

Math and Science Advisory Council Meeting
January 15, 2021
9am - 3pm

Minutes approved on 04/09/2021

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| 1. Members present | |
| Wanda Bulger-Tamez | Mollie Parsons |
| Scott Robbins | Dave Dooling |
| Anna Suggs | Ling Faith-Heuertz |
| Tanya Rivers | Marcia Barton |
| Glenda Leonard | |

PED MSB: Yanira Vazquez, Shafiq Chaudhary, Christy Krenek, Jennifer Hooten
Guest: Martha Becerra

2. (9:00) Introductions
3. (9:20) Call to Order: roll call of remote participants, identify any public members
4. (9:25) Approval of Minutes from previous meetings (October 13 Minutes)
5. (9:28) Approve Agenda for 01/15/2021
6. (9:30) Secretary update (Wanda, Tanya): Shared accomplishments and priorities documented in the annual MSAC report. Secretary shared his interest in the prioritized activities and anticipated impacts. Discussed the Mathematics Framework, systems (“marketplace”) for professional learning, interest in apprenticeships and internships as ways to emphasize the connection between STEM education and career opportunities. Sustainability and scalability were both emphasized as features considered essential for STEM education initiatives going forward. Search underway for vendors to provide professional development focusing upon those included on the HQIM alignment list.
7. (9:41) Break
8. (9:52) Members discuss plans for supporting NM school districts to restore normal instructional delivery operations. PED MSB shared some initiatives aimed at supporting accelerated student learning, as part of the recovery strategy. Extended learning options for Summer 2021 were discussed and shared including “Learning in Places”.
9. MSB members share updates including:
 - “Office hours” initiative aimed at boosting engagement with NM educators
 - Computer Science Taskforce
 - SCRIPT Workshop
 - Mathematics Framework

- New Mexico Instructional Scope (NM IS) – Mathematics
- Advancing Coherent and Equitable Systems of Science Education (ACESSE)
- OpenSciEd Field Test
- New Mexico Statewide Assessment Update
- Mathematics Reentry Support for PreK–12 School Teams
- Computer Science, Mathematics and Science STARS course offerings are under review for next school year.
- Elementary Mathematics Specialist
- Computer Science Professional Learning
- Math and Science Reentry Supports
- Presidential Awards for Excellence in Math and Science Teaching
- Computer Science Request for Applications (RfAs)
- NM Governor’s STEM Challenge and Showcase

10. (10:20) Priorities for 2020-21 Report (for AY2021-22)

a. Discussion of potential priorities

- i. Members raise questions regarding the Computer Science Framework - draft is currently being reviewed at PED and may be shared with MSAC members after the review is completed. MSB will lead efforts in CS education for grades K - 8. College and Career Readiness bureau will take the lead in promoting CS education for grades 9 - 12. Members discuss how CS education fits in the set of Math and Science instructional requirements for NM.
- ii. Members discuss the value of generating the list of MSAC priorities in the springtime preceding the school year in order to better inform stakeholder planning activities.
- iii. (10:35) Members review the results of the questionnaire circulated to collect member priority interests. Members share information regarding the “proficiency fund.” Members review the comments submitted by respondents. Priority areas included computer science education strategy, process for moving forward with Elementary Science Specialist endorsement, incentivizing instructional minutes for science and math instruction, and alignment of science courses with NGSS.
- iv. (10:50) Members suggest adding a priority focused on recovering lost ground in STEM education for NM students due to pandemic controls.

- v. (11:00) Members discuss the pros and cons of recommending increased science proficiency testing. Importance of including instructional leaders and administrators in any incentivization scheme. Increased assessments, as a “stick,” would probably be insufficient in itself to promote more and better science instruction. After school and other extended learning opportunities can help accelerate student learning in science.
- vi. (11:11) Members discuss the process for the development of an Elementary Science Specialist (ESS) endorsement, based on lessons learned from the successful effort to develop the Elementary Math Specialist endorsement. Funding in support of a project manager for the ESS initiative would be necessary.
- vii. (11:23) Members discussed the alignment of science courses with the NGSS as one of the 4 key priority areas. Efforts are underway among members of the museum educators community to align their offerings with NGSS.
- viii. Breakout rooms set up for further discussion on priority areas: Strategic Planning for STEM Ed. including C.S.; Post-Pandemic Recovery and Restoration; Incentivizing Science Instruction including development of ESS

11. (11:54) Lunch break

12. (12:45) Breakout rooms convene

13. (1:25) Breakout room members share highlights of their discussions

- a. Strategic Planning with a focus upon C.S. Education members suggest training for out-of-school providers so they can better support public schools in achieving. Testing may be considered as one aspect of the strategy for driving science instruction. Connection between C.S. and mathematics should be elaborated. Path to algebra should be included in strategic planning to span the K-8 and 9-12 divide. Career readiness for NM students should be a focus for strategic planning. Strategic plans should include how out-of-school informal science education providers can serve student needs. Adaptations leading to the proliferation of online learning may be tapped so support C.S. education.
- b. Incentivizing Science Teaching and Learning breakout group members discuss cross disciplinary curriculum models for integrating more science education into

daily teaching. Should identify what other states might be doing to incentivize science instruction. The ability to use remote learning technology may open curriculum options for teachers. Informal science support and mentoring involving STEM professionals in their communities can provide motivation. Sustainability has to be a key priority for the development of and deployment of any incentivization plan. Southern Regional Education Board can be a valuable resource. Suggest developing a catalog summarizing the instructional assets now available as informal STEM education providers adapted to pandemic conditions.

- c. Recovery, Reentry, and Restoration breakout group shares their concern that inequities are likely to have increased as a result of the pandemic upheaval. Districts should assess the areas of greatest need, students who might have suffered the greatest setbacks in their educational progress. For example, attendance data might be useful for determining the population in greatest need in school systems. Family and informal STEM education providers may have an important role to play in recovering and then advancing beyond historical norms of STEM academic achievement. Reentry plans will be braided with the attendance plan. Multiple Layers of Systems Support (replaces RTI) will be integrated into reentry plans. NM legislative session to meet 01/19/21 to begin working through funding applied to COVID recovery. Statewide reentry planning is underway and is largely shaped at the district level.
14. (2:25) Members discuss:
 - a. Planning Next Steps, two working groups will revisit recommendations in the “Strategic Planning” and “Incentivization” focus areas used for the breakout sessions. Working group members will elaborate recommendations to share in the Spring (late March - early April) meeting.
 - b. Timeline for 20-21 Report & 2021 Meetings were discussed.
 15. (2:38) Co-Chair + Secretary nominations are put forward. Dave Dooling nominated for secretary and Mollie nominated for co-chair. Members agree to finalize and vote upon the nominations for positions in the March meeting.
 16. (2:44) Members discuss membership drive and the need to focus efforts on recruiting teachers.
 17. (2:48) **Sunshines & Blues**: Members shared perspectives on what went well and what might have gone better for the group in today’s meeting.
 18. (2:57) Meeting adjourned