



Hello Science Education Leaders,

Here are the latest science education resources and opportunities I've heard about. If you have announcements to share about science or STEM-related professional learning and resources, please send them my way for the next edition. A record of these emails can be found on my website: dpi.wi.gov/science/social-media.

Cheers,
Kevin

Learning Opportunities

- [Webinar on this year's new Science Forward Exam](#) - Jan 23
- [WSST Conference w/ administrator session](#) - Mar 7-9
- [BSCS 5 Tools Training for NGSS \(WSS\)](#) - register by Feb 15
- [2019 National Conference on Education Innovation](#) - April 10-12
- [Presidential Awards](#) - nominate yourself or another great educator!
- [Summer STEM Cell Institute for Middle School Science Teachers](#) - apply by Feb 1
- [Summer Research Experience for Teachers](#) - at MRSEC at UW-Madison

Resources

- [High School Monarch Habitat Grants](#) - due Jan 18
- [Free Digital Subscription of Grow magazine](#)
- [New - National Survey of Science and Mathematics Education](#)
- [Rockets for Schools](#)
- [Free High School Aviation STEM Curriculum](#)
- [HS Spatial Visualization Lessons](#) (engineering design) from Univ of CO

Student Opportunities

- [Badger State Science and Engineering Fair \(BSSEF\)](#) - Mar 16
- [State Crystal Growing Contest](#) - MS/HS - register by Feb 15th
- [Science Olympiad State Tournament](#) - UW-Stout - Mar 15-16

Details

Learning Opportunities

- Webinar on the new Forward Exam - Jan 23

<https://widpi.zoom.us/j/628874656> - this link takes you to the Zoom meeting site, which we will use for the webinar from 3:30 to 4:15 on the 23rd. It doesn't provide further info. For further info on the Forward Exam in Science you can visit - <https://dpi.wi.gov/science/assessment/state-test>, where I'll also post a recording.

- WSST Conference w/ administrator session - Mar 7-9

<http://www.wsst.org/conference2019> - registration and schedule are now available for the annual Wisconsin Society of Science Teachers conference. It will be in Madison at the Monona Terrace. I'll be facilitating a leadership/administrator workshop the afternoon of Mar 7, though there will be lots of amazing and useful sessions!

- BSCS 5 Tools Training for NGSS (WSS) - register by Feb 15

<https://bscs.org/FiveTools> - National BSCS presenters will be conducting a week-long summer institute at Hartford J1 in Wisconsin this summer from Aug 12-16. This is an amazing opportunity for Wisconsin educators to dig into the NGSS (WSS) and learn how to implement them in the classroom. Cost is \$750 - need to email Cheryl Simonson, Simonson@hartfordjt1.k12.wi.us, by Feb 15 to register with name, email, and phone number. Useful for classroom teachers and other leaders of science efforts, from beginners to those with some initial experience.

- 2019 National Conference on Education Innovation - April 10-12

<https://www.innovativeschoolsnetwork.com/event/show/5ae1df1c26bb0c9e548b4567> - The Innovative Schools Network puts on a great conference each year for educators interested in pushing the boundaries on traditional structures and pedagogies. Many participants are from charter schools but not all.

- Presidential Awards - nominate yourself or another great educator!

<https://www.paemst.org/> - This federal program celebrates the accomplishments of great science, math, and STEM teachers. You can nominate yourself or others - must teach students for at least 50% of your job. This year it's open to 7th to 12th grade teachers, next year will be K-6. It's an in-depth application, including a video, but we have mentor support for your work.

- Summer STEM Cell Institute for Middle School Science Teachers - apply by Feb 1

<https://www.wku.edu/gifted/nss/> - The National STEM Scholar Program is an all-expense-paid summer experience for middle school educators. It runs from June 2 to 8. A past Wisconsin teacher who attended said it was amazing!

- Summer Research Experience for Teachers at MRSEC at UW-Madison

<https://education.mrsec.wisc.edu/ret-experience/> - During this 7-week program, participants have the opportunity to engage in hands-on, cutting-edge research in labs on the UW-

Madison campus. In addition to learning about the lab's research topic and the process of investigation, the teachers will collaborate with their research partners to create a classroom curriculum module inspired by their research experience. The 2019 program is full-time and runs 7 weeks, from June 17 until August 2. Teachers receive a \$6000 stipend (\$5000 at the beginning and \$1000 upon completion) for participating in the program, and they provide teachers with a \$500 supplies budget to develop their activity and implement it with students in their classroom. Application deadline is March 17, 2019.

Resources

- High School Monarch Habitat Grants - due Jan 18

www.sandcountyfoundation.org/SchoolGrant - The Sand County Foundation provides \$1000 grants to high school educators to sustain monarch butterflies. Monarch Joint Venture is a university program turning non-profit that works to sustain monarchs. Within this project classes receive plants to grow in greenhouses, which they're then asked to transfer to local pollinator gardens.

- Free Digital Subscription of Grow magazine

<https://grow.cals.wisc.edu/> - *Grow* is a magazine devoted to the life sciences that covers a wide range of topics of interest to science educators. This includes food systems, bioenergy, bioproducts, healthy ecosystems, health and wellness, and changing climate. The magazine is printed three times per year by the UW-Madison College of Agricultural and Life Sciences (CALs) for alumni, but a free digital subscription is available to all at -

<https://grow.cals.wisc.edu/subscribe>. Subscribe online to stay apprised of cutting-edge research stemming from CALS and help your students learn about exciting opportunities in the life sciences.

- New - National Survey of Science and Mathematics Education

<http://horizon-research.com/NSSME/2018-nssme/research-products/reports/technical-report> - survey of 7K+ science, math, and computer science teachers from across the country, detailing data such as teacher beliefs, instructional practices, professional development, and courses offered. Data is broken down by various demographic groups.

- Rockets for Schools, Grades 6-12

<http://www.rockets4schools.org> - Rockets for Schools is looking for schools to participate in the May 10 & 11, 2019 High Power Rocket Launch over Lake Michigan in Sheboygan. All U.S. middle and high school students in Grades 6-12 can participate and Rockets for Schools staff are able to assist educators interested in working with a team. Or just visit to watch the Saturday launch.

- Free High School Aviation STEM Curriculum

<https://youcanfly.aopa.org/high-school/high-school-curriculum> - Aircraft Owners and Pilots Association (AOPA) invites high schools to apply to use its new free ninth and/or tenth grade aviation STEM curriculum to engage students and help build the future of aviation. The curriculum and courses are part of two career pathways: piloting and drones. Schools can decide whether to implement a complete pathway or select individual courses as standalone electives/units.

- HS Spatial Visualization Lessons (engineering design) from Univ of CO

<https://www.colorado.edu/eplus/resources/spatial-visualization/spatial-visualization-workshops> - a series of free workshops/lessons for high school or early college students that support engineering design skills and communicating design ideas.

Student Opportunities

- Badger State Science and Engineering Fair (BSSEF) - Mar 16

BSSEF.org - The Badger State Science & Engineering Fair (BSSEF) will be held at Milwaukee School of Engineering on March 16, 2019. This is a wonderful opportunity for students to showcase their projects, interact with professionals and receive recognition. BSSEF is affiliated with Intel ISEF and the top awards are 3 all expense paid trips to Intel ISEF ... this year being held in Phoenix, AZ. We also are looking for judging volunteers. Please visit bssef.org for information on registering students and/or volunteering as a judge.

- Wisconsin Crystal Growing Contest - register by Feb 15th

<https://wicgc.chem.wisc.edu/> - No entry fee, with one contest for HS students and one for MS students. Who can grow the largest and highest quality crystal? Register by Feb 15th to get materials sent to you - contest time frame is Mar 1 to Apr 30.

- Science Olympiad State Tournament - UW-Stout - Mar 15-16

<https://www.wisconsinso.org/general-state-olympiad-information/> Science Olympiad is hands on STEM, with engaging science and engineering learning. Regional tournaments are coming up in the next few weeks. If you're not familiar with this program for MS and HS students, check out the state tournament or one of many regional/invitational tournaments to learn what it's all about.

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"Science is not a body of facts, [it] is a method for deciding whether what we choose to believe has a basis in the laws of nature or not." – Marcia McNutt