

January 2021

# STEM News You Can Use. . .

# VISIT THE DUPAGE ROE STEM WEBSITE AT <a href="http://stemdupage.com/">http://stemdupage.com/</a>



#### **EdCamp: How to Run Yours Virtually**

Michael Gaskell shares several steps his school used to move toward <u>virtual edcamps</u>, including choices for teachers and breakout rooms to increase engagement.

# **Teaching Math Through a Social Justice Lens**

As racial inequity soars on the nation's radar, math teachers increasingly bring social justice questions into their classrooms. Read more from <u>Education Week</u>.



Read about <u>Fermilab's plan</u> for building the PIP-II accelerator, a high-power, superconducting machine that will become the heart of the laboratory accelerator complex.



A <u>new study</u> brings together ideas on making online learning better. Among the suggestions are providing consistent opportunities for sharing among teachers, searching for better tools, and lessening the digital divide for students.



<u>Take a closer look</u> at the last decade of progress in Illinois, which is a national leader in computer science. Other fields that intersect mathematics, computing, and business have seen significant growth but education in these growing areas is lacking for many Illinoisans.



# **Upcoming Events and Opportunities**

# Technology Center of DuPage Virtual Open House - January 28, 2021

Tour the facility, meet the teachers, and learn about the programs. Click here for more information about this virtual event.

#### How Language, Race, and Culture Impact the Science Classroom - February 2, 2021

Join Bryan A. Brown (Science in the City) to <u>explore</u> how issues of race, language, and culture shape the outcomes of teaching and learning in science.

### **California Academy of Science Distance Learning Programs**

Enjoy free livestreams, nationwide, through the distance learning programs geared toward grades K-8. See the <u>February schedule</u>.

# The Learning Technology Center of Illinois Workshops and Webinars

Click here to access a comprehensive list of workshops and other events. Registration costs vary; many are free of charge.

# Illinois Institute of Technology – 37th Annual STEM Expo - February 21-27, 2021

The DuPage Regional Office of Education STEM Team will join other STEM presenters involving students in online STEM activities for grade K-12 students as part of National Engineers Week. For more information, <u>click here</u>.

# Chats with Change Makers - February 25, 2021, 11:00 am.

Watch Tiffany, the high school host, interview an electrical engineer, rocket scientist and astronaut. <u>Learn more</u> about the upcoming session and to access archived sessions.

## Resources

### **Federal Aviation Administration (FAA)**

The FAA aims to prepare and inspire the next generation of aviation and aerospace professionals and educate the public about its mission to maintain the safest, most efficient aerospace system in the world. Visit <u>FAA</u> for aviation-oriented STEM initiatives or contact Jonni Christian (<u>jonni.christian@faa.gov</u>) to schedule an FAA Outreach Representative to speak with your students.

#### **Creative Ways to Assess Math Understanding**

Traditional math assessments tend to provide a narrow gauge of student learning. Here's how some teachers are going deeper.

#### The Radium Girls (The Dark Story of America's Shining Women) - Kate Moore

Young women worked in factories painting radioactive glow-in-the-dark numbers on watches were told that the glowing radium paint was safe. Use this <u>book</u> (or excerpts) to integrate literacy, science, and social science standards into your science lessons. The movie version is/will be carried by several streaming services.

#### **How to Teach Coding and Robotics from Home**

Coding and robotics can be taught while students remote learn. Here are a few tips.

# Looking for a Good STEM Read?

NSTA released its list of <u>2021 Best STEM Books</u> for grades K-12. They focus on a variety of real-world issues such as vaccines, artificial intelligence, and women in science, which can be used to foster student interest in STEM topics.

#### Tennessee's District Science Network Task Library

The Task Library is a collection of 11 classroom tasks spanning all grade bands and disciplines designed to measure student proficiency in today's science standards. Watch the <u>webinar</u> to learn more and access the materials <u>here</u>.

### National Engineers Week - February 21-27, 2021

Start planning your engineering activities. Here are a few resources: <u>Discover Engineering</u>, <u>Chats with Change Makers</u>, <u>StarNet Libraries</u>, <u>Teach Engineering</u>, <u>National Science Foundation</u>, <u>eGFI</u>, <u>Try Engineering Toolkit</u>, <u>Encouraging Young Engineers and Scientists</u>, <u>Design Squad</u>, <u>Siemens STEM Day</u>, <u>STEAMsational</u>.



