Math and Science Advisory Council Agenda
September 6, 2013 1:00-5:00 PM
New Mexico Tech
Fidel Center Building 10, Ballroom A
Socorro, NM

1. Call to Order
Hy Tran called the meeting to order at 1:15.

2. Introduction of Members / guests (roll call)

Mr. Karl Agar II	Ms. Karen Kinsman	Dr. Hy Tran
Ms. Terri Nikole Baca	Ms. Malva Knoll	Dr. Nader Vadiee
Ms. Marcia Barton	Mr. Zachary Leonard	Mr. Charles H. Walter
Dr. John Bellum	Dr. Alexei A. Pevtsov	
Ms. Selena Connealy	Dr. Richard Sonnenfeld	

Absent: Mr. Tomàs Atencio-Pacheco, Ms. Phyllis Baca, Ms. Patricia DiVasto, Ms. Ashley Ivins, Ms. Thansewi Martinez

Guests: Dr. Kirk Steinhaus, LANL; Dr. Rebecca Reiss, NMT and CESE

NM PED: Lesley Galyas, Math and Science Bureau

3. Approval of Minutes
Karl made a motion to accept the minutes as amended to include Alexei Pevtsov's comments. Karen seconded the motion. Discussion: Richard asked for clarification about "hard to staff" language in STEM bill and Lesley clarified that that was the language in the legislation. The minutes were approved as amended.

Appointment of Co-chairs
Richard made a motion to appoint Hy Tran and Malva Knoll as MSAC co-chairs. Karen seconded the motion. Discussion: Hy and Malva both agreed to the appointments. One person will be charged with running a particular meeting. The motion passed.

Selection of secretary
Selena Connealy agreed to serve as MSAC secretary. Karen Kinsman volunteered to take the minutes if Selena could not attend the meeting.

Guidelines for Management of Council Meetings
Richard made a motion to conduct MSAC meetings following "Robert's Rules, reasonably interpreted." Marcia offered a friendly amendment to strive for consensus on MSAC business. The motion was crafted by committee to read:
"The MSAC strives to achieve consensus. Discussions will be moderated by the co-chairs so as to be fair to all participants. If consensus is not achieved, Robert's Rules, reasonably interpreted, will be followed. Any MSAC member may call for a vote."
The motion passed.

Karen made a motion to set the quorum for meetings at 9 MSAC members. Zach seconded. The motion passed.

4. Approval Additions Deletions to Agenda
The agenda was not changed.

5. PED Announcements
Lesley reminded the group that because the MSAC meetings are public, both the agenda and minutes must be published. By law, the agenda must be published 72 hours prior to the meeting. In order for Lesley to have it posted, she needs to have a final agenda one week prior to the meeting. Both the agenda and notes will be posted to the NM PED website: http://ped.state.nm.us/ped/MathandScienceIndex.html

NGSS: Lesley described the process of Next Generation Science Standards adoption which is an administrative, not legislative action. When NGSS adoption is addressed by the rules committee, it will trigger a 30 day public review and comment period. Lesley will find out more about the process and report at the next meeting. Lesley received a letter from Steven Pruitt of Achieve stating his willingness to help NM with the adoption process.

Google Groups: We are using Google Groups for our work. Several MSAC members have not yet gotten subscribed to the group; Lesley will update Google Groups to ensure that everyone has access.

Mileage Requests: Any MSAC member who would like to be reimbursed for mileage must submit a W-9 in order to be made a vendor. A PO will be issued.

STEM Professional Development Coordinator: Marcia Barton, MSAC member and SFPS high school teacher has been selected for this position. She will start September 19. Although she cannot continue as an official MSAC member, she will continue to support the work of MSAC and attend the meetings. Lesley is working to make this position permanent.

6. Guest Speaker Reports
a. Kurt Steinhaus, briefing from STEM Collective Impact Team, followed with Q&A
Kurt Steinhaus provided a overview of STEM education in New Mexico through the lens of past, present and future activities. He began by commending Lesley for her work at the Math and Science Bureau.

Past: The PED has had a math consultant on staff for the past 25 years, but the science consultant position has not been as stable. The HED doesn't have either a math or science person. Technology is addressed by a 1994 state technology act that established a technology council (now defunct) and an appropriation of $100 million to support technology education (which is why MSAC doesn't include technology).

The first Math and Science Town Hall was held in 2005. The final report (found here: http://nmfirst.org/events/previous-events) from the Town Hall was issued after the state's budget requests were already set, but Cynthia Nava pushed to have the recommendations included in legislation that ultimately included the formation of the Math and Science Bureau, the MSAC and money for Math and Science teacher professional development. The bill took a record 30 hours to get through the Senate!

In November 2008, MSAC issued a strategic plan, Project 2012, which called for initiatives to support math and science in New Mexico. It was updated in January 2010. (Project 2012 documentation can be found here: http://www.sfafs.org/nmproject2012_documentation.asp) . With the change in administrations, the MSAC member's terms lapsed and there were no meetings for several years.

In the absence of the MSAC, the New Mexico Partnership for Mathematics and Science Education took up the cause of Project 2012 and raised money to convene another Town Hall with the help of NM First. The STEM Summit was held in Santa Fe in November, 2012. The background and final reports can be found on the NM First website: http://nmfirst.org/events/previous-events.

Present:
The collective impact team has been formed to work on the recommendations from the STEM Summit. Committees are working on policy, industry STEM education investment, teacher professional development, pre-service teacher development, communication, and recruiting and retaining STEM majors at post-secondary institutions. The collective impact team's work is based on research from Stanford.

Future:
Where will the money to improve STEM education come from? We need support from both the governor and the legislature to move this issue forward.

Questions:
What are the roles of MSAC and NMPMSE and Collective Impact Team?
How can practicing scientists be part of the equation?
How do we move from Math/Science to STEM? Should we seek to amend the legislation?
What's the role of industry?

7. Committee Reports
    a. Selena Connealy NGSS presentation

Selena made a presentation about the development of NGSS, its relationship to CCSS, and potential issues related to adoption. A copy of her PowerPoint is provided with these notes.

8. Old Business
    a. Establish Legislative Report Working Group for November deadline to NM legislature.

Richard, Hy, Malva, Zach, John, Marcia and Lesley will conduct a conference call to work on the Legislative Report.

    b. Establish NGSS working group

This was tabled until the next meeting.

    c. Action items "must haves" from previous meeting. Compare to information from Math Science Partnership

This was tabled until the next meeting.

9. New Business
    Relationship with Math Science Partnership

Selena and Karen volunteered to be liaisons between MSAC and Collective Impact Team. They will facilitate communication between the two groups.

10. Schedule of Next Meeting

Tuesday, October 1 at the NMMNHS from 1 to 5 pm. An optional lunch (noon to 1) will be provided by NM EPSCoR.

11. Call to Adjourn

Selena made the motion to adjourn. Karl seconded. The motion passed.

Respectfully submitted by Selena Connealy, September 9, 2013

September 6, 2013 Discussion Items

It is not feasible to have an MSAC presence on the front page of the NM PED website because all front-page content has to go through the secretary's office for approval.

Richard suggested a "science van" with lots of hands-on experiments that could go to schools around NM. Karen offered a partnership in Indiana as a potential model for this.

Zach suggested that we look at the research base to see what's effective in science and math education.

Alexei offered suggestions for getting practicing scientists engaged in outreach activities and for getting student involved in research.

Karen suggested training for scientists to do better outreach to classrooms.

Marcia posed a question about how we might move from "Math and Science" to "STEM."

John remarked that the current teaching force can't enact STEM curriculum without significant professional development. How can we move the needle? Teachers need to be enlisted in this effort. What is the role of industry? How can we ensure that both education and science professionals have the appropriate skills they need in order to work together?