristin Umland regarding the work her committee has done on pre-service teacher preparation with the post-secondary institutions that confer teaching degrees. There are been several meetings of this group and most of the progress is in math.

- Zach reported about the work of the professional development committee and their recommendation for regional hubs and the adoption of the Learning Forward standards to teacher professional development. The nature of the Regional Education Cooperatives (RECs) in New Mexico was discussed. There are 9 RECs (even though there is a REC 10, there is no REC 1), and they are primarily organized around financial issues for rural districts.
- Selena reported on the work of the Recruit/Retain working group that is investigating the programs and practices of post-secondary institutions to recruit and retain STEM students. Data collection is on-going and the group hopes to issue a report this spring.
- Richard Persinger made a presentation about the NM STEM Connection, a website coordinated by the UNM STEM-H Center for Outreach, Research and Education. Richard provided an overview of the website (nmstemed.org) and asked for feedback from the MSAC members on the marketing plan, logo, and career profile features. Richard also described some potential website features, including a calendar, file sharing, newsletter, and blog. Hy encouraged all MSAC members to register on the site. Zach said that a website is not enough to bring teachers and researchers together; you need to build a relationship between the two. Tomas wondered if there was a mechanism for equipment and material sharing; Richard volunteered that the UNM STEM-H Center has a lending library and Hy reported that his professional organization lends Vernier equipment.
- Charlie reported on the work of the NM Informal Science Education Network (NM ISE Net), a group of science museums funded through EPSCoR to develop exhibitions and teacher professional development.

## 5. PED Announcements (Lesley Galyas)

### a. STEM Symposium

Lesley reported that there was \$640,000 left over in STEM teacher stipends, with \$860,000 having been distributed to districts to recruit and retain STEM teachers. In order to use the remaining funds, Lesley had to organize an activity for which teachers could receive a stipend for attending. The STEM Symposium will be held on June 6-7 in Albuquerque. There is space for 420 teachers to attend and receive a \$550 stipend. Teacher of STEM (including K-5 teachers) are eligible. Lesley has secured \$150,000 additional funds for the Symposium, but she is still looking for lunch sponsors. In addition the STEM Symposium, this is also money available for teachers to attend other Teacher PD in New Mexico and receive a \$1,000 stipend (Middle School Math).

### b. Filling vacancies on MSAC (Marcia Barton no longer on MSAC, as now PED staff)

Lesley reported that the MSAC is required by statute to have 12 members. MSAC currently has 17 on the roster. Tomas and Ashley will rotate off in June 2014. Lesley asked each MSAC member to indicate his or her preferred length of term (2, 3, or 4 years, or alternate). After Lesley tallies the MSAC members' responses, a determination will be made about whether new members are needed.

## 6. Discuss/ Distribution MSAC Legislative Report 2013 and 2014 Report

### a. Discuss 2014 assignment of writing team

PED determines the timeline for production of MSAC Legislative Report based on when the data is available.

b. Discuss role of PED in providing information, editing for format, and editing content  
Malva brought up the inclusion of extra material in the 2013 report and asked, “What is the editing process?” “Who edits?” “Who is responsible for the content?” Lesley explained that because MSAC members are appointed by the secretary, that person has final editing rights. This year, with an expanded timeline, MSAC members will have more time to review the report before it goes to the secretary. Hy and Malva will come up with a timeline for writing and reviewing the report.

#### 8. Old Business

Prior to choosing working groups, NGSS adoption was discussed. Hy reported the New Mexico Partnership for Mathematics and Science Education endorsed the adoption; Malva reported that NMAS, NMSTA, and CESE were working on their endorsement letters. Lesley reviewed the process:

March 2013 A rule change request to eliminate old standards and adopt NGSS as submitted by the MSB.

Dec. 2013 MSAC voted to endorse adoption and a letter was sent to Secretary Skandera

Jan 2014 Personnel from University Nebraska and OK State University will begin crosswalk between current NM Science Standard and NGSS.

Future 30-day public comment period culminating in a public hearing  
Secretary and governor make final decision.

Lesley reported that it is possible that she will be called to testify at the LESC and Achieve, Inc. has offered to help support her testimony. She is proposing a one-year planning period before any implementation begins. Zach expressed that if science is not part of the school grading system, it won't count. Materials adoption for science is in 2017

a. MSAC members choose working groups within topics from November Prioritizing Activity. See appendix below for top 5 vote-getters from November.

Three working groups were established:

1. Teacher Advocacy and PD Policy (Karl, Tomas, John, Richard, Karen, Zach, Phyllis)
2. Strategic Planning (Pat, Hy, Alexei, Teri Nikole)
3. NGSS Adoption and Implementation (Selena, Malva, Charlie, Nader)

b. Preliminary discussion of working group tasks

Zach and Hy will craft a change to the committees that will include an “early win” and a “longer term goal.” Committees are expected to meet in addition to MSAC meeting times and it was suggested that committees schedule their meetings immediately prior to the MSAC meetings.

#### 9. New Business

Discussion of new business was deferred to the next meeting.

Update contact information and affiliation for 2014 documents (see annual report)

Discuss MSAC role as liaison to community (parents, teachers, residents)

Include need of PR of MSAC activity to general public/ educational groups

Discuss solicitation of community resources and other experts

#### 10. Schedule of Next Meeting

March 6, 1:00 pm, location TBD. Committees to meet at 10 am.

11. Call to Adjourn

The meeting was adjourned at 4:39.

## **Appendix: Prioritizing top vote getters from Nov. 2013:**

### Clusters with 8

- Build teacher leadership capacity
- Be a voice for supporting STEM teachers
- Make teachers feel important
- Be available to science & math teachers to hear suggestions/issues
- PD for PLC (prof. learning communities) groups within schools within subjects
- Consider ways to raise the level of professionalism in teaching to attract to people

### Clusters with 8

- Research PD hub models with collective impact approach
- Support State & International benchmarking team to bring best practices to NM
- Better studies to drive recommendations (meta-analysis)
- Encourage collaborative PD efforts statewide
- Finding & endorse best & proven practices in STEM

### Clusters with 7

- Review & advise on implementation of Strategic PED plan
- Be a sounding board for Lesley & Marcia & MSB
- Connect & align the system
- Develop budget priorities
- Align financial resources, policies for coherence

### Clusters with 7

- NGSS with PD & resources to implement
- Legislative testimony re: NGSS implementation needs

### Clusters with 5

- Promote inclusion of diverse stakeholders in MSB planning & implementation
- Awareness: Marketing of M & STEM
- Coordinate w/ other stakeholders w/r/t STEM

Editorial comment by Hy Tran: I propose collapsing the two “clusters with 8” together into a single supercluster, as this is all about teacher PD/benchmarking/best practices.

## **I also propose collapsing bottom two lists into 1. This leaves a total of 4 working groups:**

- Report writing coordination team
- Teacher empowerment through PD and best practices
- PED Strategic plan/sounding board
- NGSS, inclusion of diverse stakeholders, awareness & marketing STEM, coordination with other stakeholders.