NGSS NOW

7 things to know about quality K-12 science education in **January 2018**

1 All Standards, All Students

When the NGSS were in development, special care was taken to make sure that all of the new science standards would reach all students. Achievement gaps in science have persisted for too long; the states that developed the NGSS sought to intentionally make the standards accessible to all students in an effort to finally close those gaps.

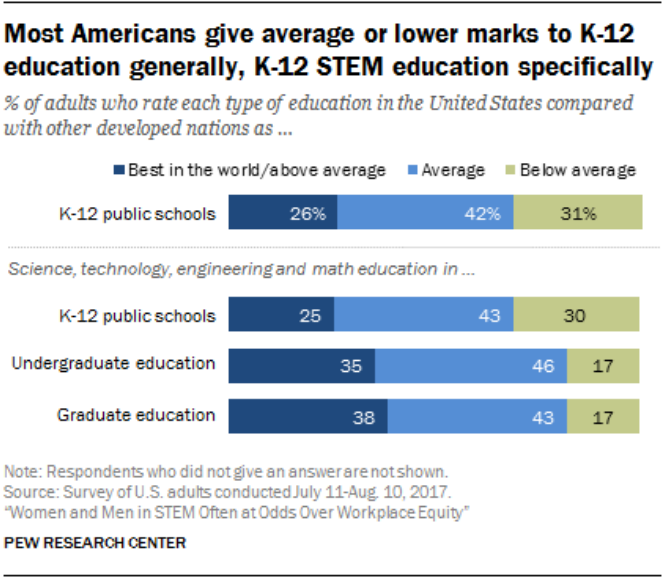
Appendix D of the NGSS details the "All Standards, All Students" approach. It also contains seven case studies that provide examples of strategies teachers can use to ensure that the NGSS are accessible to diverse student groups.

Case Study 1: Economically Disadvantaged
Case Study 2: Race and Ethnicity
Case Study 3: Students with Disabilities
Case Study 4: English Language Learners
Case Study 5: Girls
Case Study 6: Alternative Education
Case Study 7: Gifted and Talented Students

2 Most Americans evaluate STEM education as middling compared with other developed nations

By Cary Funk and Kim Parker
Pew Research Center
January 9, 2018

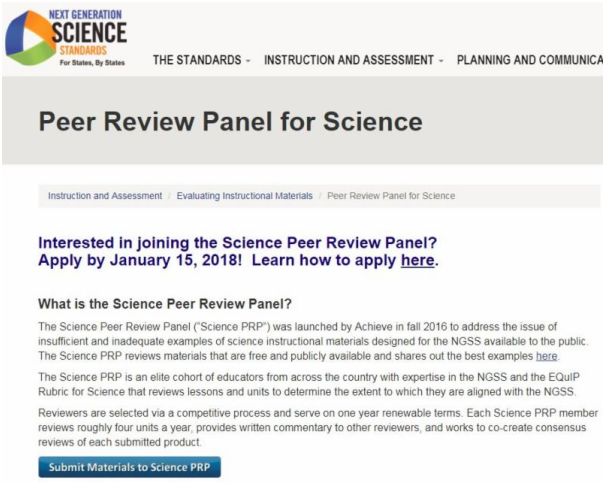
A new study from the Pew Research Center



found that "while most Americans give positive ratings for how well the K-12 public schools teach reading, writing, and mathematics, public assessments of STEM education for U.S. students in grades K-12 are middling. A large majority of Americans say such education is no better than average compared with other developed nations." 30 percent of adults believe U.S. STEM education is below average compared with other developed nations, while 43 percent rate it as average.

Read more about the full study here.

3 Last chance: Apply to join the Peer Review Panel for Science



Science educators! Time is almost up to apply to join the Peer Review Panel (PRP) for Science. The Science PRP is an elite cohort of educators from across the country with expertise in the NGSS and the EQuIP Rubric for Science that reviews lessons and units to determine the extent to which they are aligned with the NGSS.

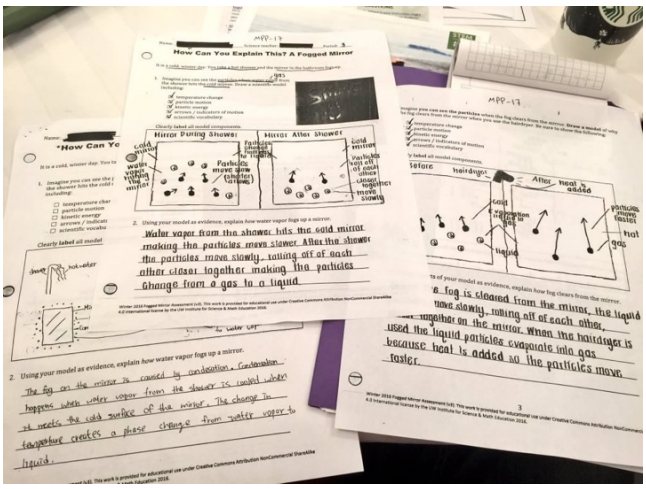
Learn more and submit your application by January 15, 2018.

4 Are your instructional materials designed for the NGSS?

Marketing materials sent to teachers, schools, and districts is plastered with claims of alignment to the Next Generation Science Standards, but developing high-quality instructional materials isn't easy. In addition to the work of the Peer Review Panel, Achieve is now offering unbiased reviews of instructional materials using our EQuIP Rubric for Science. Reviews carefully detail the evidence for how thoroughly the materials are designed for the NGSS and include suggestions for improving alignment. Our goal is to help the science education community understand what the NGSS look like in practice and to help the field define and describe these standards.

Read more to learn about the the efforts Achieve is making to help consumers make good purchases and for developers to improve the quality of their products.

5 STEM Teaching Tools PD Session: How to Build 3D Assessments



The new vision for science education calls for 3D assessments, but few examples of this type of assessment currently exist. This PD session provides a step-by-step process to support educators as they design a 3D assessment task. The approaches learned in this workshop can be used with any science curricula, at any grade level, and across all domains of science and engineering.

Learn more.

6 How many Grace Hoppers have been lost from the innovation pipeline?

By Jay Shambaugh and Becca Portman
Brookings' Up Front Blog
January 8, 2018

"The lack of women in science and innovation fields is not simply a question of fairness or equality; it suggests that the economy is missing out on important potential for productivity growth. The fact that just 16 percent of patents are granted to women demonstrates in some ways how we may be leaving future Grace Hoppers out of the world of innovation and hence missing their insights and inventions."

Read more.

7 Q&A with CEO of Project Lead the Way

EdTech Magazine
December 26, 2017

From a Q&A with Project Lead the Way's president and CEO Vince Bertram:

"People often say, 'We're preparing students for careers that don't yet exist.' The reality is

that out of 161 million people in the U.S. workforce, 9 out of 10 work in industries that existed 100 years ago. What has changed are the skills necessary for those jobs. Rather than trying to train students for a specific job, we really reduce that down to baseline skills. What are the skills necessary to succeed in any of those sectors?"

NEXT GENERATION SCIENCE STANDARDS
For States, By States