

NGSS NOW

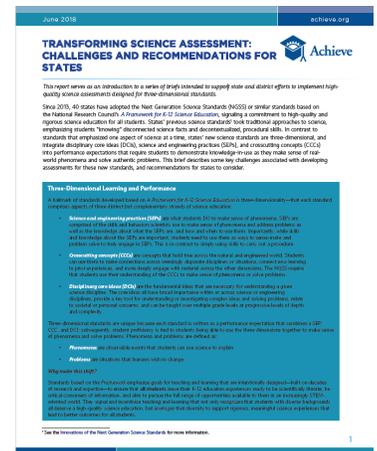
8 things to know about quality K-12 science education in July 2018



1 NEW BRIEF: Transforming Science Assessment: Challenges and Recommendations for States

Since 2013, 39 states and the District of Columbia have adopted the NGSS or similar standards, signaling a commitment to high-quality and rigorous science education for all students. Any time state content standards undergo such a significant shift, states must develop new assessments to measure student progress toward meeting the new standards. This need presents a number of challenges for state leaders.

- How should limited resources and capacity be allocated to develop assessments that are more complex than previous assessments?
- How can states meet tight deadlines to have new assessments in place?
- Is there a way to ensure that students taking the first generation of new assessments will receive sufficient opportunity to learn to be successful on these tests?



Achieve's [new brief](#) explores these and other challenges and presents a set of recommendations for states to consider in tackling them.

2 Next Gen TIME: Toolkit for Instructional Materials Evaluation

NextGen TIME

Professional learning for
next generation science

NextGen TIME, a new toolkit for instructional materials evaluation, pulls together the best tools, processes, and professional learning to help educators work together to make informed decisions. By drawing from Achieve's [EQUIP Rubric for Science](#) and [PEEC](#), the Analyzing Instructional Materials (AIM) process used by BSCS and the K-12 Alliance, and the collaborative effort of all three organizations, NextGen TIME supports districts in identifying and selecting materials designed for standards, like the

NGSS, that are based on the newest research in science education. It also includes support for districts to prepare for a review and plan for successful implementation of materials that goes beyond what any of these tools and processes have before. NextGen TIME will be officially released later this summer, but some of the NextGen TIME tools are [available online now](#).

3 Using Crosscutting Concepts to Prompt Student Responses

The Council of Chief State School Officers (CCSSO) recently released [a resource](#) to guide teachers in using Crosscutting Concepts (CCCs) as a way to monitor student sense-making of phenomena. Developed by a team of state science leaders and researchers, this resource discusses three-dimensional assessments and how to use CCCs to engage students and develop prompts for formative assessments.

4 Professional Learning Opportunity: Three-Dimensional Assessment Tasks



Achieve is facilitating a free, two-day professional learning session for teachers on three-dimensional assessment tasks on July 30-31 in the Quad Cities region of Iowa. Participants will learn about features of high-quality assessment tasks for the NGSS and about a tool to help evaluate and improve assessment tasks. [Click here](#) to learn more and register for free by July 15.

5 How to Build an Equitable Learning Community in Your Science Classroom

This [brief](#) from STEM Teaching Tools describes a range of classroom activities designed to cultivate communities that open up opportunities for all students to learn. Equitable classroom communities foster trusting and caring relationships. They make cultural norms explicit in order to reduce the risk of social injuries associated with learning together. Teachers are responsible for disrupting problematic practices and developing science classroom communities that welcome all students into safe, extended science learning opportunities. [Take a look](#) to learn more.



6 From The Santa Clarita Valley Signal: The Next Generation in Learning

Take a look at [this article](#) about educator professional development to support the NGSS in California.

"The goal of these workshops is to collaboratively develop strategies to implement use of NGSS in the classroom," said Eric Harnish, COC spokesman, in a news release, "and to improve science education in elementary schools using a three-



Photo Credit: The Santa Clarita Valley Signal

dimensional approach."

Science and engineering practices, disciplinary core ideas and crosscutting concepts will be discussed in the coming days to provide a cohesive understanding of the research-based standards, and "give teachers more flexibility when creating learning experiences for students," Harnish said.

7 From Education Week: Educators Scramble for Texts to Match Science Standards

A [new piece](#) from Education Week explores the challenges schools and districts are facing as they seek quality instructional materials to use as they implement the NGSS in classrooms. Make sure to check out Achieve's [Quality Examples of Science Lessons and Units](#), along with its [EQIP suite of tools](#), as you work to address your own instructional materials challenges.

Districts face major obstacles in trying to get a good handle on what's out there: It's labor intensive and it's costly.



"Materials selection in general isn't frequently given the time, effort, energy, and resources it deserves," said Matt Krehbiel, the director of science at Achieve. "To really dig into the materials and look for evidence of these innovations takes time. And that means either during the summer or getting teachers out of classrooms for multiple days. And that's not typical in a lot of districts."

8 Last Month on Twitter: Designing Solutions

If you aren't yet following [@OfficialNGSS](#) on Twitter, you might have missed great updates on NGSS news and resources, but also a number of tweets throughout June exploring how students can design solutions to understand phenomena with the NGSS. Follow today so you don't miss out on any of the great content in July!

