Resource Update

Classroom Sample Assessment Tasks for middle and high school were just released. These draft sample tasks, written by secondary teachers of a variety of subjects, provide examples of how content from both the NGSS and the Common Core State Standards in Math and English Language Arts can be assessed together in classrooms. The front matter for the tasks also provides valuable information for teachers about the tasks’ development process so that they can create their own tasks. Find the front matter and assessment tasks here.

Standard of the Month

4-LS1-2: Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

For a more in-depth look at this NGSS 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 (page 149). To see an example of LS1.D in action, see the fun fact section below.

Question of the Month

Q: I've seen some instructional materials that say they are NGSS-aligned. How can I determine if these materials are truly aligned to the NGSS?

A: There are several key differences between the NGSS and prior sets of standards,
including that NGSS performance expectations (PEs) have three integrated dimensions (science and engineering practices, disciplinary core ideas, and crosscutting concepts), and therefore call for students to be engaged in three dimensional learning and assessment.

Given this shift, a deliberate and strategic process to find, modify, or develop lessons and units (including student materials, such as worksheets, that accompany them) that align with the goals of the NGSS is recommended. Rubrics such as the NGSS EQuIP Rubric can help teachers and administrators make determinations about whether or not lessons, units, and student materials are truly aligned to the NGSS.

### Highlighted Resources

1. Interested in learning more about how after school programs affect Science, Technology, Engineering and Math (STEM) learning? Read the recent report released by Afterschool Alliance [here](#).

2. There are many different instructional models that can help students build toward proficiency on the NGSS performance expectations. To learn more, read the recent brief from stemteachingtools.org [here](#).

### Dolphins Fun Fact

Dolphins [recognize the calls](#) of long-lost friends up to 20 years later. Read the study [here](#). This story also functions as a great classroom connection. Dolphins put information processing (LS1.D) into action when deciphering calls. The standard of the month (above) is an example of a performance expectation that uses this DCI.

### NGSS in the News

6. State Board of Education recommendation to Legislature: Eliminate Biology end-of-course assessment as a high school graduation

7. Elementary schools start teaching data literacy

8. State Schools Chief Torlakson announces guidance on new science standards

by Mohana Ravindranath

by Trina Jung
"It's time to focus our work on implementing the Next Generation Science Standards and giving students exposure to a broad array of science content,' said Isabel Munoz-Colon, Chair of the Board."

"Elementary school teacher Lisa Parisi is trying to teach her students a new kind of literacy. By the time fifth-graders enter her class at Denton Avenue School in New Hyde Park, NY, they are about 10 years old and have developed basic reading, writing, and math skills. They are less comfortable, Parisi has found, handling data."

"SACRAMENTO - State Superintendent of Public Instruction Tom Torlakson said the state is one step closer to implementing the California Next Generation Science Standards (CA NGSS) as the State Board of Education today adopted a new plan."

Key Message for the Science Education Community

Many of the newly-released Classroom Sample Assessment Tasks note that they can be used, at least partially, as formative assessments. Formative assessments may be seamlessly incorporated into instruction, but they cannot stand alone as instructional lessons or units.

Dylan Wiliam says this about formative assessment in his 2011 book Embedded Formative Assessment; "An assessment functions formatively to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have made in absence of that evidence" (43). Even though the distinctions between instructional activities and classroom-based assessments (e.g., those that engage students in discussions or group activities) may be blurred (NRC, 2014), assessment tasks don't provide guidance on how to teach concepts or full explanations of instructional content that will be assessed by the tasks.

This is an important consideration when looking at the Classroom Sample Assessment Tasks highlighted above. While the tasks could be used as summative assessments (tasks that are used at the end of an instructional unit to measure student achievement and to evaluate the ultimate outcome of learning) and/or formative assessments, the Classroom Sample Assessment Tasks are not meant to be used as lessons, units, or instructional materials on their own.