Evidence Statements for Grades K-8

The NGSS Evidence Statements for elementary grades (K-5) and middle grades (6-8) are now available. These statements were developed and reviewed by educators and scientists, including many members of the NGSS writing team. The evidence statements are intended to identify clear, measurable components that, if collectively met, fully satisfy each performance expectation (PE) described within the NGSS.

Given that each PE is three-dimensional, the statements describe how students can use the practices, crosscutting concepts, and disciplinary core ideas together to demonstrate proficiency on the PEs by the end of instruction. They are not meant to limit or dictate instruction and were written to allow for multiple methods and contexts of performance, including students’ performance on multiple related PEs together at the same time. For more information, see the Introduction and Overview, which applies to the evidence statements for all grade levels. Additional materials, including appendices for K-2, 3-5, and middle school are coming soon.
Looking for videos that introduce the major shifts in instruction called for by The Framework for K-12 Science Education and the NGSS? Check out the National Science Teachers Association (NSTA) classroom videos here.

**Video Resources**

K-2-ETS1-1: Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. For a more in-depth look at this NGSS performance expectation and to search for others read more here. Need more context? See where these ideas are introduced in A Framework for K-12 Science Education (page 204).

**Standard of the Month**

Q: I noticed some of the performance expectations in the NGSS have statements after them in brackets that say "Assessment Boundary" and "Clarification Statement". What do these terms mean?

A: The assessment boundaries are meant to specify limits to large-scale assessment. They are not meant to put limits on what can be taught or how it is taught, but to provide guidance to assessment developers. The clarification statements supply examples or additional clarification to the performance expectations. If you are interested in learning more about why these features were included, check out the findings from this international benchmarking study here. To learn more about the layout of the NGSS performance expectations, check out this resource on how to read the standards.

Researchers recently discovered new lab tests that can detect multiple viruses that a human
body has been exposed to throughout the course of an individual's lifetime by using one drop of blood.

5 Making Crosscutting Concepts Explicit for Students

The crosscutting concepts - not in isolation, but connected to disciplinary core ideas and practices - should be an explicit part of student learning. This does not simply mean that words such as "systems" and "patterns" are used explicitly in a lesson, but that students have an opportunity to reflect on these concepts both in lessons and over time. Only with opportunities for structured and supported reflection will all students understand the crosscutting concepts and make connections that help them better understand how the world around them works. In this way, students develop their understanding of crosscutting concepts as tools to use when trying to make sense of new phenomena. To read more about the vision for crosscutting concepts, see this chapter in the Framework for K-12 Science Education.

NGSS in the News

6 Hands-on science is coming to California classrooms
   by Nicholas Weiler, Contra Costa Times
   June 6, 2015

"Students now "come from an educational system where they're trained to soak up answers and feed them back to you," Asekomeh said. But his students now realize they can draw their own conclusions. "We're teaching them to be thinkers," he said, "and they really enjoy it."

7 Science: the Next Generation
   by Susan Parrish, The Columbian
   June 14, 2015

"Rather than telling students what data to collect, Watrin asked them: "Once we determine our plot, what categories of data should we collect?"

8 Kids get hands-on training at summer science camp
   by Carol Zinke, KLEWTV
   June 29, 2015

"School may be out for the summer but students in Clarkston are still learning. These little scientists took part in a four-day summer camp at Grantham Elementary this week."
Opinion

Reflection on Year 1 with NGSS: Grade-Appropriate
by David Grossman, NGSS Resources blog
June 7, 2015

"When I think of the "essence" of the NGSS, I think of the statement below from the EQuIP Rubric for Lessons and Units: Science. "Grade-appropriate elements of the science and engineering practice(s), disciplinary core idea(s), and crosscutting concept(s), work together to support students in three-dimensional learning to make sense of phenomena and/or to design solutions to problems."

Student Evaluations of Mr. Hubbard's Life Science Class
by Josh Hubbard, Adventures in Learning blog
June 16, 2015

"I remember the first time I was asked to evaluate a teacher. It was my freshman year in college. I had never done one before and I dutifully filled out the bubbles and made comments, but in reality gave little thought to how powerful it is for a teacher."