6 things to know about quality K-12 science education in September 2020

1. Keep Teaching Science! Successful Strategies to Adapt K-12 Science Experiences for Distance Learning

The sudden shift to distance and hybrid learning due to the COVID-19 pandemic has created a need to identify virtual and at-home science experiences that ensure students keep learning science in meaningful ways. Anchored in the vision of the Next Generation Science Standards (NGSS) and A Framework for K-12 Science Education, this new NextGenScience resource highlights ways materials designed for in-person NGSS learning can be adapted for at-home settings while maintaining or enhancing essential features. Register to hear the reviewers and developers share their process on a September 17 webinar at 4:00pm ET, then join for an #NGSSchat Twitter discussion at 9:00pm ET the same day.

See the resource from NextGenScience here.

2. New High-Quality Elementary Unit Posted

In this 3rd grade unit developed by the Multiple Literacies in Project-Based Learning (PBL) initiative at Michigan State University, students explore the question, "Why do I see so many squirrels, but I can't find any stegosauruses?" Students observe squirrels in their community, plan and conduct investigations, and develop models to explain that, as the environment has changed, some animals (e.g., mammals) were able to adapt and survive, while others (e.g., dinosaurs) died out.

See the unit and the corresponding EQuIP Rubric for Science report written by the NextGenScience Peer Review Panel here.
Two Board on Science Education Panel Discussions by the Committee on Enhancing Science and Engineering in Prekindergarten through Fifth Grade

**Equity, Justice, and Anti-Racism in Elementary Science:** In this webinar series, researchers share key findings on equity, justice, and anti-racism in elementary science and engineering. They discuss strategies for inclusive science education (Felicia Moore Mensah), approaches to designing safe spaces (Christopher Wright), and lessons learned from examining Indigenous families' approaches to sense-making (Ananda Marin).

See the webinar series [here](#).

**Integrating Science and Literacy in Elementary Education:** Integrating science and literacy has been identified as a key strategy for improving elementary science instruction and increasing the amount of science instructional time. This webinar highlights research on the relationship between elementary science and literacy learning (Nell Duke); lessons learned from an elementary science observation, curriculum design, coaching and professional learning project (Amelia Gotwals and Tanya Wright); and approaches to science learning that support academic language development for English learners (Okhee Lee).

See the webinar [here](#).

A Story of Statewide Science Leadership, Collaboration, and Legacy

Seven years after the development of the Next Generation Science Standards, more than 44 states have taken strides to transform their K-12 science education systems. This suite of resources, developed by the K-12 Alliance and the CA NGSS K-8 Early Implementation Initiative evaluators, tells the story of California's multi-faceted, highly collaborative approach to transforming science education for all students. The evaluation report and accompanying videos highlight the processes, tools, and lessons learned, while sharing the perspectives of teachers, administrators, and state science education leaders.

See videos ([Next Generation Science Standards: Learning from Early Implementers](#) and [The Future of California Science: A Story of Leadership, Collaboration, and Legacy](#)) and an evaluation report [here](#).

Learning in Places Classroom Storyline

"These learning engagements walk you through the Learning in Places Seasonal Field-Based Science Storyline, and are designed for use in learning environments such as classrooms, teacher professional..."
development experiences, community based settings or outdoor educational settings. [They] are meant to be used in sequence in order to maximally engage learners in progressions of field-based science investigations through a phenology lens that supports their learning about complex socio-ecological systems. Each learning engagement contains various tools designed for educators, families, and learners, and learning is intentionally meant to cross boundaries between home, communities, and your learning environments."

See the learning engagements [here](#).

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**Equitable Transitions During Pandemic Disruptions**

"This is a series of six Policy Briefs, commissioned by the Education Commission of the States and authored by external organizations, that explore various facets of the transition from secondary to postsecondary education, which are now complicated by the COVID-19 pandemic. The series pays special attention to the student populations already underserved in our nation's education system, including Black, Latinx and Native American students and students from low-income families or high-poverty schools. Each brief provides actionable steps and examples for state policymakers to consider as they address the transition from high school to college and the workforce."

See more from Education Commission of the States [here](#).

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