



*Education, Exploration and Innovation,  
for Today and Tomorrow*

**December 2013**

# STEM

**News You Can Use . . .**



## STEM Grants Fund DuPage Area STEM Activities

For the second year, the DuPage Regional Office of Education has sponsored grants to help fund STEM related activities, including STEM club activities, field trips, Family Nights and others. Nine DuPage schools or districts received over \$5000 to support their STEM work.

## Science and Technology Knowledge Quiz

Do you know more about science and technology than the average American? Take this 13-question quiz then see how you did in comparison with the 1,006 randomly sampled adults in a national poll conducted by the Pew Research Center and Smithsonian magazine.

<http://www.pewresearch.org/quiz/science-knowledge/>



## Educator Lists Free Math Apps to Help Increase Student Engagement

Educator/blogger Monica Burns shares a list of free iPad applications that math educators can try out in their classrooms, including apps that can help teach time, angles and decimals. "Whether you're modeling a lesson, creating stations or working in a one-to-one classroom, virtual tools can promote student engagement while increasing academic success," she writes. <http://www.edutopia.org/blog/11-virtual-tools-math-classroom-monica-burns>

## Wood Dale JHS received an ROE grant to support their Nov. 7 STEM Family Night

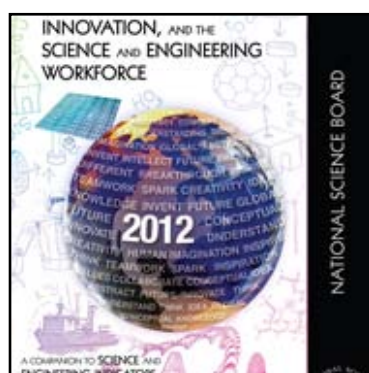
## Shortage of Job Applicants with STEM Background

With more STEM jobs being created than non-STEM jobs, the shortage is a reality.

[http://blogs.edweek.org/edweek/curriculum/2013/10/bayer\\_reveals\\_findings\\_on\\_stem.html?cmp=ENL-EU-NEWS2](http://blogs.edweek.org/edweek/curriculum/2013/10/bayer_reveals_findings_on_stem.html?cmp=ENL-EU-NEWS2)

## Illinois Program Hopes to Encourage Girls to Pursue Science

Girls remain largely underrepresented in science, technology, engineering and math, but Girls 4 Science, an Illinois-based nonprofit program, is trying to change that. Students ages 10 to 18 in the Girls 4 Science program participate in science-focused field trips through the University of St. Francis as well as Olive-Harvey and Malcolm X colleges. They also take part in hands-on activities and interact with women in STEM fields. The Herald News (Joliet, Ill.)



## STEM Education Data and Trends Tool

Use this new resource to find information on current science, technology, engineering, and mathematics (STEM) trends in the United States. How much do states spend on schools? What is the science and engineering job market outlook for U.S. graduates? The STEM Education Data and Trends Tool provides answers to these and other STEM related questions based on the latest edition of the NSB's biennial Science and Engineering Indicators report.

<http://www.nsf.gov/statistics/seind12/>

## Coming Events

### February 6, 2014, 8:30 a.m. to 3 p.m. ROE Workshop

Taking STEM and NGSS to the Next Level: Targeting Reading in the Science Classroom and STEM Projects for the Middle School Classroom. Details coming soon.

### February 17, 2014, 10 a.m. to 12:00 noon, STEM Open House

Middle school students and their parents are invited to participate in various STEM related activities, talk to STEM professionals and bring home prizes! The program is sponsored by the DuPage Regional Office of Education and hosted by the Technology Center of DuPage. More information will be available in January.

### February 22, 2014, DuPage Area Engineer's Week Celebration

Fun, free, family interactive event providing children and adults the opportunity to experience and explore the many fields of science and engineering through interactive displays and presentations. The 30th Annual Engineers Week Expo at IIT-Rice Campus, Wheaton is geared toward children in K-8th grade, however, all ages will enjoy the event! [Go to http://www.dupageeweek.iit.edu/](http://www.dupageeweek.iit.edu/).

## Resources

### Tech Tools for NGSS

New Standards—New Tools. Explore the role that these instructional tools can play in teaching the NGSS. <http://thejournal.com/Articles/2013/10/17/5-Tech-Tools-for-the-Next-Generation-Science-Standards.aspx?Page=1>

### Chicago Architecture Foundation Education Programming

Through hands-on, real-world explorations discover how to turn your local community into a dynamic setting for teaching and learning. Buildings, structures, people, and events help young people discover how architecture and the built environment impact their lives every day. <http://www.architecture.org/page.aspx?pid=477>

### National Academy of Engineering

To celebrate its 50th Anniversary, National Academy of Engineering (NAE) is offering a \$25,000 prize for the most inspiring one-to-two minute video, focused anywhere in the time period from 1964-2064, showing how engineering innovations advance human welfare and address societal needs. [Go to http://www.nae.edu/e4u/](http://www.nae.edu/e4u/).

### STEM-Works

A resource for teachers, mentors, parents, STEM professionals, volunteers, and everyone passionate about getting children eager to learn about science, technology, engineering, and math. [Go to http://stem-works.com/](http://stem-works.com/).

### Fermilab Teacher Resources

Looking for NGSS and STEM workshops? Take a closer look at the fabulous opportunities available from Fermilab at [http://ed.fnal.gov/trc\\_new/fact-sheets/TeachersResourceFactSheet.pdf](http://ed.fnal.gov/trc_new/fact-sheets/TeachersResourceFactSheet.pdf).

This newsletter is published with the support of the DuPage County Regional Office of Education, Dr. Darlene Ruscitti, Regional Superintendent, 421 N. County Farm Road, Wheaton, IL 60187



Send suggestions, comments and feedback Mary Biniewicz at [mbiniewicz@dupage.k12.il.us](mailto:mbiniewicz@dupage.k12.il.us); Susan Camasta at [scamasta@dupage.k12.il.us](mailto:scamasta@dupage.k12.il.us); or Nancy Nega at [nnega@dupage.k12.il.us](mailto:nnega@dupage.k12.il.us).