

NGSS NOW

14 things you need to know about the NGSS this month (and a Science fact)



October 2014

1 Accelerated Model Course Maps Development

The Accelerated Model Course Maps are in the final stages of development! These course maps provide examples of how the NGSS can be arranged for accelerated students. Created by Advanced Placement teachers, these models are designed to help schools and districts envision pathways for students intending to take advanced science courses in their junior year. Schools and districts can customize these models to provide curricular options that offer maximum opportunity to access advanced coursework in all areas of student interest.

2 NGSS EQulP Rubric

Given the increasing demand from states for [NGSS EQulP Rubric](#) training, we are preparing new trainers from across the U.S. to facilitate additional trainings. We will also be releasing an updated version of the rubric soon. It is important to note that both the current and new versions do not have numerical scoring guidelines (as the Common Core State Standards EQulP rubric does) because we are not yet at the stage where we can identify exemplars, but rather, are keeping the focus of the rubric and conversations surrounding it on the shifts that lessons and units need to make. In the future, we envision including scoring guidelines and establishing a peer review panel.

3 Standard of the Month

3-5-ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

The engineering design performance expectation listed above is one that students can

fully perform by the end of fifth grade, but can also be included in the learning goals for earlier grades - this is indicated by the notation "3-5" in the name [3-5-ETS1-2](#). This performance expectation can be applied in a variety of science contexts, and is intended to work in tandem with at least one performance expectation from a science discipline. In other words, students should be engaged in engineering design in the context of scientific concepts. For a more in-depth look at this NGSS engineering design performance expectation and to search for others, we encourage you to go [here](#). Need more context? See where these ideas are introduced in [A Framework for K-12 Science Education](#) (pgs. 206-207).

4 Resource of the Month

Looking for additional information about how the NGSS relates to English Language Learners in the classroom? Learn more by reading this [article](#) published by professors involved in the [Understanding Language](#) initiative at Stanford University.



5 QUESTION OF THE MONTH

Q: My district is implementing the NGSS and I'm looking for resources on how to make sure we reach all students, including students who are gifted and students with disabilities. What do you recommend?

A: You might find [Appendix D](#) to be a useful resource. It addresses what classroom teachers can do to ensure that the NGSS is accessible to all students. In addition, there are [seven case studies](#) that accompany this appendix that highlight several strategies teachers can use in their classrooms.

6 New Report

A new report from SRI Education describes findings from a study of middle school science curriculum materials. In the study, middle school science teachers who used curriculum that presented opportunities for students to engage in science practices improved their students' performance on science assessments. [Read more](#)



**SCIENCE
FUN FACT**

NASA Scientists can turn the [data collected from satellites into sounds](#) to analyze them in different ways.

NGSS in the News

7 [Teachers in Boonton stay focused on education in summer](#)

by Lisa Kintish
NorthJersey.com, Sept. 3, 2014

"School may have been out for summer, but that does not mean that teachers were not at work. John Hill School's Jenna Crithary and Boonton High School's Karen Reich spent time over their break in educational endeavors that will benefit their students."



8 [AIR Research: Deeper Learning Approach Shows Positive Student Gains](#)

by Michael Hart, 09/25/14
TheJournal.com, Sept. 25, 2014

"The idea that students need to develop a deeper understanding of content and the ability to apply what they learn in one area to another area are major premises of new learning standards, such as the Common Core State Standards and Next Generation Science Standards. A new study now shows that schools promoting the practices of what's called 'deeper learning' are getting better results from their students."



9 [Cape Moves Full STEAM ahead](#)

by Melissa Steele
Cape Gazette Newspaper, Sept. 22,
2014

"A new program with a twist on the latest science and technology trend is available for accelerated fifth-grade learners in the Cape Henlopen School District."



10 [Key Message for the Field](#)

All standards, all students: The NGSS were built upon a vision for quality science education for ALL students, meaning that wherever the NGSS are being implemented, every student should have access to every NGSS performance expectation. It is important to note that the NGSS do not replace course standards for high level science courses, nor do they prevent students from taking those courses. The NGSS do, however, represent an increase in expectations because they are for ALL students, not just for the students who would typically take upper level courses. All students, no matter what their future education and career path, must have a solid K-12 science education in order to be prepared for college, careers, and citizenship.

11 Opinion

[Why it's time to change how and when we bring STEM into the classroom](#)

by Noha El-Ghobashy, August 6, 2014

"Developing these skills begins at the earliest levels of education. Students in grades Pre-K-12, particularly in the formative Pre-K-3 grades, need exposure to the latest advancements in STEM, and they need the time and space to explore, to understand and develop the skills of collaboration and persistence."



12 #NGSSChat

Looking to learn more about a variety of topics related to the NGSS from teachers and others involved in science education? Look for the NGSS twitter chats (#NGSSchat) every other Thursday evening at 9:00 p.m. ET.



13 Congrats!

Congratulations to Dr. Michael Wyssession for his selection as a 2014 American Geophysical Union Ambassador Awardee. This new award is given annually to one or up to five honorees in recognition of "outstanding contributions to the following area(s): societal impact, service to the Earth and space community, scientific leadership, and promotion of talent/career pool." Dr. Wyssession was on the NGSS leadership team and served as the lead writer for Earth and Space Science. He is currently an Associate Professor of Earth and Planetary Sciences at Washington University in St. Louis.

14 Follow Us

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