

NGSS NOW

7 things to know about quality K-12 science education in February 2021



1 Authentic Science Experiences: Designing High School Science Learning to Reach all Students

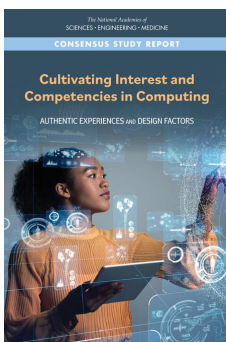
In their latest resource, NextGenScience examines five key features of authenticity that are essential for the design of science learning for today's high school students, drawing on research behind why each feature can improve student learning. The resource includes several vignettes that highlight authenticity features in a variety of high school science experiences and a series of recommendations for those seeking to design and implement more authentic high school science experiences.

See the resource [here](#).



Authentic Science Experiences:
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2 Cultivating Interest and Competencies in Computing: New Report from the National Academies



A new report from the National Academies of Science, Engineering, and Medicine describes ways authentic STEM experiences help students develop interest and competencies in computing. The report "gives particular attention to approaches and experiences that promote the success of children and youth from groups that are typically underrepresented in computing fields."

See the summary [here](#) and the full report [here](#).

Follow [@OfficialNGSS](#) for next week's Twitter series on connections between Computer Science, Science, and Engineering!

3 A Framework for Diversity and Equity in K-12 Science Educational Media

To support resource developers, educators, and researchers in the design and use of digital and instructional resources for diverse (i.e., academic, linguistic, cultural, and socioeconomic) learners, GBH Education in collaboration with NASA developed A Framework for Diversity and Equity in K-12 Science Educational Media. The framework summarizes key research in diversity and equity, identifies practices to support equity and diversity in science education alongside examples, and shares a set of principles to guide the development of more equitable science educational media.

See the framework [here](#) and webinar [here](#).

4 Connecting Mathematics and Science Through Literature and Storytelling

In this webinar, panelists "examine and discuss the intersection of literature and storytelling with mathematics and science as an incredible opportunity to make connections for students and teachers alike." Through a showcase of various STEM storytelling books and literature, panelists discuss the benefits of making mathematics and science connections through storytelling including "building positive identities, helping students make sense of the world, and providing opportunities to experience joy, wonder, and beauty across the subjects."



See the webinar and accompanying resources [here](#).

5 Article: Why Students Should Write in All Subjects



This article offers an analysis of the research for why writing in all subjects, including science, is beneficial for all students and also provides strategies that educators can use to incorporate various writing strategies in their subject area. Strategies such as "I wonder journals" can support students with deeper thinking and serve as metacognitive tools to help educators examine gaps in students' understanding.

See the article [here](#).

6

Analysis: Science Matters Now More Than Ever. The Time to Start Teaching It Is in Elementary School

In this article, several strategies are highlighted for district leaders and educators to prioritize elementary science education by leveraging the disruption that the COVID-19 pandemic has caused as an opportunity to try something new. The article highlights strategies used by districts around the country that were successful in elevating science in their elementary curriculum.

See the article [here](#).

7

2021 STEM for All Video Showcase Registration

NSF's 2021 STEM for All Video Showcase is an opportunity for researchers, practitioners, policy makers and the public to learn about related work in the field, broadly disseminate their work, and receive new ideas and feedback. Last year's showcase included 171 videos from over 700 presenters. This year's themes include impacts of the COVID-19 pandemic and approaches to STEM equity and social justice.



Register as a presenter by February 12 [here](#) and see last year's STEM for All Video Showcase [here](#).



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