

Math and Science Advisory Council Meeting

August 23, 2019

9:00am to 2:30pm

Santa Fe Botanical Gardens

Santa Fe, NM

Agenda

1. Call to Order (9:14 am - CK)

Dr. Wanda Bulger-Tamez

Ms. Christy Krenek

Dr. Scott Robbins

Ms. Glenda Leonard

Ms. Anna Suggs

Ms. Tanya Rivers

Ms. Mollie Parsons

Ms. Bernadine Cotton

PED Guest: Shafiq Chaudhary

2. Introductions with vision for upcoming year

- Who or what is the MSAC? We should get the word out, figure out where we fit into the broader NM education ecosystem.
- Negotiate purpose and role of the MSAC.
- Focus on advice, what might the MSAC advise upon?
- Provide guidance to those on the front lines, universities, school districts, teachers in the classroom.

3. (9:35 am) Members review, update, and approve agenda (Additions/Deletions)

4. Minutes: 9:37, Members approve minutes from May 17, 2019 meeting at Las Cruces

5. Logistics/Setting the Stage

- (9:40 am) Review of NEW group norms in pairs and larger group
- (9:44 am) Review electronic communications format
 - All MSAC members have an electronic device
 - MSAC members are getting more comfortable with google drive
 - Bookmarking the MSAC share folder as a tip

6. Presentation: Santa Fe Botanical Garden and STEM - Mollie (9:45 - 10:25)

7. Discussion of Elementary Specialist for math and science (10: 25, TR, WBT)

- Start with K-6 Math specialist certification, next focus on science
- Leadership, pedagogy, content integrated to address specific needs
- New cohort (~ 30) envisioned across the state anchored to a higher education institution, eventually imagine 1,000 teachers

- Funding will be a challenge over 5 - 10 years; How to pay for the extended education? Members discuss how to incentivize participation, board certification? Pay scale advancement?
- Starting with inservice upskilling, hope to influence higher education to boost competencies targeted for pre-service teachers-in-training.
- Reference the national standards to develop competencies for elementary teachers.
- SC provides an overview of the rule-making process - the path for establishing the competency foundation for the elementary math specialist (EMS)
- Members discuss site-based dimension of supporting the EMS-certified teachers in assuming the role of site math instruction leaders.
- First cohort starts at NMSU September 7, 2019.
- Discuss challenges likely to come up as the EMS model is rolled out to more rural parts of the state, ENMU, WNMU, etc.
- Members discuss the differences between the math specialist role and the eventual (maybe) science specialist role.
- Members will review information related to how to best implement science education at the elementary level.
- Members discuss structural impediments or potential facilitators to boost the degree to which science is being well taught.

8. (11:10 am) PED Math and Science Bureau update (SC)

- Developing, elaborating the state-wide vision for STEM ed., 2-day Supporting Science Standards Implementation.
- Open Sci-Ed field test as an example of programs aimed at boosting high quality STEM teachers for all students. August 15 release of first materials set.
- Science Readiness initiative - continue work with partner schools...13 schools mostly in the NW, Gallup, T. or C. Phenomenon-based learning constitutes one element.
- High Academic Standards & Aligned Assessments - recommendation 3-8 assessment drawn from 2020 spring assessment with a gradual insertion of increasing proportion of NM-developed items. A blueprint exists and may be viewed on the PED Assessments web page, which defines key features. College readiness exams may be adopted to evaluate grade 11 achievement. NM Measures of Student Success and Achievement to label new assessment instruments. NM Assessment Science Readiness will be used for science assessment - currently in field test, "census" test.
- Math instructional materials have been reviewed, results will be released Fall 2019 at which point the districts may proceed with procurement decisions.
- Inspire conference provides NGSS implementation content to 476 participants.
- Making Sense of Science institutes were delivered during the Summer 2019. A total number of 663 participants over the course of the 2-week session were included. Members recommend that future sessions clarify the content focus, as opposed to

classroom implementation. Plan to expand offerings during the school year with teacher and administrator NMSRS implementation sessions to be delivered around the state.

- Computer Science Alliance - standards adopted Summer 2019. Professional development activities were offered.
- Facilitator training was provided to develop capacity to deliver teacher and administrator training on NMSRS implementation.
- Discuss ways by which professional development may be more directive - how do we inspire to do the right thing? Members discuss Principals Pursuing Excellence as an example of programs promoting administrator engagement.
- Priority Schools Bureau has collaborated with MSB in the past.
- Twenty teachers participated in Virtual P.D. initiative aimed at rural educators. MSB looks at continuing and expanding the program into the current year.
- STEM Learning Opportunities for all Students at All Grade Levels: \$500K was appropriated to support computer science education.
- NM Governor's STEM Challenge and Showcase.

9. (12:05 pm) Break for lunch!

10. (12:37 pm) Members discuss interest in training to acquire a more in-depth appreciation for the NM standards. Group decides to start with computer science and will host a guest presenter for an orientation session.

11. (12:40) Members work with SC to lay the foundation for developing the 2019 Annual Report first draft.

- Members discuss graphs and charts to define the data needs and interests relevant to the report.
- Discuss partnerships, entities

9. (2:30 pm) Wrap up the meeting, agree to meet on September 9 to draft the annual report. Members split into subgroups to focus on specific "Critical Issue" areas. Subgroups will review the Action Recommendations for their assigned Critical Issues before the 09/09 meeting.

(2:35 pm) Meeting adjourned in a hail storm. Did not get to the "Sunshines and Blues" self-evaluation activity.