NGSS NOW

7 things to know about quality K–12 science education in **July 2021**

① Webinar: Designing or Selecting Science Curricula? Here's What You Need to Know

EdReports and NextGenScience teamed up to create a new resource (coming soon!) that lays out critical design features of science instructional materials. A July 21st webinar at 12:00 p.m. PT/3:00 p.m. ET will showcase that resource, including findings based on hundreds of reviews of science instructional materials, implications for the field, and illustrations of high-quality features.

Register for the NextGenScience and EdReports webinar here.

② Science Observation Tool and Leadership Workbook

Instruction Partners recently released two new resources for science education leaders: (1) a classroom observation tool, which includes several indicators to support educators in determining their current state of science instruction, and (2) a science leadership workbook that supports learning about high-quality science classrooms and offers tools that support describing, prioritizing, and planning for instructional growth in science.

Download the resources here.

③ Fostering Diversity, Equity, and Inclusion in STEMM

The National Academies of Sciences, Engineering, and Medicine recently held a national summit called *Addressing Diversity, Equity and Inclusion in 21st Century STEMM[Science, Technology, Engineering, Mathematics, and Medicine] Organizations.* In the summit, experts provided insight on ways to advance diversity and inclusion, and strategies for confronting systemic racism in STEMM.

See webinar recording and meeting materials here.

4 Two Webinars on Supporting Students With Disabilities

Valuing Disabled Voices in STEM

In this webinar hosted by the University of Pittsburgh, STEM researchers and a panel of students with disabilities share their experiences and contributions on what it's like to be in the STEM field with a disability. The webinar provides insight on how classrooms and work spaces can be better designed to support STEM students and professionals with disabilities.

See the webinar here.

Supporting COVID-19 Recovery for Students with Disabilities

This webinar, hosted by the Alliance for Excellent Education, NWEA, and the National Center for Learning Disabilities, shares research on academically supporting students with disabilities before COVID-19 and implications for future policies and practices.

See the webinar here.

5 The Influence of NGSS and Three-dimensional Learning on Undergraduate Chemistry

This research article provides insight on past and current reform initiatives to teach chemistry effectively in both K–12 and higher education. The authors argue that aligning chemistry college courses with the learning approach taken by the NGSS and similar standards is an opportunity to make introductory courses accessible to all students and invite them to engage in further STEM coursework and careers.

See the article from ACS Publications here.

## 6 A Climate Change Solution: Invest in Youth Environmental Education

"Environmental and science education helps people develop robust understanding of systems, develop skills for collaboration and problem-solving, and respond appropriately to warnings about the climate emergency…. Only then will contemporary calls by organisations such as the United Nations Environmental Programme (UNEP) and UNESCO, which emphasise that environmental education must 'be a core component of all education systems at all levels by 2025', have a chance of gaining the multilateral and multileveled support the situation so urgently requires."

Read the Stanford University article here.

⑦ Two Resources on Computer Science Education
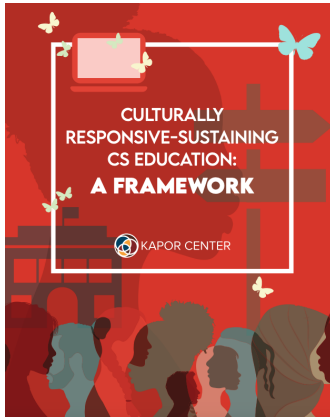
A Framework for Culturally Relevant, Responsive, and Sustaining Pedagogy in Computer Science

The Kapor Center released a framework for K–12 computer science education developed in partnership with researchers, practitioners, teachers, students, and other education advocates. The framework can be used to help prepare educators in adopting culturally sustaining classroom practices, closing equity gaps, and improving outcomes for students from underrepresented backgrounds in the area of computer science.

See the framework here.

Computer Science for All?

"*Today, computer-science-for-all leaders acknowledge they've hit a plateau and that they need more-widespread buy-in from lawmakers and educators and increased funding to overcome disparities in the U.S. education system that fall along racial and socioeconomic lines.*"

See the Education Next Article here.