NGSS NOW

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



ICYMI: The NGSS Design Badge is Here!

If you haven't heard the news, Achieve is now awarding an NGSS design digital badge! The badge is awarded to science units designed for the NGSS that have earned the highest rating on the EQuIP Rubric for Science based on a review conducted by Achieve or its Science Peer Review Panel. Unfortunately, many science instructional materials claim to be aligned to the NGSS with little or no evidence to back up those claims. The NGSS Design Badge provides quality control and helps educators feel confident that they're making smart decisions about which instructional materials to use.



To learn more, <u>click here</u> to watch a recording of a recent webinar introducing the badge, hosted by Achieve and its partner in developing the badge, <u>Concentric Sky</u>.



New Criteria for Designing and Evaluating Science Assessments



As states and districts across the country have begun to implement new science standards in classrooms, they have turned to the question of how to best assess student learning. Achieve recently released a <u>set of criteria</u> that can be used to develop and evaluate new statewide summative assessments designed for three-dimensional science standards, including the NGSS. States, practitioners, researchers, and assessment developers are also invited to share feedback and suggestions for how to improve

subsequent versions of these criteria by emailing ngss@achieve.org and including "Assessment Criteria" in the subject line.

NGSS Alignment Claims: What Publishers Are Saying

In response to the demand for high-quality instructional materials to support the NGSS, the science instructional materials marketplace has started to fill with products and programs that make different claims about how those materials are connected to the standards. This resource will help with categorizing a few of the common ways publishers make claims about being designed for (or "aligned to") the NGSS and suggests follow up questions to make sure the materials will meet your needs.





From Education Week: Want More Girls in Science Fields? Check the Images on Your Classroom Walls



Source: Education Week

This <u>article</u> from Education Week looks at how students' image of a "scientist" changes as they get older - and the impact this trend could have on gender diversity in STEM fields. (Subscription may be required)

"Overall, students have drawn about 73 percent of scientists as male, but women have gained a lot of ground over time. In the studies conducted before 1983, only .6 percent of all drawings depicted a

woman as a scientist. In more recent studies, women are drawn as scientists 28 percent of the time. ...

"At age 6, girls drew about 70 percent of their scientists as women. But by the time they were 16, girls depicted scientists as male 75 percent of the time. "



Blog Post: That's My SCIENCE Teacher!

Check out <u>this great blog post</u> from Dana Nielsen, a second grade teacher at Doyle Elementary School, Teacher Leader in the CA NGSS K-8 Early Implementation Initiative for San Diego Unified School District, and member of the CA Science Teachers Association.

"Being part of the <u>CA NGSS K-8 Early Implementation Initiative</u> (EII) for the last three years has allowed me to become a better science teacher than I ever thought I could be. It has been one the most challenging, yet rewarding opportunities I have ever been given. Through the Initiative, I have been able to create professional relationships with other science teachers within my very large district and across the other districts in the grant. We have become a large statewide science family.

"But how have the <u>Next Generation Science Standards</u> (NGSS) and my participation in the Initiative changed my science teaching? They have fundamentally changed what and how I think about the teaching and learning of science. They have changed everything I think about preparing engaging learning experiences for the students at my school site. Kids like science, so why does it matter HOW you teach it? Science should be fun, engaging and hands-on. It should not be memorizing a list of vocabulary or diagrams. My goal is to support students to become critical thinkers and problem solvers, making scientific claims based



Mae Jemison: Diversity in STEM Isn't A Nicety, It's A Necessity



This <u>article</u> from the Huffington Post features Dr. Mae Jemison, the first African-American woman in space, who knows firsthand the importance of exposing kids to STEM topics early.

"'We're losing talent and we're losing capability by not including them,' she told HuffPost. 'When people think about why it is important to have a diversity of talent in a field, they think of it as a nicety. No, it's a necessity. We get better solutions.'

"'It's not about just making girls continuously jump over these hurdles that we put in place in front of them. It's about us taking those hurdles down,' Jemison said of guaranteeing diversity in STEM - science, technology, engineering and math."



How the New Budget Funds STEM in ESSA

With a new federal spending bill signed into law on March 23, 2018, STEM advocates are celebrating increased funding for programs and initiatives in the Every Student Succeeds Act (ESSA). Several provisions in ESSA allow - and even encourage - the use of federal funds to support STEM education. Click here to see the full breakdown of new funding levels for STEM-related provisions in ESSA compared with the previous funding levels from May 2017.



Achieve at NSTA's National Conference

Earlier this month, the NSTA National Conference in Atlanta invigorated thousands of science educators with new ideas and supplied them with ample swag! Achieve's NGSS Team was thrilled to be there to share the experience with all the passionate and dedicated science educators who were able to be there, but in case you weren't able to join, here are a few highlights from Achieve's four sessions.



Source: @AndrewLHipp on Twitter



