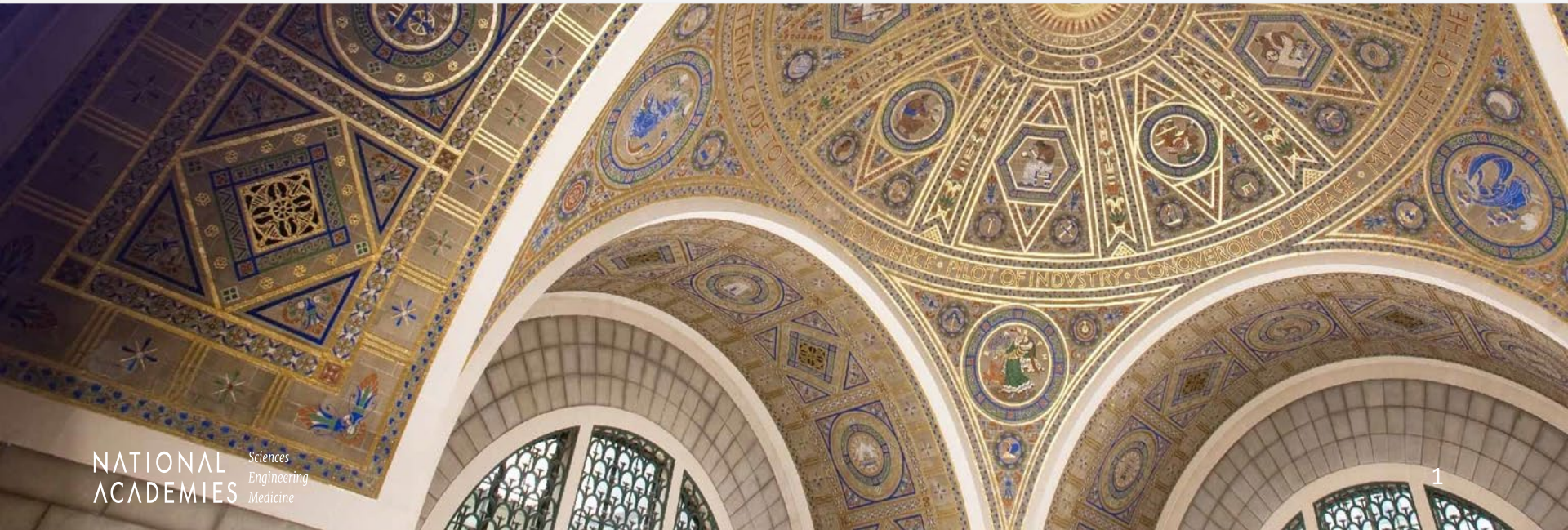


International Practices in K-12 Mathematics Education: the Role of Computational Thinking, Data Science & AI

May 14, 2026

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WELCOME

The National Academies of Sciences, Engineering, and Medicine (NASEM) provide independent, trustworthy advice that advances solutions to society's most complex challenges.



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Why?

- Less than 3 percent of U.S. children are receiving [data science education](#)
- Deficit of US school teachers
- No global analysis available
- Hard to improve when we do not know where we stand
- Because it is important - socioeconomically

Project Components

- A Survey - webinar in the Fall and handout
- February 23-24, 2026 - Workshop Recordings
- A Webinar Series (4 webinars this Spring) and more in the Fall
- A Workshop Proceedings Report - July 2026
- A Distribution List - Scroll down and Sign Up



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In-Person Workshop Attendees



Scope of Work

- **Three Frameworks**

- Data Science
- Computational Thinking
- Artificial Intelligence

- **Four Themes**

- Curriculum Development and Policy Implementation
- Assessment Techniques and Student Learning
- Technology Tools and Frameworks
- Instructional Approaches and Professional Practice

- **Two Grade Levels**

- 70% on High School Math Ed (Grades 9-12)
- 30% on K-8 Math Ed (Grades 1-8)

Expected Outcomes

- Advancing the body of knowledge
- A global understanding of best practices
- **A National Plan and/or a Consortium of Stakeholders**
- New collaborations and partnerships
- Development of new policies or revise old policies


Webinar Agenda

- Background - Ana Ferreras & Padhu Seshaiyer
- Introduction of the Moderator - Lindsey Henderson
- Introduction of the Speaker - Justine Sakurai
- Webinar Lecture - Justine Sakurai
- Q&A - Lindsey Henderson & Justine Sakurai
- Announcements - Ana Ferreras

Project Website - Follow Us

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WORKSHOP

A Workshop and Webinar Series on International Practices in K-12 Mathematics Education: The Role of Computational Thinking, Data Science, and AI



Today's Moderator - Lindsey Henderson



Serves as **Senior Policy Director in Math for ExcelinEd**. Lindsey most recently worked at the Utah State Board of Education as the Secondary Mathematics Specialist and helped to drive mathematics innovations across the state of Utah. Her work in this role included leading the first ever Data Science Pilot, the development and implementation of **Utah's PK-12 Mathematics Framework** and engaging stakeholders in defining the mathematics for everyone that builds empowerment through engaged citizenship.

Australia's School Mathematics Curriculum and Education Policy



Justine Sakurai is a Lecturer at the University of Melbourne's Faculty of Education where she teaches in the Master of Teaching and Master of Education programs specializing in Mathematics and Curriculum Education. She is an educator with three decades of experience in mathematics education and curriculum development. Her research areas encompass mathematics education, curriculum (standards) development, secondary mathematics pedagogy, underperforming upper secondary mathematics students and the role of digital technologies in curriculum design and implementation. She has contributed extensively to curriculum (standards) development in Australia, with work spanning senior secondary mathematics curriculum and assessment frameworks in both academic and vocational pathways.



Announcements

AND UPCOMING EVENTS

Next Webinar - May 27, 7 pm (ET)



**Toward the Integration of DS,
CT and AI in Mathematics
Classes: A Perspective from
Japan**

Speaker: Takashi Kawakami,
Associate Professor, Utsunomiya
University, Japan



Moderator: David Weintrop,
University of Maryland

Save the Dates - Upcoming Webinars



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International Practices in K-12 Mathematics Education

The Role of Computational Thinking,
Data Science, & AI

- MAY 14** • 6:00 – 7:00 PM ET
- MAY 27** • 7:00 – 8:00 PM ET
- JUNE 9** • 6:00 – 7:00 PM ET
- JUNE 25** • 8:00 – 9:00 PM ET