



Hello Fellow Educators,

I hope you're finding joy in this school year. Below are a few 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

- [NSTA Equity Webinar Series](#) - Saturdays in Nov/Dec
- [Presidential Award for Excellence](#) - Nominate a K-6 Teacher or Apply Now
- [Webinar on Helping Students Make Sense of Phenomena](#) - Oct 19, 4pm (free)
- [Smithsonian Webinar on Talking with Communities about Vaccines](#) - Oct 26, 5pm

Resources

- [NSTA Article on Lab Safety Related to Room Size and Capacity](#)
- [NSTA Blog Article on How Scientists Work and Use Evidence](#) (and a related equity-based HS lesson)
- [New Tools to Support Equity in a Science Class](#) - free pdf
- [BadgerLink STEM](#) - research resources from the WI Library System
- [Elementary Science Research and Policy](#) - new national report and recorded webinar
- [Computer Science](#) - latest resources and opportunities
- [Grant - American Chemical Society](#) - Central Wisconsin Section - due Jan 10
- [Grant - High School Garden Pollinator Grant](#) - due Nov 19
- [Grant - DiscoverE Engineers Week](#) - due Nov 5
- [Phenomenon](#) - Martian Geology

Student Opportunities

- [Wisconsin Science Olympiad](#) – still time to start!
 - [Science Fairs and Toshiba/NSTA Exploravision](#) - register soon!
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Details

Learning Opportunities

- NSTA Equity Webinar Series - Saturdays in Nov/Dec

<https://www.nsta.org/promoting-equity-diversity-inclusion-through-science-and-stem-teaching-miniseries> - This series of webinars related to diversity, equity, and inclusion feature national gurus in the field Nov 6, 20, Dec 4, 18. Topics include an introduction to these ideas, supporting multilingual learners, social justice, and links to social-emotional learning. Cost is \$60 for members, \$70 for nonmembers.

- Presidential Award for Excellence - Nominate a K-6 Teacher or Apply Now

<https://www.paemst.org/> - Show your appreciation for great teachers by nominating a K-6 teacher for the [The Presidential Awards for Excellence in Mathematics and Science Teaching \(PAEMST\)](#) – the highest honor bestowed on STEM educators by the United States government. The science category includes engineering, science, and integrated STEM. The mathematics category includes mathematics and computer science. Teachers can also nominate themselves (many of our winners have - you know you're amazing!).

- Webinar on Helping Students Make Sense of Phenomena - Oct 19, 4pm (free)

<https://home.edweb.net/webinar/science20211019/> - Establishing a Culture of Figuring Out in Your Next Generation Science Classroom - free webinar on Tuesday, Oct. 19 @ 4 pm CT. It will be presented by Rebecca Abbott, Professional Learning Lead, University of California Berkeley's Lawrence Hall of Science (an amazing PD and curriculum resource center). In this webinar, you will explore ways to cultivate curiosity and value student voice while utilizing the structures and content from phenomena-based, literacy-rich science curricula designed for the NGSS (WSS).

- Smithsonian Webinar on Talking with Communities about Vaccines - Oct 26, 5pm

https://smithsonian.zoom.us/meeting/register/tZ0kdO2orjMoEtePHME_y7aLlvqP3RjRuR4c (registration) - Join the Smithsonian Science Education Center and invited guests on Tuesday, October 26, 5-6:15pm CT as they explore having challenging conversations about vaccines within schools, communities and families. In this webinar, they will explore investigations from the Smithsonian Science for Global Goals [Vaccines! How can we use science to help our communities make decisions about vaccines?](#) guide to better understand how to engage those around us in talking about vaccines.

Resources

- NSTA Article on Lab Safety Related to Room Size and Capacity

<https://www.nsta.org/blog/sciencestem-laboratory-occupancy-load-level-it-law> - in this article by safety expert Ken Roy, he describes safe practices related to the number of students in a science lab space. He cites a range of OSHA and related policies in making his points. This is a frequent safety topic brought up by educators!

- NSTA Blog Article on How Scientists Work and Use Evidence (and a HS lesson)

<https://www.nsta.org/blog/teaching-about-how-scientists-work-focus-claims-evidence-reasoning> - this article describes the work of practicing scientists and how they use the claim, evidence, reasoning (CER) framework. It's always helpful to reflect on how your class design reflects the actual practice of science. On a related note, [here's a high school lesson from NSTA that focuses on climate change from a social justice lens, and has students engage in CER.](#)

- New Tools to Support Equity in a Science Class - free pdf

[Packet with Tools](#) - this packet includes a series of teacher tools to support equitable dialogue and classroom practice that pulls in diverse student background knowledge and ways of thinking. Dr. Maria Simani led the development of these resources, and three Madison teachers also supported that work - Mary Modaff, Melina Lozano, and Stacey Hodkiewicz. These tools would be particularly useful for teacher leaders supporting professional learning sessions.

- BadgerLink STEM - research resources from the WI Library System page

https://badgerlink.dpi.wi.gov/sites/bl/files/imce/documents/badgerlink-stem-guide_2021.pdf - The new STEM Subject Guide from BadgerLink can support research across STEM subjects. Educators can also find it on [BadgerLink's new For Library Staff Page](#) under the For Your Classroom section. You can also contact these listed staff members, if similar materials to the guide would be of interest in your lesson planning.

- Elementary Science Research and Policy - new national report and webinar recording

<https://www.nap.edu/catalog/26215/science-and-engineering-in-preschool-through-elementary-grades-the-brilliance> - this new report from the National Academies summarizes the research on the importance of PK-5 science and provides specific recommendations for school policy and practice. There was also a webinar that reviewed the report--recording and slides here: <https://www.nationalacademies.org/event/10-07-2021/enhancing-science-and-engineering-in-prekindergarten-through-elementary-grades-report-release-webinar>

- Opportunities for Science teachers who also teach Computer Science

- 1) [NCWIT Aspirations Awards](#) – Applications close Nov 5, 2021 2) [MSOE Opportunity Conference](#) 3) Science, Math and Computer Science Competitions – Registration open now! 4) [Midwest is Best CS Education Unconference](#) March 5, 2022 5) Free Practice for Praxis CS Exam from [CompuScholar](#). 6) Join the WI CS Teachers Google Group for more information on these and other CS opportunities - email Joe Kmoch at joe@jkmoch.com with your name and school.

- Grant - American Chemical Society - Central WI Section - due Jan 10

<https://communities.acs.org/t5/Central-Wisconsin-Local-Section/gh-p/cent-wisconsin> - The ACS of Central Wisconsin is again offering teaching enhancement grants up to \$500 - due January 10, 2022. Teachers in the following counties can apply: Adams, Chippewa, Clark, Eau Claire,

Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Price, Rusk, Taylor and Wood County.
[Further details on this flyer.](#)

- Grant - High School Garden Pollinator Grant - due Nov 19

www.sandcountyfoundation.org/schoolgrants - Sand County Foundation is now accepting proposals from high school teachers for pollinator habitat grants! This competitive grant program gives students hands-on experience growing native forbs indoors and establishing habitat on the land. Successful applicants will receive prairie seeds and seedlings, a webinar and consultation, and \$1,000 to support project expenses. The deadline for proposals is November 19th. To be eligible you must be a high school teacher, have access to a greenhouse or other indoor growing area, and identify a suitable site (such as a farm) to create habitat for native bees, honeybees, and monarch butterflies.

- Grant - DiscoverE Engineers Week - due Nov 5

<http://www.discovere.org/about-us/outreach-grants> - Engineers Week is Feb 20-26. DiscoverE's Engineers Week Outreach Grants support activities and events that engage the next generation of innovators and are hosted as part of a local organization's Engineers Week celebrations. Events or activities that focus on underserved audiences and feature hands-on engineering experiences are encouraged. Grants range from \$250 to \$1,000. Due Nov 5th.

- Phenomenon - Martian Geology!

<https://www.bbc.com/news/science-environment-58852236> – I thought these recent images and discoveries from the Perseverance rover were super cool - further evidence of flowing water over extended time on Mars. NASA will find alien bacteria perhaps?

Student Opportunities

- Wisconsin Science Olympiad

<https://www.wisconsinso.org/> - A great opportunity for getting students engaged in meaningful problem solving. Invitations start in November, and registration for a team is due in mid November. Regionals are in Jan/Feb 2022, and state is in April 2022.

- Science Fairs and Toshiba/NSTA Exploravision - register soon!

<https://dpi.wi.gov/science/science-fairs/opportunities> - It's always a great idea to get students engaged in meaningful science projects, which are no longer cookbook procedures on a tri-fold. These could be an anchor project in the background over the next several months. The [Capital Science and Engineering Fair](#) (fill out form expressing intent by Nov 15) is in Madison in February and welcomes participants from across the state. [Toshiba/NSTA Exploravision](#) is another route to spice things up.

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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

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