

NGSS NOW

6 things to know about quality K-12 science education in **September 2019**



1 New OpenSciEd Units Identified as High Quality and Publicly Released

The first three [OpenSciEd](#) units for middle school science have been officially released. All three of these units were independently reviewed by [Achieve's Science Peer Review Panel](#) and are listed as examples of quality materials on the [nextgenscience.org](#) website. Two units earned the [NGSS Design Badge](#). Each unit is approximately six weeks of class time and all teacher and student materials are free and openly licensed. See the unit materials and corresponding EQulP Rubric for Science reviews here:



- [Middle School: OpenSciEd Unit 6.2: How can containers keep stuff from warming up or cooling down?](#)
- [Middle School: OpenSciEd Unit 7.3: How Do Things Inside Our Bodies Work Together to Make Us Feel the Way We Do?](#)
- [Middle School: OpenSciEd Unit 8.2: How Can Sound Make Something Move?](#)

2 Upcoming Webinar: Using the NGSS to Change Worlds



Join Achieve's Matt Krehbiel and the National Association of Geoscience Teachers for a webinar - Using the NGSS to Change Worlds - on Thursday, September 12 at 4 p.m. ET. Matt will discuss how the NGSS and similar standards

based on the research of the *Framework for K-12 Science Education* provide a unique opportunity for science educators to change their world and the worlds that their students perceive. He will also share resources that Achieve has developed in the past year as part of ongoing efforts to support educators in their efforts to bring three-dimensional science education to their students. You can register for the free webinar [here](#).

3 Webinar Recording: Closing the Excellence Gap for English Learners and Students of Color

The [recording of this recent webinar](#) features two Purdue University professors discussing the underrepresentation of English Learners and students of color in gifted and talented programs. In addition to sharing data and statistics regarding this discrepancy, the webinar also provides strategies educators can use to address this excellence gap, including methods educators can implement in the classroom to meet the intellectual and academic needs of underrepresented students.



4 From the NSTA Blog: Linking Science and Engineering Through Good Questions

A new [NSTA blog post](#) from science educator Greg Bartus explores how educators can structure good questions to gauge and guide student learning through conversation. Bartus shares examples of questions he uses during engineering design projects to spark student discussion, formatively assess student understanding, and move students from partial understanding toward scientific accuracy.

5 Online Course: STEM Education in the 21st Century



A [new online course](#) from the New York Academy of Science supports K-12 teachers of science, technology, engineering, and mathematics (STEM) through the process of developing an instructional unit for K-12 students aligned to the New York Academy of Sciences' STEM Education Framework. Participants will explore the research behind the framework and apply it to create a unit of study designed to foster 21st-century skills in the context of STEM. The course runs from October 6 through December 22, and the registration deadline is September 20; the course is being offered to a limited

number of educators free of charge.

6 BOSE Workshop on the Future of Undergraduate STEM Education

A [workshop from BOSE](#) in Washington D.C. from September 12-13 will bring together stakeholders with many perspectives on the future of undergraduate STEM education. The first day will focus on how we value and evaluate teaching as well as strategies for spreading evidence-based instruction to students of all backgrounds and goals. The second day will consider the impact of globalization and technological change on undergraduate STEM learning. Participants will leave



with new ideas for thinking broadly and systemically about improving student learning in undergraduate STEM education. They will network and strategize together about how we educate the increasingly diverse student population and consider the impact of the surrounding system on efforts to improve

learning. Register to attend [here](#).

