

STEM News You Can Use. . .

VISIT THE DuPAGE ROE STEM WEBSITE AT <http://stemdupage.com/>



Downers Grove North High School Students Partner with ComEd and Illinois State University

Students from DGN, the only DuPage high school selected to participate in the challenge sponsored by the Illinois Science and Technology Coalition, designed and developed solar powered innovations that leverage smart grid technology and related services to address community needs. [Read more](#) about the challenge.



Five Ladies Leading Change in Education and Technology

Five female leaders [share their work](#) and passion to create more enriching and equitable opportunities for a variety of learners.



Middle Schoolers Are Doing Better on a Key Tech and Engineering Test - Thanks to the Girls.

American middle schoolers are performing better on a national assessment of technology and engineering, an improvement driven largely by girls. Read more [here](#).



How STEM Invigorates Classrooms

eSchool News recently spoke with Vince Bertram, the chief executive officer of Project Lead The Way (PLTW), about the [importance of STEM education](#). Engaging, hands-on classroom environments empower students to develop the in-demand knowledge and skills they need to thrive.



Why Everyone Can and Should be a Scientist

Citizen and community science (CCS), and the data collected by participants, create a *mutual dependence* that makes [CCS scalable and meaningful](#) through engagement in real science with emotional, motivational, and cognitive consequences.



How Arts-Based Lessons Improve Science Performance

Integrating the arts into science lessons helps the lowest-performing students retain more content and does not require much in terms of funding, according to a recent study published in the Journal *Trends in Neuroscience and Education*. [Read the article](#) in *District Administration*.

Upcoming Events and Opportunities

ChemEd Conference - July 21-25, 2019

The [conference](#) will take place at North Central College (Naperville) and will integrate various strands including K-8.

STEM Read Professional Development - July 24-26, 2019

Learn how to facilitate an action-packed STEM Read event in your school! You will also have access to the materials and resources you need to make your STEM Read event a success. [More information](#) here.

Exploration of Other Worlds Using NASA Solar System Treks - Webinar October 8, 2019

Learn about [NASA's Solar System Treks](#) (SST), free resources that enable students to study the surfaces of the Moon, Mars, Vesta, Ceres, Titan, and Icy Moons. The portals provide interactive and innovative ways to inspire, inform, and educate. Participants will hear from specialists from NASA's Jet Propulsion Laboratory and Ames Research Center and have the opportunity to ask questions about the visualization tools.

Illinois Future City Competition - January 18, 2020

Sixth-eighth graders are invited to participate in this exciting competition to be held at Whitney Young Magnet School (Chicago). Details and the theme will be announced in June. More information [here](#).

Resources

Reaching All Students in Science

Don't miss [the recording](#) of the 30-minute webinar presented by Achieve's Vanessa Wolbrink. Vanessa dives into four key features of equity in the classroom: relevant and engaging phenomena, asset-based thinking, student agency and identity, and accessibility.

K-12 Wind Schools Program

Grants support the installation of 1 to 5 wind turbines, allowing students to see how wind energy is converted into electricity. Eligible applicants are Illinois K-12 schools, educational organizations, and nonprofit organizations. Grants up to \$40,000 or 90 percent of the system and installation costs are awarded. [Applications](#) due August 27, 2019.

Mazda Foundation

The Mazda Foundation supports 501(c)(3) organizations to promote education and literacy, environmental conservation, cross-cultural understanding, social welfare, and scientific research. Priority is given to organizations located in markets where Mazda has offices. More information [here](#).

Toshiba America Foundation

Teachers who are passionate about making science and mathematics more engaging for their students may apply for support of classroom projects that focus on project-based learning. Awards vary. [Applications](#) for requests less than \$5,000 are due June 1, September 1 and December 1, 2019. Requests for grants of \$5,001 and greater are due May 1 and November 1, 2019.

A Virtual Storm Teaches Computational Thinking

Weather and weather forecasting offer an ideal medium for the integration of science, mathematics, and computational thinking. This [program](#) empowered students to understand and apply weather-related science, mathematics and computational thinking.

Teaching STEM Using Car Crash Safety as the Focus

Update your STEM lessons by integrating car crash safety. More information available from the [Insurance Institute for Highway Safety](#). You can also [download the Lab Out Loud podcast](#) to learn more.