Math and Science Advisory Council Meeting August 25, 2023, 9 a.m.-4 p.m.

Los Alamos National Laboratory, Community Partnerships Office 100 N. Guadalupe Street, Santa Fe, NM 87501

Virtual

https://us02web.zoom.us/meeting/register/tZcvceyvrDsjE9LKGKDrscJqcfn1neXY3K51

Agenda

1. (5 min) Call to Order: Roll call of participants, identify any public members. 9:10 a.m. Welcome by Martinez-Archuleta. Started 9:15.

Angela Alderete

Deborah Elder Jessica Hadaway, senior policy analyst, for

Monica Martinez-Archuleta LESC.

Kim Ayres Michael Baty, PED/Black Education Act Nathaniel Evans Joseph Ulibarri, PED/Black Education

Paulo Oemig

Marcia Barton Shafiq Chaudhary, MSB
Ling Faith-Heuertz Patricia Gharrity dir MSB
Dave Dooling Dave Ubinger, MSB
Tammy Gaudet Lisa Sanchez, sci spec

- 2. (2 min) Approval of agenda. Martinez-Archuleta moves to approve. Gaudet seconds. Approved, 9:21.
- 3. (5 min) Approval of minutes from May 5, 2023 meeting. Oemig moves. Angela seconds. Approved 9:26.
- 4. (5-10 min) Public Comment. None yet. May have Jessica Hadway, LESC member, later.
- 5. (30 min) MSB Education Session. Start 9:27. Chaudhary reviews questions about meeting. SAT and other data are still embargoed and under review. Microcredentialing pilot plan will have no financial incentives other than having no cost. Districts will have to decide on their own incentives. Applications for Open SciEd reviewers will open this fall. Legislature will approve funding for consumables in 2025 session. Chaudhary explained process MSB is following to ensure that math pathways are coherent for students and that they understand how to switch pathways if interests change and plan to release for public feedback. Microcredentialing will be advertised (mid-September) to teachers when contracts are in place. Martinez-Archuleta asked for highlights from June conference to help support states navigate changes in science policies and how to communicate things that PED and others cannot. Not acceptable for teachers to have to spend their own money for materials and activities. Chaudhary said goal is for districts to have trainers who expand skills to other teachers.

Hadaway reviewed LESC plans for math classes and curriculum. Members discussed concerns about 8th grade standards being addressed properly.

6. (10 min) Break. 10:03-10:15.

Resume 10:17 with Baty and Ulibarri, PED/Black Education Act, providing an overview of the program. Expressed an interest in holding workshops through MSB to train teachers; team goes to schools. Finish at 10:40.

7. (90 min) Breakouts and then reporting out and discussion from Math, Science, Computer Science, and Outdoor Learning working groups on Critical Issues. Chaudhary said that requested data is still embargoed. Oemig

notes that Science Working Group met twice this summer and plans to finish report by Nov. 30. Adjourn to breakout rooms for 60 minutes. 10:45–11:47.

12-1 p.m: Lunch @ Il Vicino.

7. (cont'd) 1:14. Breakout summaries:

Science (Alderete, Oemig, Dooling): Asking about development of E.S. science specialist. Ask about expanding to requiring that each school have at least one specialist, with stipend, and recommend that 5 hrs/week instruction be implemented. Funding for lab supplies is an important issue that must be pushed to ensure high-quality instruction, and funds should be encumbered to prevent diversion. Ask for annual summer science conference, Driving Change, with stakeholders and teachers to identify critical issues that emerge. Needs to be new and separate from NMSTA. Need science credits for CTE courses; teacher will need to be science-endorsed; perhaps address through microcredentials. Rebrand as Science Research Roundup.

<u>Math</u> (Gaudet, Martinez-Archuleta): Continue on working to get kids involved at a younger age; a stipend to help attract and retain people; math identity; Algebra II pathways being rigorous; how to bring in student voice and learn what they need to help them get and stay involved and see connection to real problems.

Outdoor Learning (Barton): No report.

<u>Computer Science</u> (Faith-Heuertz): Agreed on getting data on grades and classes taken; CS microcredntialing at K-8 level.

8. (45 min): Motion to approve Critical Issues for 2023 MSAC Report. Oemig says we have not yet formalized any critical issue, so there is nothing can be approved. Timeline is draft ready by Nov. 30, so issues need to be identified by late September/early October. Chaudhary reminds that they have to be approved by the full MSAC, but we have to wait for data to be released. Oemig said that should be at the next MSAC meeting on TBD.

9. (25 minutes): Review data: ASR, MSSA, SAT, course-taking data will be available. Dual enrollment and AP data may be available. No data available yet.

10. (45 min), 1:4–2:302. Breakout groups align MSAC narrative on the data available and Critical Issues to 2022 NM PED Strategic Plan. Change agenda to work on draft version of critical issues.

Science

- 1. Support implementation of Elementary Science Specialist by:
 - a. Add differential to teacher salary for ESS.
 - b. Require every Elementary School have an Elementary Science Specialist.
 - c. Require all elementary school students participate in 5 hours of phenomenon based, 3D science instruction provided by an Endorsed Elementary Science Specialist who will follow NM Stem Ready Science Standards/NGSS.
- 2. Support dedicated funding for equipment and consumables to be specifically used for classrooms aligned to NM Stem Ready Science Standards/NGSS.
- 3. Support High quality science instruction.
 - a. Offering endorsement pathway for CTE teachers to become science endorsed.
 - b. Provide tuition reimbursement for course offerings.
 - c. Provide master level classes.
- 4. Foster a network of collaboration between formal and informal science organizations
 - a. Provide funding for Science Driving Change Conference.

Outdoor Learning (Barton): Still in progress.

Math (name): TBD.

Computer Science (name): TBD.

Chaudhary reviewed origin of critical issues and funding challenges.

- 11. (10 min) Break. Skipped.
- 12. (30 min) Review and finalize data narratives. 3:30. Oct. 20 is next meeting. Oemig asks each working group to meet and finalize drafts with rationales. Chaudhary needs draft by Oct. 1. He said he is waiting word on when data will be available. Gaudet suggested an emergency meeting before Oct. 20, which would require a 2-week notice to comply with the Open Meetings Act. The Council discusses a September meeting (8, 15, 18 were options; possibly 3:30–5:30) to review Critical Issues and Executive Summary. Alderete moves for Sept. 18 at 3:30, seconded by Gaudet. Approved, 3:38.
- 13. (10 min) Review 2022 Executive Summary and discussion of 2023 Executive Summary. Absorbed into Item 12.
- 14. (10 min) Reflections on this meeting. 3:40. Alderete moved to adjourn. Oemig seconds. Adjourned at 3:42.