

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

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

Agenda

**Instructional Materials for the Next Generation Science Standards: Design,
Selection, and Implementation**

Room 100, Keck Building
500 Fifth St NW
Washington, DC 20001

DAY 1: Tuesday, June 27th

- 8:30 am *Registration, Breakfast and coffee*
- 9:00 am **Welcome and Introductions**
Michael Lach, Director, STEM Policy and Strategic Initiatives, University of Chicago
Heidi Schweingruber, Director, Board on Science Education, National Academies of Sciences, Engineering, and Medicine
- 9:15 am **The Importance of Science Education**
Rush Holt, CEO, AAAS
- 9:45 am **Existing Instruments to Guide Development and Selection of Instructional Materials: Overviews of EQuIP, PEEC, and Next Generation AIM**

Moderator: *Susan Gomez-Zwiep*, Professor, California State University, Long Beach

Overview of EQuIP and PEEC
Matthew Krehbiel, Associate Director, Science, Achieve, Inc.

Overview of Next Generation AIM
Kathy DiRanna, K-12 Alliance Director, WestEd

Commentary
Jo Ellen Roseman, Director of Project 2061, AAAS
- 10:30 am **Questions from the audience**
- 10:45 am *Break*
- 11:00 am **Beyond Content Alignment: What Additional Criteria Should Be Considered When Developing and Selecting Instructional Materials?**

Moderator: *Daniel Edelson*, Executive Director, BSCS

Panelists:

Elizabeth Davis, Professor, University of Michigan

Erin Furtak, Associate Professor, University of Colorado, Boulder (virtually)

Okhee Lee, Professor, NYU Steinhardt

Brian Reiser, Professor, Northwestern University

Note: Short papers are available on-line as background to each panelist's presentation.

12:00 pm **Questions from the audience**

12:15 pm ***Lunch***

1:15 pm **Lessons from Mathematics about Developing, Selecting, and Implementing Instructional Materials**

Moderator: *Diane Briars*, Past President, National Council of Teachers of Mathematics

Kathryn Chval, Dean, College of Education, University of Missouri

William McCallum, Professor, University of Arizona

Valerie Mills, Mathematics Education Consultant, Oakland Schools

1:45 pm **Questions from the audience**

2:00 pm **What Is the Current State of Science Curriculum and Instruction in the USA?**

Patrick Sean Smith, President, Horizon Research, Inc.

2:25 pm **Questions from the audience**

2:40 pm ***Break***

2:55 pm **What Are Districts and States Doing? What Do They Need?**

Moderator: *Tiffany Neill*, Executive Director of Curriculum and Instruction, Oklahoma State Department of Education

Panelists:

Jill Cowart, Math and Science Instructional Team Lead, Louisiana Department of Education

Jennifer Munger, Principal, Hartford Elementary School, West Central School District, South Dakota

James Ryan, STEM Executive Director, San Francisco Unified School District

Sam Shaw, Team Leader Division of Learning and Instruction, South Dakota
Department of Education

3:30 pm **Questions from the audience**

3:45 pm **Teachers' Needs**

Moderator: *Tiffany Neill*, Oklahoma State Department of Education

Panelists:

Monica Aguirre, Teacher, Lake Elementary, Oceanside, California

Rabiah Harris, Science Teacher, Kelly Miller Middle School, District of
Columbia

Margo Murphy, Science Teacher, Camden Hills Regional High School,
Rockport, Maine and Chair, National Academies' Teacher Advisory Council

4:05 pm **Questions from the audience**

4:15 pm **How Do We Get the Instructional Materials We Need: Models for
Development**

Moderator: *Brian Reiser*, Northwestern University

Panelists:

Charles (Andy) Anderson, Professor, Michigan State University

Philip Bell, Professor, University of Washington

Eric Berson, Director of Teacher Happiness, Mystery Science

Joseph Levine, Author, Pearson Education and Course Director, Organization for
Tropical Studies

5:15 pm **Day 1 Summary and Looking Ahead to Day 2**

5:30 pm **Adjourn**

DAY 2: Wednesday, June 28th

- 8:30 am *Breakfast and coffee available*
- 9:00 am **Welcome to Day 2**
- 9:10 am **Adoption, Usage, and the Marketplace**
V. Darleen Opfer, Director, RAND Education, RAND Corporation
Kathy Mickey, Senior Analyst/Managing Editor of the Education Group, Simba Information
- 9:50 am **Questions from the audience**
- 10:00 am **How Do We Get the Instructional Materials We Need: Business Models**
Moderator: *Michael Lach*, University of Chicago
Panelists:
Bert Bower, CEO, Teachers' Curriculum Institute
Jay Diskey, Executive Director of the PreK-12 Learning Group, Association of American Publishers
Jeff Livingston, President and CEO, EdSolutions
- 10:30 am **Questions from the audience**
- 10:40 am **Recommendations for the Field: How Do We Build Smarter Supply, Demand, and Implementation of Instructional Materials for the NGSS?**
Small group discussion
- 11:45 am **Share recommendations with the large group**
- 12:15 pm **Lunch**
- 1:00 pm **Instructional Materials and Teachers' Professional Learning**
Moderator: *Cynthia Passmore*, Professor, University of California-Davis
Panelists:
Jennifer Horton, Science Teacher, Lincoln High School, Lincoln, California
Barbara Nagle, Director, Science Education for Public Understanding Program, Lawrence Hall of Science, University of California-Berkeley
Leon Walls, Associate Professor, University of Vermont
- 1:30 pm **Questions from the audience**

1:45 pm **Instructional Materials and Building School and District Capacity**

Moderator: *Elizabeth Davis*, University of Michigan

Panelists:

Jill Cowart, Louisiana Department of Education

Katherine McNeill, Associate Professor, Boston College

William Penuel, Professor, University of Colorado-Boulder

Lesa Rohrer, Secondary Science Curriculum Coordinator, Oklahoma City Public Schools

Douglas Watkins, Science Curriculum Specialist, Denver Public Schools

2:30 pm **Questions from the audience**

2:45 pm ***Break***

3:00 pm **Instructional Materials and Equity**

Moderator: *Leon Walls*, University of Vermont

Panelists:

Lizette Burks, Science Program Consultant, Kansas State Department of Education

Eileen Parsons, Professor, University of North Carolina-Chapel Hill

Alberto Rodriguez, Chair of Elementary Education and Professor, Purdue University

3:45 pm **Questions from the audience**

4:00 pm **Reflections from the Audience**

4:30 pm **Reflections from the Sponsors**

James Short, Program Director for Teaching and Human Capital Management, Carnegie Corporation of New York

Judy Wurtzel, Director, Education, Schusterman Family Foundation

4:50 pm **Reflections from the Committee Chair**

Michael Lach, University of Chicago

5:00 pm **Adjourn**