Blog Post: Two Things that Improve Student Outcomes: Quality Materials and Systemic Support for their Implementation

With promising science curricula increasingly available to schools around the country, WestEd has released findings from a new study on high-quality instructional materials in science classrooms. NextGenScience’s latest On The Same Wavelength blog post by one of the researchers of that study shares findings and reflections on the use and implementation of these materials and impact on student outcomes.

See the post here.

Science and Engineering in Preschool Through Elementary Grades Blog and Upcoming Event

The National Academies of Sciences, Engineering, and Medicine’s recent report, Science and Engineering in Preschool Through Elementary Grades: The Brilliance of Children and the Strengths of Educators, provides evidence-based guidance on ways to support science and engineering for all elementary students. Learn more about the report through the blog and virtual event below.
Blog Post: Uncovering the Brilliance of Children: Science in Elementary
Report contributor and Board on Science Education member, K. Renae Pullen, shares promising practices for teachers and leaders to ensure all preK–5 students have access to meaningful and effective science and engineering learning experiences.

See the STEM Teacher Leadership Network blog post here.

Virtual Event: Report on Science and Engineering in Preschool Through Elementary Grades
In a full-day virtual event on June 14th, panelists of stakeholders discuss challenges faced when ensuring all children have access to science and engineering in preschool to elementary grades.

Register for the virtual event here.

Re-envisioning STEM Education and Workforce Development for the 21st Century
This month’s special issue of Journal of Science Policy and Governance focuses on diversity, equity, and inclusion in STEM education. One article, Hardwired To Learn Science But Left Out of the Landscape, focuses on how integrating high-quality science in elementary grades can address the current disparities in access to science education for all young learners.

See the journal issue here.
Teaching and Learning

During school closures resulting from the COVID-19 pandemic, implementing NGSS-aligned science instruction through distance learning posed an exceptional challenge. WestEd researchers recently released findings from a national survey of teachers of science conducted in 2020 and 2021 about science instruction during the pandemic.

See the Teaching K–8 Science Through Distance Learning policy briefs: Specific Challenges and Successes During the COVID-19 Pandemic and Overall Impacts of the COVID-19 Pandemic.

STEM for All Video Showcase

The STEM for All Video Showcase highlights the work of federally funded projects that target improving STEM and computer science education. The videos include strategies for broadening participation, increasing access, and addressing equity. This year’s showcase consists of 267 presentations that may inspire educators and leaders in the field to try something new in their classrooms, or learn more about the types of research being conducted to improve teacher and/or student outcomes. For example, check out one video about supporting students with significant cognitive disabilities to succeed in science using professional learning designed for the NGSS as well as Universal Design for Learning (UDL) principles. See video showcase here.
Next Gen Navigator Issue — Employing Well-Designed Assessments and Accountability Systems for Science

The National Science Teaching Association (NSTA) recently published four blog posts as part of a newsletter centered on science assessment and accountability policies. This issue highlights the need for assessment and accountability systems to maintain the vision of *A Framework for K–12 Science Education* and to prioritize equity, feedback systems, and systemic action to advance student learning.

See the e-newsletter [here](#).

NASBE Journal Article: Advancing Science Instruction

“While states have historically invested far more resources in math and reading, they must give more attention to improving science education and performance. State boards are well positioned to elevate science education across the P–16 continuum. They can gauge the extent to which their states offer access to high-quality science instructional materials, educator professional development, and dedicated instructional time devoted to science and hands-on-science inquiry. Working together and with partner organizations, members of state boards can advance science education and thereby improve the future of students and the nation.”

See the resource [here](#).