

NGSS NOW

6 things to know about quality K-12 science education in September 2018



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Graduating Ready: What are states' high school graduation requirements in science?

Achieve recently released a new website, [Graduating Ready](#), that looks at all high school graduation requirements and options in every state. The site also includes a [deep dive](#) into science graduation requirements in particular; how many science credits do states require? What science coursework must students take to graduate? With the increasing importance of STEM skills for continuing to grow the economy, these questions matter more than ever before. Take a look to see how your state compares with others.



29 states offer more than one way for students to graduate, including at least one option that is at the college- and career-ready (CCR) level. Of these:
14 states expect students to complete a CCR option, but include flexibility to opt out.
15 states require students to proactively opt in to a CCR option.

Source: Achieve, "State Expectations for Graduation: A State-by-State Guide." Many thanks to Achieve. Map reflects stated graduation options for the class of 2017.

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LinkEngineering: Let's Talk Next Generation Science Standards with Ted Willard



NSTA's Ted Willard and veteran science teacher and STEM coach Rachael Manzer recently presented on LinkEngineering's video conversation series. Their conversation covered the NGSS, the Framework for K-12 Science Education, how engineering fits into the standards, and more. Watch the video [here](#) if you missed it!

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From California Classroom Science: Science Instructional Materials: What to Do Between Now and January 2019

A [blog post](#) by members of the California Science Teacher Association discusses what California science teachers should do while waiting for the state to release the much-anticipated list of recommended science instructional materials in January 2019. Importantly, the blog notes that districts will still need to prepare to evaluate materials even if they made the state list, and County Offices will be providing support to districts using a California version of [NextGen TIME](#), a suite of tools and processes that

supports educators to evaluate, select, and implement instructional materials designed for the NGSS. Districts should determine their own priorities for materials, examine Achieve's paper, [NGSS Alignment Claims: What Publishers are Saying](#), which can help you navigate publisher NGSS alignment claims, and be sure to participate in any of the offered county professional learning opportunities.

4

Blog Post: Facilitating Sense-Making in the Science Classroom

Cari Williams, an Achieve Science Peer Review Panel member and Teacher on Special Assignment for the Tustin Unified School District, recently wrote a [blog post](#) about one of the most important shifts for teachers transitioning to the NGSS: helping students figure stuff out and make sense of things in science class.

"It seems that one of the most important shifts for teachers in transitioning to the NGSS is learning how to facilitate the sense-making process with students. We are moving towards helping students 'figure out' rather than providing resources for students to 'learn about.'"



5

From The Daily Democrat: Woodland Teachers Explore Sunflower Science at Whitehead



Photo credit: Cutter Hicks, The Daily Democrat

An [article](#) in the California Daily Democrat highlights how teachers are using the school's garden to share real-world science learning experiences with their students.

"These types of school gardens provide a perfect place for students to practice data collection and analysis, says Suzanne Falzone, board president of Yolo Farm to Fork. This coincides with Next Generation Science Standards' curriculum of crosscutting concepts, using science and engineering practices, and examin[ing] core ideas. In short terms: hands-on education."

6

Moving Water Involves Using the Practices of Science and Engineering

This [blog post](#) from NSTA explores using materials on a playground as a way to use NGSS Science and Engineering Practices - such as asking questions.

"Sometimes the discovery of materials on a play area inspires children's exploration and use of the NGSS science and engineering practices."



