NGSS NOW

7 things to know in November 2022

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Blog Post: Influences of a Large-Scale, Intensive Initiative on Teachers' NGSS Implementation

A recent <u>On The Same Wavelength</u> blog post shares findings from a WestEd study that examined how teachers' participation in a multi-year, sustained, and intensive professional learning experience and their role in such an initiative (e.g., leader, participant) affected their understanding of the NGSS, science leadership practices, and science teaching practices.

See the NextGenScience blog post here.

2



Taking Stock of Science Education: Proceedings of a Workshop in Brief



This brief by the National Academies summarizes the *Taking Stock of Science Standards Implementation* multi-part workshop held in 2021–22. It describes the themes that emerged throughout the sessions in areas of strength and growth in the country's transition to today's science standards, and describes several "pitches" for suggested next steps to effectively address top areas of need.

See the NASEM brief here.

) How to Teach about Natural Disasters with Care

"Anchoring lessons in news events or experiences from students' lives this way can foster students' authentic interest in science, experts say, especially if kids come to class already full of questions about the topic. And it's a way to demonstrate how science works in the real world—an important part of the Next Generation Science Standards, which undergird how many states and districts approach science."

3

See the *Education Week* article <u>here</u>. See a related resource about *Authentic Science Experiences* <u>here</u>.



4 How Can We Improve Early Science Education?

This *Hechinger Report* article highlights key findings and strategies that were discussed in the newly released American Institute for Research report, <u>*Prekindergarten and*</u> <u>*Elementary Science Teaching*</u>. Some of the highlighted findings and recommendations include (1) providing opportunities for teachers-in-training to take science courses taught by science professors rather than solely science methods courses in teacher education programs and (2) training mentor teachers to focus on evaluating and providing support for new teachers on high-quality science instruction.

See the Hechinger Report article here.

5

Practical Framework for Working Toward Equity and Justice in Elementary Science



This Innovations in Science Teacher Education article explores key approaches for supporting preservice elementary teachers to enact equity and justice practices while teaching science. In a pilot study with preservice elementary teachers using a practical framework designed around these approaches, researchers found their lesson plans incorporated certain components of the targeted approaches important for equity (e.g., increasing opportunity and access to science learning and increasing achievement, representation, and identification) more than other approaches (e.g., a focus on broadening what counts as science or bringing science and justice together).

See the ISTE research article here.

6

For Students to Succeed, Put High-Quality Curriculum in Teachers' Hands

"But there's one big reason for hope: Educators know more about improving teaching and learning than ever before. Rigorous research on emerging models of teacher development shows positive results for students hit hardest by COVID-19. And with billions of dollars in federal relief funding at their disposal, school system administrators and state leaders have the resources to take bold action."



See *The 74* article here.



This article provides recommendations for school board members to ensure all students have access to effective science learning experiences. Strategies include providing teachers with high-quality instructional materials and ongoing opportunities to engage in curriculum-based professional learning.

See the National School Boards Association article here.



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