

NGSS NOW

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



January 2016

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New NGSS EQuIP Teaching Channel Videos

We're excited to announce that four new videos highlighting the Educators Evaluating the Quality of Instructional Products (EQuIP) for Science rubric are now available online. Developed through a collaboration between Achieve and the Teaching Channel, the video series uses rich conversations emerging from a Next Generation Science Standards (NGSS) EQuIP training session to illustrate some important features of NGSS-aligned instructional materials and classroom activities.

Each of the stand-alone videos focuses on educators using different aspects of the EQuIP rubric and captures discussions of what to look for in NGSS instructional materials, as well as the evaluation and feedback process that the rubric is designed to support. Each video also highlights some of the common ideas and frequently asked questions that emerge during an EQuIP for Science training session.

For teachers, this series explores what the NGSS might look like in the classroom and how to think about shifts in the instructional materials that will support a transition to the standards. The videos are part of a growing suite of NGSS EQuIP resources, including the [EQuIP Rubric for Lessons & Units: Science](#) and the [NGSS EQuIP Professional Learning Facilitator's Guide](#).

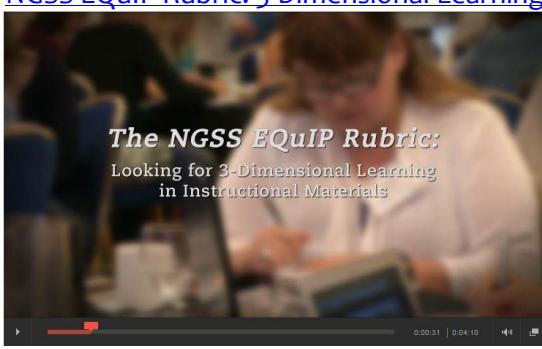
[NGSS EQuIP Rubric: Overview Video](#)



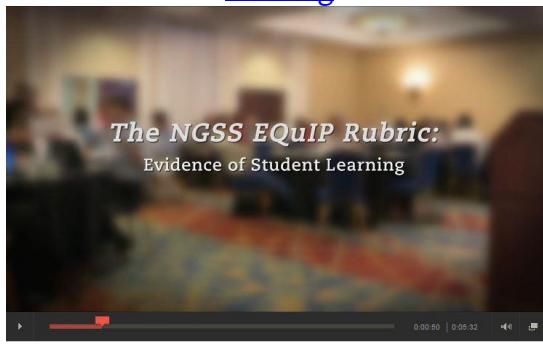
[NGSS EQuIP Rubric: Using Phenomena](#)



[NGSS EQuIP Rubric: 3-Dimensional Learning](#)



[NGSS EQuIP Rubric: Evidence of Student
Learning](#)



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Standards of the Month

Here's an example of an elementary school bundle of performance expectations (PEs). Instruction leading to this bundle of PEs would help students learn about the ways humans and other living things interact with their ecosystems. How would you design lessons to lead toward this bundle and develop student understanding? Could you use an aspect or the entirety of the Science Phenomenon of the month (see right) to help engage students in learning these concepts?

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS3-1: Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

For a more in-depth look at these NGSS PEs 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](#) (pages [147](#) and [191](#)).

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Science Phenomenon: How Black-Capped Chickadees Eat in Winter

Although they typically eat insects, in winter months, birds such as the Black-Capped Chickadee can be seen perching in bushes and eating berries and seeds. The birds' typical food source of insects becomes limited during the winter. Since birds maintain their internal temperature by metabolizing food, chickadees must change their eating habits seasonally in order to obtain enough calories to stay warm. The Mountain Bluebird is another animal that can be observed feeding on berries and seeds in winter months.



Missy Mandel/Great Backyard Bird Count Participant. Audubon Society.

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QUESTION OF THE MONTH



Q: I've noticed an asterisk next to certain performance expectations. What does this symbol indicate?

A: An asterisk is used to indicate PEs that have already integrated engineering design through a connected practice, core idea, or crosscutting concept. Additional

connections can be made between science and engineering by building instruction toward a science PE and an Engineering, Technology, and Applications of Science PE at the same time. More information about features of the PEs can be found by selecting "[How to read the standards](#)" on the standards pages of the [NGSS website](#).



SCIENCE FUN FACT

Liquid helium can form a superfluid that can climb up the walls of its container.



NGSS in Educator Blogs

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[Primary Science - Integrating NGSS and the Common Core](#)

By Valerie Joyner, *California Classroom Science*
October 19, 2015

"[I]t's time to look at how you will integrate NGSS science and CaCCSS (California Common Core State Standards). To some this may seem a daunting task, but in reality there are many integration connections that already exist in both NGSS science instruction and CaCCSS."

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[A Treat for Science Teachers - Evidence Statements!](#)

By Hallie Mills, *CORElaborate*
October 31, 2015

"I have been working on incorporating the NGSS into my teaching, I am feeling pretty good about day to day work with the Three Dimensions - Practices, Core Ideas, and Crosscutting Concepts...However, I still have more work to do on making my assessments align with NGSS...If you're like me though, and this is an area that you're still working on, I think tonight's [post] will be helpful."

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NGSS in the News

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[Science Standards boost learning](#)

By Jennifer Stainton, *Burlington Free Press*
October 21, 2015

"When the Vermont State Board of Education adopted the Next Generation Science Standards (NGSS) in 2013, it delivered a clear message to every science teacher in Vermont: engage all students with the core, interconnected ideas of science by allowing them to practice the skills of scientists and engineers."

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[Re-envisioning teacher preparation](#)

By Anne Egger, *The Daily Record*
October 3, 2015

"The NGSS are inspiring. They represent our best effort to integrate what we know about how people learn with the skills and knowledge that are critical for citizenship. I am proud that Washington was both a lead state involved in writing the standards and an early adopter."

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