

*The National Academies of*  
**SCIENCES • ENGINEERING • MEDICINE**

Board on Science Education  
Division of Behavioral and Social Sciences and Education

**Agenda**

**Taking Stock of Science Standards Implementation: A Summit**

**April 26-27, 2022**

**Lecture Room, National Academy of Sciences Building  
2101 Constitution Ave, NW  
Washington, DC 20418**

**Zoom:** See Registration Email

**Goals**

The Board on Science Education (BOSE) of the National Academies of Sciences, Engineering, and Medicine (NASEM) held a virtual summit October 14-15 and December 8 that was designed to take stock of the implementation of state science standards, considering implementation across all states and territories to identify successes, challenges, and identify areas where additional work is needed. This session will build from this and other activities to ...

1. Identify the conditions for implementation that will support a more equitable and coherent system of science education.
2. Develop a road map for implementation efforts looking forward that supports research, policy making, and shifts in practice.

**DAY 1: Tuesday, April 26<sup>th</sup>**

**All Times are ET**

**9:30 am**      ***Breakfast and Informal Introductions*** (East Court)

**10:00 am**      **Welcome and Agenda Overview**

Heidi Schweingruber, *Director, Board on Science Education (BOSE), National Academies of Sciences, Engineering, and Medicine (NASEM)*

Maya Garcia (Chair), *Colorado Department of Education*

**10:10 am**      **Reflections from Practice**

Autumn Rivera, *Glenwood Springs Middle School, CO*

**10:20 am**      **Greatest Hits and Setting the Stage**

**Moderator:** Heidi Schweingruber, *BOSE, NASEM*

**Virtual Moderator:** Amy Stephens, *BOSE, NASEM*

**10:20 am Greatest Hits Reflection, Select Planning Committee Members:**

- Maya Garcia, *Colorado Department of Education*

- Jessica Henderson-Rockette, *Instruction Partners*
- Victor Sampson, *University of Texas at Austin*

**10:35 am Setting the Stage, Visionary Panel:**

- Stefanie Marshall, *University of Minnesota*
- Tia Madkins, *University of Texas at Austin*
- Tiffany Neill, *Oklahoma State Department of Education*
- Elizabeth Mulkerrin, *Omaha Zoo and Aquarium, NSTA President Elect*
- Brian Reiser, *Northwestern University*

**Panelists will be asked to respond to:**

*Imagine it's 2032: What do you see has happened? How do we get there?*

Each panelist will have 5 minutes for their remarks followed by a brief Q&A.

**11:15 am Introduce Breakout Sessions**

Maya Garcia, *Colorado Department of Education*

**11:20 am Transition to Breakout Rooms**

**11:30 am Group Planning Time – Goals, Actors and Actions**

**Activity:** Considering the state of implementation for the next 2 years, what are the top goals that need to be addressed? For each goal, identify some actors and actions that could help to meet these goals and move implementation forward.

**Group 1: Leadership Systems – Room 250**

**Planning Committee Member Support:** Jessica Henderson Rockette, *Instruction Partners*

**Virtual Planning Committee Member Support:** Amy Stephens, *BOSE, NASEM*

- **In-person Facilitator:** Stefanie Marshall, *University of Minnesota*
- **Virtual Facilitator/Reporter:** Jamie Rumage, *Oregon Department of Education*
- **In-person Reporter:** Jenny Sarna, *NextGenScience WestEd*
- **Invited Practitioner:** Linda Cook, *National Science Education Leadership Association (NSELA)*

**Group 2: Teacher Workforce – Board Room**

**Planning Committee Member Support:** Tricia Shelton, *National Science Teaching Association (NSTA)*

**Virtual Planning Committee Member Support:** Victor Sampson, *University of Texas at Austin*

- **In-person Facilitator:** Tia Madkins, *University of Texas at Austin*
- **Virtual Facilitator/Reporter:** Lizette Burks, *University of Houston-Downtown*
- **In-person Reporter:** Susan Gomez Zwiap, *BSCS Science Learning*
- **Invited Practitioner:** Meg Richard, *Kansas State Department of Education*

### **Group 3: District and State Policy – Members’ Room**

**Planning Committee Member Support:** James Blake, *Lincoln Public Schools*

**Virtual Planning Committee Member Support:** Heidi Schweingruber, *BOSE, NASEM*

- **In-person Facilitator:** *Oklahoma State Department of Education*
- **Virtual Facilitator/Reporter:** Kevin Anderson, *Wisconsin Department of Public Instruction*
- **In-person Reporter:** Melissa Mortiz, *Afterschool and Summer Learning Fellow, U.S. Department of Education*
- **Invited Practitioner:** Mike Heinz, *New Jersey Department of Education, President of Council of State Science Supervisors*

### **Group 4: Partnerships and Alliances – Lecture Room**

**Planning Committee Member Support:** Aneesha Badrinarayan, *Learning Policy Institute*

**Virtual Planning Committee Member Support:** Maya Garcia, *Colorado Department of Education*

- **In-person Facilitator:** Elizabeth Mulkerrin, *Omaha Zoo and Aquarium, NSTA President Elect*
- **Virtual Facilitator/Reporter:** Amanda Buice, *Georgia Youth Science & Technology Centers, Inc.*
- **In-person Reporter:** Karmen Rouland, *Mid-Atlantic Equity Consortium*
- **Invited Practitioner:** Peter McLaren, *Next Gen Education, LLC*

### **Group 5: Curriculum and Instruction – Room 125**

**Planning Committee Member Support:** Sam Shaw, *EdReports.org*

**Virtual Planning Committee Member Support:** Ravit Duncan, *Rutgers University*

- **In-person Facilitator:** Brian Reiser, *Northwestern University*
- **Virtual Facilitator/Reporter:** Christine Cunningham, *Pennsylvania State University*
- **In-person Reporter:** Daniel Alcazar Roman, *The Lawrence Hall of Science at the University of California Berkeley*
- **Invited Practitioner:** Ellen Ebert, *Office of the Superintendent of Public Instruction, WA*

**For virtual groups:** Participants will join one of the main group rooms. You will then be placed into smaller groups to brainstorm. At 1:00 pm ET, you will rejoin the main room to synthesize ideas.

### **12:15 pm      Lunch Available**

Lunch will be available in the East Court. Grab lunch at your leisure and continue working with your groups.

**1:00 pm      VIRTUAL PARTICIPANTS – Report to Larger Group**

Each small group will rejoin the main breakout room to synthesize ideas. The goal is to create a single slide that will be shared out at the 2:30 pm ET session

**In-person participants:** continue working in your small groups until 2:30 pm ET.

**2:10 pm      Break and Transition Back to Main Room**

**2:30 pm      Report out from Breakout Rooms and Full Group Discussion**

Each group will have 5 minutes to present their group's goals, actors, and actions. After each group reports out, there will be time for Q&A and facilitated discussion.

**Consider the following in the report outs:**

- Are there any goals missing?
- Any additional actors or actions you might suggest?

As you listen to the report outs, be prepared to think about what your group's pitch will be to national (or state) actors, philanthropic communities, and funding agencies (to be discussed the following morning). You only have 5 minutes, so get creative. You can do a song/dance, TED talk style ... anything goes!

**4:00 pm      Community Reflections and Overview of Next Day**

Maya Garcia (Chair), *Colorado Department of Education*

**DAY 2: Wednesday, April 27<sup>th</sup>**

**All Times are ET**

**9:30 am      Group Meeting Time – Develop Your Pitch!!**

Grab breakfast and join the group you were working with in your assigned breakout room. During this time, you will develop your pitch to national actors and funding agencies. What should they be doing? Design your pitch so that it can be given in 5 minutes. Make sure that you have nominated who from the group will deliver the pitch!

- **Group 1: Leadership Systems** – Room 250
- **Group 2: Teacher Workforce** – Board Room
- **Group 3: District and State Policy** – Members' Room
- **Group 4: Partnerships and Alliances** – Lecture Room
- **Group 5: Curriculum and Instruction** – Room 125

**10:40 am      Break and Transition Back to Main Room**

**11:00 am      Pitch Sessions and Community Reflections**

Each group will have 5 minutes to give their pitch. The remainder of the time will be dedicated to group discussion.

**12:30 pm**

**Closing Remarks**

Maya Garcia (Chair), *Colorado Department of Education*