6 things to know in December 2022

1. Blog Post: Getting Back to Business: How Do We Equitably Accelerate Learning in Science?

A new *On The Same Wavelength* blog post discusses ways to address unfinished learning caused by disruptions due to the pandemic. The post focuses on how rich, three-dimensional learning experiences can help ensure that all students can learn through engaging and equitable instruction.

See the NextGenScience blog post [here](#).

2. Why and How Should I Use Crosscutting Concepts to Enhance My Science Instruction?

This new STEM Teaching Tool provides guidance for educators and leaders to support successful integration of crosscutting concepts (CCCs) in science instruction. Recommended actions include establishing routines for students to use CCCs both implicitly and explicitly during instruction and studying high-quality examples of CCC use.

See the STEM Teaching Tool Practice Brief 91 [here](#).
3  **Webinar: The Role of Instructional Materials in Science Teacher Education**

Four presenters involved in equitable science instructional materials, policy, and professional development share their thoughts on the current status and recommendations for the future of research, policy, and practice as they seek to reform science instruction for today’s learners. This archived webinar examines how the field defines and identifies high-quality instructional materials and how we can best support teachers’ learning and transition to three-dimensional science teaching in a way that is accessible to all learners.

See the NSTA/ASTE webinar recording [here](#).

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4  **Promoting Inclusion and Engagement in STEM Learning**

This guide provides strategies and resources for out-of-school-time STEM programs to promote inclusive learning environments that reach diverse student groups, including indigenous learners, emerging multilingual learners, and learners experiencing differing physical and/or sensory abilities.

See the guide by WestEd and Northern Arizona University [here](#).
5  Mapping STEM Opportunity: A Dissemination Workshop of the Call to Action for Science Education

In this virtual workshop hosted by the National Academies, participants will explore ways to document and track progress in moving towards equitable and meaningful science education and using data to inform decision-making. A panel will share examples of analyzing and using data to advance equity goals in science education. The workshop is designed based on recommendations made in the 2021 Call to Action for Science Education report.

Learn more about the NASEM event here and register here.

6  Elementary Science Materials Still Lag Standards. Could Free Resources Help?

Two major barriers to teaching science in elementary school include the lack of high quality instructional materials and allotted time for science to be taught. This article explores how open education resources may help address these barriers by both improving access and prioritizing creative instructional designs that can fit into various scheduling models.

See the Education Week article here.