



Moving toward 3-D instruction

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The vision of the *Next Generation Science Standards* has been hailed by many as a necessary change that will prepare our students for their future and foster deeper understanding of science concepts as they relate to daily life, yet the road to classroom implementation can be fraught with challenges. Teaching the Standards can be intimidating, given that they require an approach that is vastly different from the way most teachers learned science and have historically taught science. Other challenges include locating resources, realigning a district's K–12 scope and sequence, adopting new pedagogies, and educating administrators about what an NGSS classroom looks like.

Textbook and other companies have rushed to create NGSS-aligned materials; however, it's critical for teachers to evaluate those materials to ensure they truly mirror the three-dimensional approach envisioned by the Standards. One of the best tools for evaluating materials is the EQuIP Rubric, which examines how well teaching materials synthesize practices, disciplinary core ideas, and crosscutting concepts. A growing number of quality lessons that have undergone peer-review using the EQuIP Rubric can be found at the Next Generation Science website (see Resources).

Standard activities and teaching pedagogies can be modified with the goal of bringing them into alignment with the NGSS. For example, NSTA has also made available a plethora of existing classroom resources that contain recommendations for modifications so that they are better aligned to the NGSS. If you are interested in quickly and informally reviewing a learning sequence, consider using the NGSS Lesson Screener, which can inform you as to whether or not a lesson is on the correct pathway.

Teaching the Standards requires professional development that will yield new pedagogic strategies. By examining exemplar lessons, studying how existing lessons can be modified, and by using tools such as the NGSS Lesson Screener, you'll be on your way to identifying and using materials that will benefit all students.

Patty McGinnis
Editor, *Science Scope*

RESOURCES

Books

National Research Council. 2015. *Guide to implementing the Next Generation Science Standards*. Washington, DC: National Academies Press.

Online

Quality examples of science lessons and units—<http://bit.ly/2IMzx Cz>

NSTA classroom resources—<http://ngss.nsta.org/Classroom-Resources.aspx>

EQuIP rubric—<http://nstahosted.org/pdfs/ngss/equprubric.april.2014.pdf>

NGSS Lesson Screener—www.nextgenscience.org/sites/default/files/NGSSScreeningTool-2.pdf

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