



Hello Science Education Leaders,

I hope you're finding joy in the beginning of this school year. As always, it's important to consider self-care - [here are some resources](#).

Please, let me know if I can help with some resources, a virtual discussion, or in-person support. My help is always free, and it's the best part of my job - send me an email!

Below are a few science education resources 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

- [Wisconsin Science Week and Science Festival](#) – Oct 16-22
- [Wisconsin Association of Physics Teachers \(WAPT\) Conference](#) - Nov 3-4
- [Wisconsin Science Ed Leadership Association](#) - Oct 17 in Wi Rapids
- [WSST Conference Submissions Open](#) - in La Crosse, April 18-20
- [Apply now for the Presidential Awards for Excellence in Math and Science Teaching](#)
- [NSTA 2024 in Denver](#) - submit a session or review proposals
- [KidWind Educators Workshops](#) - Platteville Oct 20 and Milwaukee Oct 24
- [Solar Energy Workshop](#) - Fennimore, WI (CESA 3) - Oct 19

Resources

- [NSTA Eclipse Resources](#) for Oct 17, 2023 and Apr 8, 2024 Eclipses!
 - [Pollinator Habitat Grants for High Schools](#) - due Nov 17
 - [Next Round of Wisconsin FabLab Grants](#) - webinar on Sept 26
 - [The Wisconsin K-12 Energy Education Program \(KEEP\) Newsletter](#)
 - [Physics of Climate Change](#) - Instructional Resources and Support
 - [New book](#) - Answers to Your Biggest Questions About Teaching Secondary Science
 - [New Wild Hope videos](#) from HHMI Biointeractive (free)
 - [Free Science, STEM, and Computer Science Resources](#) for TI calculators
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- [Knowles Fellowships](#) for New and Pre-Service STEM Teachers - \$\$
- [Society for Science grants](#) – supporting student research equipment and projects
- [Go Outside Grants](#) - up to \$500, due Sept 30
- Noteworthy [High School OER Curricular Materials](#)

Student Opportunities

- [Wisconsin Science Festival In-Person and Virtual Field Trips](#) – Oct 16-22
 - [Future City Competition](#) – middle school, register now
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Details

Learning Opportunities

- Wisconsin Science Week and Science Festival – Oct 16-22

<https://www.wisconsinsciencefest.org/> - It's not too late to plan an event during the Wisconsin Science Festival & Wisconsin Science Week! Event ideas include inviting a guest speaker, having students facilitate a family science/STEM night, conducting a local biodiversity study, and creating science videos that are shared with the community. Look for Proclamations soon from the Governor and State Superintendent!

- Wisconsin Association of Physics Teachers (WAPT) Conference - Nov 3-4

<http://www.wapt.org/> - The WAPT conference for physics and physical science teachers will be Nov 3-4 at Marquette University in Milwaukee. Combined membership and conference registration is only \$20. Gary Baier is available to answer questions: gabaier@pointschools.net

- Wisconsin Science Ed Leadership Association - Oct 17 in Wi Rapids

<https://www.wsst.org/wsela> – email Kevin Anderson @ DPI to reserve your spot at the fall WSELA meeting. Agenda topics will include a range of free resources and student opportunities, ACT science standards in the high school, Curriculum-Based Professional Development, and updates on any science standards and assessment revisions for the state. Feel free to suggest other topics you'd like to dig into! With a recent remodel, Rapids also has [lots of science equipment](#) to give away for **free**. We can also tour their remodeled science space at the end of the day.

- WSST Conference Submissions Open - in La Crosse, April 18-20

<https://www.wsst.org/2024-conference> - You can submit ideas now for pedagogy sessions, workshops, or interesting science content. It's going to be an amazing time to network, rejuvenate, and learn new science teaching ideas!

- Apply now for the Presidential Awards for Excellence in Math and Science Teaching

<https://paemst.nsf.gov/> - Nominate yourself or someone else for this prestigious award for

science, math, computer science, and STEM teachers. The 2023-24 award is for grades K-6 teachers who teach students 50% or more of work time. Awardees receive \$10,000! Past applicants have repeatedly talked about what a great learning experience the application process is. The program even has a mentor to help you in your work. Email me with any questions!

- NSTA 2024 in Denver Mar 20-23 - Submit a session or review proposals!

<https://www.nsta.org/conference/proposals> - Denver is a great city for a science conference w/ several direct flights from Wisconsin airports (sometimes you can find a deal). This amazing national conference is looking for session proposals and session reviewers, both of which are due Sept 30th.

- KidWind Educators Workshops - Platteville Oct 20 and Milwaukee Oct 24

<https://energy.wisc.edu/education/kidwind-challenge/kidwind-educator-workshops> - these engaging workshops cost only \$15 but provide over \$100 in materials to implement the great ideas shared. In the workshop you will review energy basics, design and test blades in a wind tunnel, and preview ready-to-use curriculum for integrating renewable energy into your lessons. Participants will leave with the resources and confidence to use renewable energy as a lens for hands-on science, technology, and engineering exploration. During these half-day workshops, you'll also learn about the annual WI KidWind Challenge, gain tips and tricks for coaching student teams through the process of designing and constructing small-scale turbines, and get a free KidWind Kit to take home (\$134 value)! Cost is only \$15.

- Solar Energy Workshop - Fennimore, WI (CESA 3) - Oct 19

<https://cnroutreached.asapconnected.com/#CourseID=289017> - Get your students excited about solar energy and the implications it has for our environment and economy while exploring potential careers in the energy industry. This workshop provides hands-on activities that utilize the KEEP Solar Tilt Kit and standards-aligned companion lessons. You will learn how solar panels work, use professional tools for siting solar PV installations, and use the Solar Tilt Kit to discover how the angle of the sun impacts the electricity generated by a solar panel. This workshop is ideal for Science and Social Studies teachers. Recommended for teachers of grades 4-12.

Resources

- NSTA Eclipse Resources for Oct 14, 2023 and Apr 8, 2024 Eclipses!

<https://www.nsta.org/eclipse> - Free guides available for educators, administrators, and community members. The annular eclipse on Oct 14 and the full solar eclipse on April 8 will both be partially visible in Wisconsin, what a great learning opportunity! Please, make sure to emphasize to leadership that it's safe to go view the eclipses, though some preparation and guidance is important. Research provided by NSTA shows that it's safe learning!

- Pollinator Habitat Grants for High Schools - due Nov 17

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 pollinator habitat. Successful applicants will receive prairie seeds and seedlings, an orientation and consultation, and \$1,000 to support project expenses. To be eligible you must be a high school teacher, have access to a suitable indoor growing area, identify a site (working/agricultural lands preferred), and be located in Iowa, Illinois, Michigan, Minnesota, or Wisconsin.

- Next Round of Wisconsin FabLab Grants - webinar on Sept 26

[Registration form](#) - Want to learn about the FY24 Fab Labs Grant Program? WEDC will provide grants of up to \$25,000 to eligible Wisconsin public school districts, or up to \$50,000 to consortiums of two or more public school districts, for the creation and/or expansion of fabrication laboratories within the school district(s). The funds may be used to purchase equipment used for instructional and educational purposes by elementary, middle, junior high or high school students. Two school districts will showcase how utilizing the Fab Labs Grant Program has been a benefit to them. [General grant info](#)

- The Wisconsin K-12 Energy Education Program (KEEP) Newsletter

<https://www.uwsp.edu/wcee/wcee/keep/keep-newsletter/> - From solar kits, to workshops, to the annual Energy Fair, KEEP has a great assortment of resources and learning opportunities for you! This link takes you to their newsletter page, where you can click on the most recent edition for the latest updates.

- Physics of Climate Change - Instructional Resources and Support

Are you a STEM teacher interested in incorporating climate science concepts into your curriculum but don't know where to start? The Physics of Climate Change project, a collaboration between the UW–Madison Department of Physics and Wisconsin's 4-H program, has you covered! Adding climate science concepts into your curriculum this school year is made easy with an engaging activity, easy-to-use teacher materials, and in-class support from the project team. If you are interested in having the project team join your class for a session during the 2023-24 school year, or if you're simply interested in receiving the activity instructions, please [fill out this form](#). Please reach out to Haddie McLean (haddie@physics.wisc.edu) with any questions.

- New book - Answers to Your Biggest Questions About Teaching Secondary Science

<https://us.corwin.com/books/five-to-thrive-secondary-science-285542> - A new book for secondary science teachers is now available for pre-order for 25% off and free shipping. It will be shipped in January. Co-author (and Wisconsin science guru) Dr. Karen Mesmer thinks that *Answers to Your Biggest Questions About Teaching Secondary Science* will be a great resource for newer teachers as they navigate all of the things they need to do when teaching science. The book is organized around five overarching questions and answers: 1) How do I build a positive science community? 2) How do I structure, organize, and manage my science class? 3) How do I engage my students in science? 4) How do I help my students talk about science? 5) How do I know what my students know and how can I use that information to plan and move them forward?

- New Wild Hope videos from HHMI Biointeractive (free)
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<https://www.biointeractive.org/partner-content/wild-hope> - many Biology teachers really like the HHMI materials. *Wild Hope* is a video series produced by HHMI's Tangled Bank Studios highlighting the intrepid changemakers who are restoring and protecting our planet. The episodes (all under 30 minutes in length) feature a diversity of people and settings and connect to topics in biology and environmental science. From tapping oysters to clean New York City waters to growing coffee to save Mozambican rainforests, the series reveals how local action can spark powerful positive change.

- Free Science, STEM, and Computer Science Resources for TI calculators

Have TI graphing calculators already? They can be used for data and analysis tools in [science](#), [STEM](#) and [computer science](#). There are a range of free activities in each subject. The STEM link also takes you to the pilot program for our STEM Kits.

- Knowles Fellowships for New and Pre-Service STEM Teachers - \$\$

<https://knowlesteachers.org/teaching-fellowship/teaching-fellows-program> - Knowles fellowships are for pre-service or very early career teachers in STEM subjects (especially science). You would benefit from financial support, coaching/professional development, and a network of like-minded educators. Wisconsin educators involved have said they love it!

- Society for Science grants – supporting student research equipment and projects

<https://www.societyforscience.org/outreach-and-equity/stem-research-grants/> - **STEM Research Grants provide support to middle and high school teachers engaging their students in authentic scientific research. Over 6 years, \$775,000 has been awarded with priority consideration is given to schools that support students from low-income communities and demographics underrepresented in STEM fields. Teachers can apply for up to \$5,000 in order to purchase specialized equipment or \$1,000 in preselected equipment including Arduino starter kits, soil test kits, and PocketLab sensors. For the purposes of this grant, a research project is defined as an independent investigation by a student involving experimentation to answer a scientific question outside of regular classwork. Independent research projects are frequently entered into science fairs and other competitions.**

- Go Outside Grants - up to \$500, due Sept 30

<https://www.wisconservation.org/grants/go-outside-fund/> - We know that nature provides tremendous physical and mental health benefits – yet today's children spend less than 1% of their time outside. The Go Outside Fund provides funding that helps connect youth to outdoor, nature-based learning experiences. Teachers or partner organizations may apply for funding to cover costs that facilitate getting kids outside and hands-on with nature, such as purchasing field supplies, or paying for transportation, substitute teachers, or educator costs. Outdoor learning is key! Grants between \$100 and \$500 are available.

- Noteworthy High School OER Curricular Materials

Are you a high school educator looking for instructional materials? Several have come up in my conversations lately:

- <https://public.3.basecamp.com/p/Rg9aodQjeWGoNxD1qt7MiuG> - Model based biology,
- <https://www.genderinclusivebiology.com/> - gender inclusive biology, as biological sex and societally constructed gender are more continuum than dichotomous categories.
- <https://sites.google.com/beaverton.k12.or.us/patterns/home?authuser=0> - Patterns Science (from Oregon) - all core science subjects
- <https://curriculum.newvisions.org/science> - New Visions from New York
- [OpenSciEd](#) - the first 2 units of bio, chem, and physics are available now.

Student Opportunities

- Wisconsin Science Festival In-Person and Virtual Field Trips – Oct 16-22

<https://docs.google.com/forms/d/e/1FAIpQLSfACBI-giuUUqxGEJet34cbZtAi6WqrKOCRru2GutdeBn1BFQ/viewform> - Whether you want to bring your students to UW-Madison or engage in a virtual field trip, there are lots of options at the Wisconsin Science Festival. In-person trips to the expo at the Discovery building are now on a wait list basis, but there are many other options! [More details here.](#)

- Future City Competition - middle school

<https://futurecity.org/register/> - Future City starts with a questions – how can we make the world a better place? To answer it, middle school students imagine, research, design, and "build" (on a small scale, with recycled materials) cities of the future that showcase their solution to a citywide sustainability issue. This year's issue is sustainable electricity.

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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