7 things to know about quality K-12 science education in March 2021

1. **Toward NGSS Design: EQuIP Rubric for Science Detailed Guidance**

This new NextGenScience resource supports curriculum developers and educators with understanding the most important features of instructional materials designed for today’s science standards. Toward NGSS Design unpacks each of the 19 EQuIP Rubric for Science criteria, provides a detailed description of the criteria, and explains how materials can fully meet each criterion.

See the resource [here](#) and sign up for the upcoming webinar [here](#).

*Join #NGSSchat tonight (March 4) at 9pm ET to chat about NGSS design using the EQuIP rubric.*

2. **Key Takeaways for Transforming Science Education and Stories from the Field**

What has the field learned from seven years of implementing a new approach to science teaching and learning? The Key Takeaways are now available for download as a PDF [here](#) along with two new Stories from the Field:

- **Adapting Existing Materials for the NGSS:** This story shares a curriculum developer’s lessons learned from designing materials for today’s science standards along with advice for educators on how to determine which existing lessons and activities can be adapted.

- **Rethinking Science Curriculum Adoption:** This story highlights one district’s journey to adopt new science instructional materials, using a process that engaged multiple stakeholders to carefully review and pilot the materials. It underscores the importance of
for new standards. See the resource here.

New High Quality Middle School Unit Posted

In this OpenSciEd sixth grade unit, students explore the question, “how does a one-way mirror work?” Through investigations and models, students develop their thinking about how visible light travels and how we see images.

See the unit and the corresponding EQuIP Rubric for Science report here.

Five Case Studies of Successful Implementation of HQIM

A new report from the Center for American Progress examines five different approaches to successful professional learning as it relates to the implementation of high-quality instructional materials. It shares lessons learned that districts and school leaders should consider as they prepare teachers and provide them with the knowledge and skills to ensure that the adoption of high-quality instructional materials translates into improvements in student achievement.

See the report here.

Black Representation in Science Webinar and Twitter Chat

Future Science Group and BioTechniques hosted a webinar and Twitter chat focusing on the themes of Black representation, identity, and diversity in science. These resources highlight the experiences of Black scientists, celebrate their contributions to the field, and showcase efforts to inspire the next generation of Black scientists.

Check out the Twitter chat at #FSGForBHM21 and view the chat summary here and webinar here.

Three New STEM Teaching Tools
“By introducing students to climate solutions—along with opportunities to take scientific and civic action—climate learning can have a positive effect on students’ well-being and life and employment prospects.” STEM Teaching Tool #68 provides guidance, research, and resources to educators, school leaders, and district staff.

See the resource here.

STEM Teaching Tool #69 provides research, guidance, and resources on how the use of local challenges related to climate as phenomena can provide students with the opportunity to “envision solutions and approaches appropriate for their own community” therefore promoting agency and collaboration for students to find solutions that are meaningful to them and their communities.

See the resource here.

STEM Teaching Tool #70 provides research, guidance, and resources on how environmental educators can “foreground the diverse ways that BIPOC’s lived experiences, community practices, adaptive resilience, and social justice movements can undergird environmentalism.”

See the resource here.

Investigating the Impacts of COVID-19 on Science Instruction

WestEd invites K-12 educators to share their experience with teaching science during the 2020-2021 school year as part of an NSF-funded survey. Last year, hundreds of teachers across the country reflected on opportunities and challenges for science distance learning. Building on those findings, the current survey aims to understand the many changes teachers faced last year, to promote high-quality science instruction for students and identify appropriate support for teachers moving forward.

Interested educators can participate here.

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