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

D A Y 1 : T u e s d a y , J u n e 2 7 t h

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