7 things to know about quality K–12 science education in January 2022

1. New Middle School High Quality Unit Posted

In this BSCS life science unit, *A Medical Mystery*, students investigate why 13-year-old M’Kenna is feeling sick and losing so much weight. Using models, reasoning, and argumentation, students explain the difference between M’Kenna’s and a healthy person’s digestive systems in order to ultimately make sense of why she feels sick. The unit was awarded the NGSS Design Badge by the NextGenScience Peer Review Panel.

See the unit and the corresponding EQuIP Rubric for Science evaluation report [here](#).

2. Blog Post: Kindergarten Cop: What Science is Appropriate for Early Elementary Kids?

Students in early elementary can and should engage in science and engineering to make sense of the world around them and solve problems – but what is appropriate for our youngest students? The newest post from NextGenScience’s *On The Same Wavelength* blog explores how learning progressions can support K–2 students to engage in developmentally-appropriate three-dimensional learning.

See the post [here](#).

3. NASEM Science Standards Implementation Coffee Chat Webinar Series

The National Academies of Sciences, Engineering, and Medicine’s Board on Science Education is hosting a five-part webinar series based on the recent summit on Taking Stock of Science Standards Implementation. Each webinar will highlight a different topic including data from national implementation research, science in rural and informal education settings, science teacher education, and instructional shifts.
Professional Development to Support Principals’ Vision of Science Instruction

This JRST article shares findings from a research study of Instructional Leadership for Science Practices, an NSF-funded professional development program for school principals developed by Dr. Katherine McNeill and colleagues. The article describes how the program’s design increased school leaders' understanding of science and engineering practices. It offers considerations for designing science-specific learning for school leaders that prepares them to support instructional shifts.

See the article [here](#).

Curriculum Case Study: A Massachusetts Town Boosts Students’ STEM Learning by Letting the Students Do the Talking

"Prior to our adoption of OpenSciEd, most middle school science teachers wrote their own curriculum. Unfortunately this led to vastly different educational experiences across our four middle schools, exacerbating knowledge and skill gaps when our students entered high school. In 2018, we began to explore what a unified curriculum might do for us and to look for something that was tightly aligned to standards and supported the unique learning needs of middle school students."

See The 74 article [here](#).

Last Call for Middle School Submissions to the Peer Review Panel

NextGenScience’s Peer Review Panel (PRP) is a group of expert educators who use the EQuIP Rubric for Science to evaluate the extent to which science lessons and units are designed for the NGSS and provide detailed, criterion-based feedback and suggestions for improvement free of charge. States, districts, or other organizations developing free and publicly available middle school lessons or units for the NGSS are encouraged to submit them by March 1, 2022 in order to be reviewed during the PRP’s final scheduled middle school review window.

Learn more about the review process [here](#).
Stay tuned for an email next week describing review opportunities through both the NextGenScience Peer Review Panel and EdReports review teams and the different roles the two review teams play in the instructional materials ecosystem. It will also announce a call for high school reviewers on the Peer Review Panel.

A NextGenScience Publication
Visit ngs.wested.org/ngss-now to sign up.