

## 6 things to know about quality K–12 science education in August 2024



### 1 Two New High-Quality High School Units Posted

#### Postgame Analysis

In this Relevant Classroom life science unit, Postgame Analysis, students investigate how intense exercise impacts the body and how milk may help with recovery. The unit was awarded the NGSS Design Badge by NextGenScience's cadre of expert reviewers.

See the free unit and the corresponding EQUiP Rubric for Science evaluation report [here](#).



#### Stars and the Big Bang

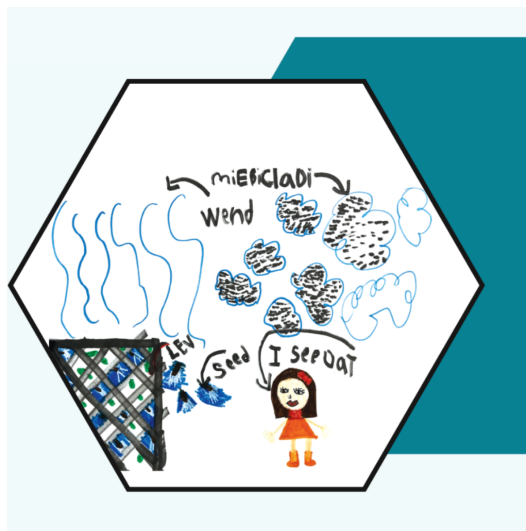
In this OpenSciEd physical science unit, students wonder about how some stars appear unchanging while they are actually changing drastically in a short period of time. The unit was awarded the NGSS Design Badge by NextGenScience's Peer Review Panel.

See the free unit and the corresponding EQUiP Rubric for Science evaluation report [here](#).

## 2

## Uncertainty in Science Practice: The Investigations Framework

A team of researchers and educators from the NSF-funded Investigations Project are exploring the role of uncertainty in motivating science investigation and learning. The team has developed a tool describing types of uncertainty that emerge during investigations, which is designed to support teachers with anticipating and leveraging student questions, uncertainty, or discussion opportunities that arise during phenomena-driven investigations.



See the Investigations Project tool [here](#).

## 3

## Artificial Intelligence in Professional Learning: Navigating Opportunities and Challenges for Educators

The field often focuses on how artificial intelligence (AI) will impact classroom experiences for K–12 students, but there are also significant potential opportunities for AI to shape teacher professional learning experiences. This study looks at current work at the intersection of AI and professional learning and what advances the practitioners might see in the future.

See the Research Partnership for Professional Learning paper [here](#).

## 4

## New Science Curriculum Has High School Students Learning Through Real-World Situations and Puzzles



*“Many science classes today rely on cookie-cutter science labs and rote memorization of the terminology. I can still remember learning about the nucleus and cytoplasm and my personal favorite, endoplasmic reticulum (it sounds so cool) in high school. But there’s a growing demand for science curricula to help students apply science in novel ways to solve challenging problems like pandemics or climate change.”*

See the CPR News article [here](#).



## Teaching about the Critical Role of Key Scientific Institutions

This article describes the importance of scientific institutions in providing trustworthy science information to the public. It highlights various instructional practices for teachers to support students to identify reliable sources of information, including those produced by scientific institutions.

See the NSTA Science Teacher article [here](#).



## ICYMI: Embracing the Implementation Journey: How Mount Horeb Area School District Achieved Their

This case study shares the story of a Wisconsin school district transitioning to using a new mathematics curriculum. The intentional steps taken to ensure they get the most out of their investment can illustrate lessons learned for districts who are implementing science instructional materials.

See the Rivet Case Study [here](#).

