Minutes Approved on November 22, 2024

Math and Science Advisory Council Meeting August 23, 2024 9am-4pm

Hybrid – In-Person Address

Taos Charter School 1303 Paseo Del Cañon E. Taos, NM 87571

Virtual link Zoom link

Agenda

1 Call to Order: Roll call remote participants, identify any public members 5 min

Angela Alderete (sci)	Allison Nannemann (math)
Kim Ayres (cs)	Paulo Oemig (sci)
Nathaniel Evans (math)	Gregory Rael (STEM & Math)
Kelsey Garner (outdoor)	Heather Summers (sci & STEM)
Tammy Gaudet (math)	Stephanie Thompson (sci & STEM)
Cari Hushman (sci/STEM)	Kersti Tyson (Math and STEM)
Monica Martinez-Archuleta (math/CS and STEM)	

2 Approval of agenda

3 min

Rollcall-

Online: Lisa, Allison, Heather, Conor Hicks (LESC)

In person: Monica, Tammy, Kelsey, Trish, Paulo, Angela, Nathaniel, Kersti, Shafiq

3 Introductions and Updates-Name & Affiliation

15 min

NMSU - submitted ITEST proposal

Monica - Super Computing Challenge, Other Challenges

Angela - Seeing excitement in Science in her classes and importance of competitions

Nathaniel – Taos Academy opened in 2000; Hosting!

Kersti – NSF ITest Getting to Y; NNSA funding; ISEC; NM NSTA

Nathaniel – High Intensity High Dosage Tutoring Program

Heather - NM-STA; October 18-20;

Lisa – Instructional Materials; 101; OpenSciEd; NM Academy of Science - Poster Presentations.

Project ECHO – math and STEM starting up in the next few weeks

Ali - first week of classes at UNM

4 Approval of minutes from May 31, 2024, meeting

10 min

Motion: Nathaniel Second: Tammy

Motion carries, non opposed

5 Public Comment

No requests for public comment

6 min

6 MSB Education Session

30 min

Shafiq

Updating MS math and science instructional scope; strengthening core layer 1 and layer 2 and Universal Design for Learning;

Participated in CES LEAP

Black Education Act

NCTM & CTE (Initiatives on outdoor learning)

Questions:

Monica – ReEnvision math pathways what is that process:

Shafiq: – MSB working with recommendations from working group, will be presented to leadership at the agency with multi-year roll out plan. Release in fall for feedback.

Monica: What did process look like?

Shafiq: Working group centered what students should have access to; Working group has worked for 18 months.

Kersti: How did shift in grad requirements influence the conversation?

Working group looked at standards in Algebra II – what is relevant to all; What are pathways beyond that? I.e. What course sequences are being developed? Flexibility within pathways so that students can change midstream.

Monica: How are we supporting schools to give students the right guidance – so that schools can really provide the guidance to students; This needs special attention so that students have the support they need to make the choices.

Shafiq – we are developing a multi-step approach – school counselors are pivotal. Working with CCRB – College & Career Readiness Bureau to be in sync with implementation plans – and ensuring that we are providing necessary professional guidance

Angela – What is the communication with parents? Parents can also guide their students. There is a full range of parents.

Monica – We need to support parents; not rely on parents for that guidance. Students need supports to consider what path they want to take.

Kelsey – In Roswell area – there are a lot of Spanish only speaking parents; How can we communicate – there is a lot of good stuff out there; how do we know.

Angela - can you expand on the ESS – Elementary Science Specialist? (Presented to LESC). Shafiq - Counsel has always advocated for ESS. And Science Endorsement. We are updating entry level competencies for Science and Math – MSAC will have input on that process – goal is for updating competencies and Science endorsement and then develop specialist. Shafiq - Continue to include advocacy for Science Endorsement, if Council agrees.

Monica - Update on Science visioning

Shafiq - Survey went out – data was very positive; in terms of pride about Science education. There were clear themes. There was a lack of voice from stakeholder groups, i.e. indigenous, elementary teachers. Next phase – NSTA & consultants will be convening focus groups. So that their voices can be captured in vision. One day final meeting end of October to craft vision. Consultants will review with data – goal is to create a Science framework similar to Math framework.

Paulo – How does this work fit with STEM Framework?

Shafiq – this council has a pivotal role in determining STEM strategic plan.

Bureau – over sees Science education; Council should not wait so that Council can send a message to state about what STEM should look like. There has not been an update since 2019. And alot has happened. I don't know what the MSAC vision is. It is the council's job to advise MSB.

Angela – can the data be shared with MSAC?

Shafiq – yes. I will put it in the running notes.

Kelsey – we reached out to 1500 people, 300 people responded; I did not see input from my region. Can we extend and ask for more input? NSTA did send out another email survey to broader list.

Shafiq – perhaps a focus group in SE region.

Kersti: Who was the audience:

Shafiq: K-12 educators, industry, administrators, families.

Kersti: Survey seemed very educator focused.

Shafiq: We can develop questions for the focus groups. Let us know who should be in focus groups and what questions.

The contractors have been phenomenal to work with! If you have further questions – please ask Shafiq or Trish.

7 Follow up: Publicly list names and email addresses of MSAC members on MSAC webpage

 Motion: Agree to list council members' email addresses on the PED MSAC site as displayed in the MSAC member contact info spreadsheet. 10 min

Motion Nathaniel Second Kelsev Motions approved, none opposed

Angela will confirm with Greg and Stephanie who are not here.

8 NM STEM Innovation Network: Monica Archuleta-Martinez & Kersti Tyson

30 min

- Action item: Create a statement of support for the development of a STEM Innovation Network
- Committee will discuss at our next meeting 5 min
- Action item: Appoint a MSAC representative to be on the STEM Innovation Network Coalition
- Motion: Carrie will be MSAC rep at STEM Innovation Network meetings.

Nathanial (moved)

Kelsey Second

Motion carries, no opposition

10 min

9 Working groups present updates from their meetings since May 31.

30 min

Math Report Out

Outdoor Learning – reconvened task force

Grad requirements

Integrating Science Competencies (vs creating outdoor learning standards)

Action items to empower teachers

What is in progress?

Communications

Role in competencies

Kersti: Interdisciplinary learning/learning in the outdoors

Outdoor learning defined place based learning

TOTAL NM has developed standards; and how to align

Paulo: Drone; Climate based education?

Schools receiving grants and are submitting annual reports

Outcomes are reported in MSB

More inclusion in indigenous knowledge as part of core curriculum

Getting more kids outside

How many students are going outdoors

Science:

Curricular issues

Assessment of Science readiness; SAT

HS Course taking trends Science subject enrollment

Science expenditures

Science teacher licensure levels – Level I, IIs IIIs.

10 STEM Working Groups update on the revision of STEM Strategic Framework

30 min

11 MSAC Working Groups Only

90 min

- Break out into Working Groups and discuss Critical issues
- **12** Working Groups share next steps

15 min

- 13 Next meeting details November 22nd (virtual)
- 14 Sunshine and Blues, reflection on meeting

5 min

Adjourn Angela (Motion) Paulo (second)

Motion carries.