

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



### Trends and Predictions That Will Define STEM in 2020

Examine [2019 trends and 2020 predictions](#) to gain perspective on leveraging what we know to improve STEM education.



### Are We Teaching STEM Wrong?

Perhaps not enough of us are engaging students and instead show or demonstrate to our students. Here is [one perspective](#) on moving toward engagement and discovery.

### 5 PBL Strategies from the Champs

PBL should incorporate student choice, voice and a public product. [Learn more.](#)



### The Myth Fueling Math Anxiety

Children aren't born fearing math. Anxiety tends to rise as they age and exposure to others' attitudes. Read more from [Education Week](#).

### Algebra Teachers Work to Combat Math Anxiety and Improve Math Literacy

These ninth grade teachers are using [several strategies](#) to help students better understand math and achieve greater success.



### Planning for Science Success for All Students

[Read](#) how this teacher's approach in designing lessons that include all three dimensions helps to reach all students.

### A Scientist Barbie - Who Would Have Thought?

The [Washington Post](#) recently reported on how this scientist who started climbing trees as a kid eventually became an ecologist and helped Mattel create a scientist Barbie doll.



### A Study on Teaching Critical Thinking in Science

A team of researchers [report](#) that students who learn to think like a scientist absorb the content better.

### Connecting Math and Science to Reading and Writing

Educators are exploring unique ways to bridge the gap between math, science and literacy. Read the [article](#).

## Upcoming Events and Opportunities

### Upcoming STEM Events

The ROE STEM Team will sponsor activities at these upcoming STEM events. We look forward to seeing you there.

[IIT STEM Expo](#) at IIT, Rice Campus in Wheaton on February 22.

[2020 Census STEM Family Fun Day](#) at William F. Murphy School in Woodridge on March 21.

[STEMCon](#) at College of DuPage on April 25.

### Tech Savvy - March 21, 2020

6<sup>th</sup> - 9<sup>th</sup> grade girls can enjoy a full day of STEM exploration. [Register and learn more.](#)

### National Girls Collaborative Project Webinars

- Hear more about types and characteristics of out of school activities that increase student interest in STEM and the barriers that prevent students from participating. [Register](#) for this February 26 webinar (1:00 pm central).
- Learn creative approaches to better understand the mid- and long-term impacts of informal STEM programs for girls and methods for measuring them by participating in this March 25 [webinar](#) (1:00 pm central).

### Fermilab Scholarships

Fermilab Friends for Science Education offers scholarships for teachers to attend summer workshops, to assist with field trip transportation expenses, and to support families for student classes at Fermilab. Deadline to [apply](#) for teacher summer 2020 workshops and 2020-21 field trips is March 15, 2020. Applicants will be notified by April 13, 2020.

## Resources

### Celebrate Black History Month

Some of these resources might be of interest. [Science Buddies](#), [Scholastic](#), [Society of Women Engineers](#), [Scientific American](#).

### National Engineers Week - February 16-22

Here are a few suggestions on incorporating engineering processes and careers. [Discover e](#), [Engineer Girl](#), [STEAM Discovery Lab](#), [AAAS Science Net Links](#).

### Superhero Physics

NSTA is offering [free access to this article](#) that was published in the January 2020 edition of Science Scope featuring eighth graders learning physics concepts from superhero-inspired lessons.

### Invite a Fermi Scientist into Your Classroom

For schools within a reasonable driving distance, Fermilab scientists, engineers and technicians will bring presentations to you. Geared toward students in grades 2 through 12, the presentations are free of charge to classrooms. Interested? Click [here](#) to learn more.

### Pi Day Activities

Looking for ideas to integrate fun learning activities into your Pi Day lesson? Some of these links will kickstart your planning. [ICTM](#), [NEA](#), [NCTM](#), [Exploratorium](#), [piday.org](#), [teachpi.org](#).