PREPARING K–5 STUDENTS FOR A STEM FUTURE

EDC ELEMENTARY SCIENCE SUMMIT 2018

November 30, 2018
Waltham, Mass.
Keynote Speakers and Panelists

Dr. Heidi Schweingruber  
Director  
Board on Science Education  
National Research Council

Val Zanchuk  
President/Owner  
Graphicast

Dr. Erin Hashimoto-Martell  
Director of STEM, Massachusetts Department of Elementary and Secondary Education (DESE)

Scott Sedberry  
Strategic Alliance Director  
Texas Instruments

Abigail Jurist Levy  
Leader, Coalition for Elementary Science Education at EDC

David Offensend  
President, EDC

Rachael Manzer  
STEAM Coach  
Winchester Public Schools

Patreka Wood-Blain  
Assistant Principal  
Umana Academy

Rebecca Katsh-Singer  
Pre-K–6 Science Curriculum Coordinator  
Westborough Public Schools

Nathan Saddler  
Assistant Principal  
Adeline C. Marston Elementary School

JoAnn Harvey  
K–4 STEM Coach  
Georgia Elementary and Middle School

Elizabeth Dowst  
Grade 5 Teacher  
Adeline C. Marston Elementary School
Thank You to Our Summit Partners
# Deep Appreciation to the Summit’s Science Advisors

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<tr>
<td>Margaret Carrera-Bly</td>
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<td>Patricia Fitzsimmons</td>
<td>Assistant Director, Standards and Assessment, Vermont Agency of Education</td>
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<td>Barbara Hopkins</td>
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Dear Colleague,

I invite you to explore this recap of EDC’s November 2018 Elementary Science Summit. At the Summit, we launched the Coalition for Elementary Science at EDC to improve science education for all K–5 students in New England.

Our work is vital. Far too many of our students leave high school with very poor science literacy and skills. At the Summit, over 100 business leaders, educators, parents, policymakers, researchers, and journalists came together to chart a course to high-quality elementary science for all. Together, we can make a difference for our students.

Please reach out to me to learn more (elemscience@edc.org), and I hope you will join us at our 2020 Summit!

Sincerely,
Abigail Jurist Levy
Meeting Objectives

Understand the Challenge
Participants shared research and experience on the state of K–5 science in New England.
Key points:
• Most students get little time for science.
• Many teachers are not prepared to teach science.
• Many schools lack necessary resources.

Explore Science Learning
What does high-quality science teaching and learning look like?
Participants heard from experts and then became learners. They dove into science explorations that gave them new insights into high-quality science teaching.

What Works? What’s Next?
Participants heard from principals who are making great strides in science education and whose students are thriving.
Then, participants created action plans to ensure all K–5 students have an outstanding science education.
Who Attended

14 Speakers
100 Attendees
4 Sponsors
6 States
Opportunities and Challenges

“The Coalition for Elementary Science must continue to bring key stakeholders together to discuss innovative ways to provide opportunities where science is taught with fidelity in elementary schools across the region.”

—Wardell Powell, PhD
Assistant Professor of Education
Framingham State University, Mass.

“If we lock some kids out early from STEM career paths, and don’t allow them to see themselves in science and engineering, we’re really doing them a disservice.”

—Heidi Schweingruber
Director, Board on Science Education
National Research Council

“Many elementary teachers do not consider science as part of the regular core curriculum.”

—Erin Hashimoto-Martell
Director of STEM
Mass. DESE
Opportunities and Challenges

“The economic well-being of our whole region is very much dependent on the success of elementary STEM.”
—Val Zanchuk
President/Owner
Graphicast

“The only way to enable tomorrow’s STEM workforce is by coming together today, industry and education, to promote the importance of STEM learning in all grades.”
—Scott Sedberry
Director, Business Development
Texas Instruments

Research shows that K–3 students spend, at best, an estimated one to three hours per week studying science.

EDC ELEMENTARY SCIENCE SUMMIT 2018
Characteristics of High-Quality Elementary Science Programs

- **Learning science** is valued by principals, teachers, and parents.
- **Science is a regular and reliable** part of all students’ elementary school experiences.
- **Enough time** for science is included in the school’s weekly schedule.
- **Core science concepts** are integrated with science and engineering practices in most science lessons.
- **Enough funding** and resources for science are available.
- **Assessments** emphasize core science concepts and the science and engineering practices.
- **Teachers** have access to high-quality instructional materials.
- **Principals** observe science lessons. Teachers have ongoing support and professional development.
Goals and Next Steps

• Give teachers opportunities to watch excellent science teaching in action and to observe children and teachers engaging in science and engineering practices in meaningful ways, especially when linked to their school’s curriculum.

• Share exemplary instructional materials, such as modules, lesson plans, and videos of lessons that model integration of concepts and practices, and school schedules that include enough time for science.

• Promote collaboration with special education teachers to reduce the number of times that children are pulled out of class during science explorations to receive remedial help.

• Invite principals to the 2020 Elementary Science Summit with a team of teachers from their school. Show the importance of science and engage them in finding ways to elevate science in their schools.
Coalition Members Weigh In

“It was great to share ideas on how to make science more of a priority in our academic week. My team teacher and I have been consistently planning for 2 science blocks of 1 hour each week since the Summit.”

—Jennifer Vesey
5th Grade Teacher
Hudson Public Schools, NH

“The Coalition can do great things because of the expertise that lies at its center: EDC, state departments of education, science leadership organizations. There’s already buy-in. Now it’s about getting the work done and getting the word out.”

—Alison Riordan
Science Curriculum Coordinator
Plymouth Public Schools, Mass.

“Thanks to the Summit, I have already connected with a coach on how to get your school board on board with the teaching of STEM. I hope to follow up and present to the school board.”

—Karen Fream
Portland Schools, Maine
Summit Gallery
Social Media Glimpse

At the first Elementary Science Summit in Waltham, MA! Exciting collaboration!
#WallfordSTEM

Excited to be a part of the Elementary Science Summit today!

EDC Retweeted

Our Elementary Science Summit is underway! Fascinated house, great speakers, lots of energy. Follow here: #elemsci
“We have a chance right now to make a real difference because parents, teachers, and industry leaders all realize how important early science learning is.”

—Dr. Abigail Jurist Levy
THANK YOU

For more information, contact:
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