

NGSS NOW

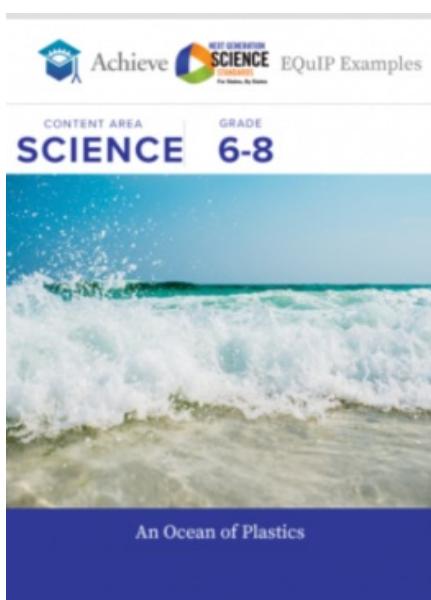
7

things to know about quality K-12 science education in **December 2017**



1

Quality Examples of Science Lessons and Units



A new unit has been reviewed by the EQuIP Peer Review Panel for Science and added to nextgenscience.org under [Quality Examples of Science Lessons and Units](#).

This middle school unit was designed to help students raise public awareness and take action against the global crises of plastic pollution, by reducing their individual impact, educating their family and communities, and proposing possible solutions to help monitor and minimize the effects of plastic pollution in marine ecosystems.

The unit is in a draft stage written in collaboration with [Aspire Public Schools](#) and the [5 Gyres Institute](#).

Learn more about this unit [here](#).

2

By 2022, America will need 1 Million More STEM Grads than on Track to Produce

By Blair Blackwell and Talia Milgrom-Elcott

www.the74million.org

Blair Blackwell, Manager of Education and Corporate Programs at [Chevron](#), and Talia Milgrom-Elcott, Executive Director of [100Kin10](#), penned an op-ed about the



importance of supporting STEM teachers and preparing America's students to compete in the 21st century global economy. [Read more.](#)

3

Earlier Entrance into Classrooms Helping To Prepare Future Science Teachers

By Jim Carlson
Penn State News
November 16, 2017



In a middle school science classroom, several pre-service teachers are constructing rubrics to grade tests and acquiring a sense of how to write curriculum. It's a very real version of the countless facets of teaching - the enthusiasm that's necessary to capture the attention of all ages, the collaboration that's behind ongoing professional relationships, and getting a taste of not only bonds that can form but just how important a teacher can be in the life of exceedingly impressionable students. [Read more.](#)

4

STEM Education Develops Children's Skills to Make Them 'Future-Proof' in Employment Market

By Staff Reporter
South China Morning Post
November 26, 2017



Considerations of integrating STEM subjects at the elementary level have implications beyond the United States, as other countries strive to prepare their students for the global economy. In Hong Kong, Superintendent Malcolm Kay of the Stamford American School explores some challenges and opportunities in preparing students for STEM instruction and learning. [Read more.](#)

5

Elementary Kids Should be Deeply Engaging in Science

By STEMTeachingTools



Our future depends on a public that can use science for personal decision-making and to participate in civic, political, and cultural discussions related to science. There are multiple reasons for science to be a core part of elementary school learning, including meaningful learning of language and mathematics skills and solid preparation for STEM-related majors, careers, and opportunities. [Read more.](#)

6

Five Ways Design and Making Can Help Science Education Come Alive

By Christa Flores

MindShift/KQED News

Archived: December 22, 2016



Studies show that the best predictor of STEM career choice in adulthood is linked to whether kids self-report seeing themselves as scientists when they grow up by 8th grade. When students invent, they take ownership over an idea, then face real-world problems en route to making their idea come to life. They act, think and work as real scientists and inventors. [Read more.](#)

7

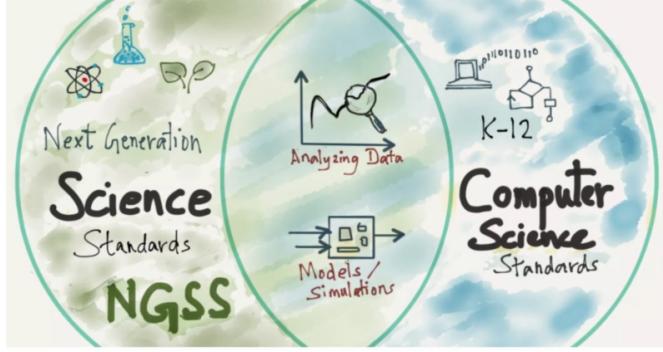
Why Computer Science Belongs in Every Science Teacher's Classroom

By Sheena Vaidyanathan

EdSurge

November 16, 2017

Some of the NGSS guidelines directly overlap with the practices listed in the [K-12 Computer Science Framework](#) and the new [CSTA](#)



[Computer Science standards](#). As educators implement the NGSS, they can consider adding computer science to daily classroom instruction in several ways. [Learn more.](#)

