



Happy Holidays, Science Education Champions!

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

- [WSELA Meeting for School/District/IHE Science Leaders](#) - Feb 13 in Oconomowoc
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Student Opportunities

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 - [Yerkes Observatory](#) - Student Field Trips
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- [Nominate an 11 or 12th grader for the National Youth Science Camp!](#)
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Details

Learning Opportunities

- WSELA Meeting for School/District/IHE Science Leaders - Feb 13 in Oconomowoc

Our next meeting of the Wisconsin Science Education Leadership Association (WSELA) will be February 13th at Oconomowoc High School (East Campus) from 8:30 -3pm. The first 30 minutes, as usual, will be networking and a continental breakfast. Lunch will also be provided. **Please, email me an RSVP if you plan to be there** and share any agenda ideas you'd like to discuss (and dietary needs). Cost is still free if you're a first-time attendee or \$20 if you've attended before (but don't let that stop you from attending - "scholarships" are available).

- Space Science Game Design Fellowship - UW-Madison, Jan 10 deadline

[Field Day](#) (UW-Madison) and the Wisconsin Department of Public Instruction are partnering with the [Wisconsin IceCube Particle Astrophysics Center](#) to create a new educational game about space science. They are looking for a select group of middle and high school level science teachers to assist in generating and testing ideas for the game. Are you interested in learning more about research being done at UW around games and learning? Are you curious about scientific research being done at the University of Wisconsin and how you can make it relevant to your students? Check out the [full description and application link here!](#) Fellows will receive a \$200 stipend for participating. Deadline for priority consideration is January 10, 2024.

- Elkhorn Mini-Maker Faire - Feb 17

<https://elkhorn.makerfaire.com/about/> - The 5th annual Elkhorn Mini Maker Faire, will be held on February 17, 2024 from 9 am to 4 pm. Elkhorn will welcome makers – tech enthusiasts, inventors, crafters, educators, students, tinkerers and hobbyists of all ages – to exhibit their work and share their knowledge and skills with other makers and with the community. During our fifth year, our goal is to spread the word, promote the do-it-yourselfers of Wisconsin and the Midwest. We hope that our guests will come with an open mind, and be pleasantly surprised with the skills and talent that surround us. It's [free to exhibit](#) what you and/or your students are doing, or selling items costs only \$25.

- WSST Conference and News

<https://www.wsst.org/> - There are lots of great things happening in the Wisconsin Society of Science Teachers! Their [latest newsletter](#) includes a range of interesting articles, including some written by members with a focus on equity in their science classroom and the "science of reading." The annual conference is coming up in La Crosse on April 18-20th. If you haven't been a member before, I can help get you a free membership, otherwise it's only \$25. If you're for a way to give back and/or connect to a fun network of science educators, they're [looking for folks to run for offices](#).

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Resources

- Pre-service and New Member Survey from NSTA - complete by Jan 5

<https://docs.google.com/forms/d/1J-VV6X9MNPdHbA7bYwdASHiBALsSeOcZt9n-ZET4XB0/edit> -

The purpose of this survey is to collect data from pre-service and new science teachers as to what they need to help them be successful in the classroom. NSTA's Middle Level Teaching Committee and their affiliate, the National Middle Level Science Teachers Association (NMLSTA), are hoping to find ways to make their work lives easier and to offer support to help avoid early burn-out in the teaching profession. Mentors of early career teachers are welcome to complete this survey sharing what you feel the teachers you are supporting need. They will accept responses until Jan 5.

- Land Acknowledgments and Book Study on Indigenous Practices for Sustainability

[WSST now has a land acknowledgment](#) and is working to build up relationships with Native organizations across the state, such as their DNRs and Fish and Wildlife groups. The organization realizes that land acknowledgments need to be more than words, needing to also connect to action, as described [in this article](#) by DPI American Indian Studies Consultant, David O'Connor. Along these lines, there is a free [online book study](#) coming up this spring on *Traditional Ecological Knowledge*, which is facilitated by DPI leaders.

- Engineers Week Resources - Feb 18-24

<https://discovere.org/programs/engineers-week/> - DiscoverE has a range of resources and ideas to engage students and community members in Engineers Week in February. There are lessons, online events, etc. My life might be much different if I had been encouraged to become an engineer and had an opportunity to learn about engineering careers!

- Solar Eclipse on April 8th! What are you doing at your school/community event?

This is the eclipse of the century! We'll have 80+% of totality even in Wisconsin, making a great opportunity to get kids and families out viewing this event. Here's an [administrator support video](#) and a [one-page admin resource document](#), which are especially useful if your administrators are hesitant to support an activity. I can still remember using a pinhole viewer to "see" an eclipse in elementary school! [More resources here](#).

- Phenomenon – What if we aimed the Hubble Space Telescope at the Earth?

<https://www.youtube.com/watch?v=2LSyizrK8-0> – I've wondered about this question myself, so I thought I'd share an answer from xkcd's Randall Munroe. It could be an interesting phenomenon for physics students to model and reason through!

- Edutopia's Top 10 Education Studies of 2023
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<https://www.edutopia.org/article/10-most-significant-education-studies-2023/> - I always appreciate this annual article. Some of the highlights for me this year include AI, the value of social-emotional learning, and moving beyond "finding the main idea" in reading comprehension tasks (like those terrible questions after each section of the textbook).

- How are you talking about climate change? A few resources and thoughts...

I was intrigued by a recent article noting that some Midwest meteorologists are quitting after getting pushback about talking about climate change in their weather reports. That led me to want to dig further into how and whether climate change is being taught across Wisconsin. Please, share your thoughts with me or any favorite resources! Here's a new book by Mark Windschitl (of NGSS committee fame) on [Teaching Climate Change](#), and [here are some videos](#) where he talks about it.

- New NAEP Science Assessment Framework Released

<https://www.nagb.gov/naep-subject-areas/science/2028-naep-science-assessment-framework.html> - This new framework for the "nation's report card" in science might give you some ideas for framing your science assessments and will help you to see how this national report card will be run in the coming years. Shout out to Waunakee, WI teacher Jessica North who served on the committee!

- Highlighting Elementary School Science article

[Article about elementary students investigating phenomena](#) - I appreciate this article by Dr. Tiffany Neill on great work happening in elementary science. Notably, it takes place in Louisiana. I'd love to write up a story like this one featuring a Wisconsin elementary school(s). Could I visit your district/school in the coming year to do that?

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Student Opportunities

- KidWind Challenge at UW-Madison - grades 3-12, register by Jan 15

<https://energy.wisc.edu/events/2024-wisconsin-kidwind-challenge-saturday-march-2> - The KidWind Challenge is a hands-on renewable energy celebration that engages students in STEM. Student teams bring small-scale wind turbines or (NEW for 2024!) solar devices that they've designed for the Challenge at UW–Madison where they will be tested for power output. Teams meet with a panel of expert judges to present their design process, learn about clean energy careers, and tackle instant challenge activities at the March 2nd event. Participation is free and registration is open for teams of 3-12th grade students now through January 15th.

- Yerkes Observatory Open for School Visits

<https://yerkesobservatory.org/visit/school-visits/> - Yerkes Observatory is excited to welcome school groups for curated educational visits for the 2023-24 school year! Details and

information, such as costs per student and other logistics, can be found on the [Yerkes website](#). Plan your school visit today and reach out to Mallory Conlon (mconlon@yerkesobservatory.org) with any questions.

- Remake Learning Days - South Central Wisconsin - submit an event!

<https://remakelearningdays.org/badgerland/> - This annual event provides an opportunity for organizations of all types to highlight innovative types of learning and doing for families, students, educators, and community members in general. Your school and students could share some of your great work!

- Nominate an 11 or 12th grader for the National Youth Science Camp!

<https://airtable.com/appvnmV8HQUkV6jMw/shrYKejLoO8brfJ8d> - The Wisconsin students that have attended this national science camp have found the experience to be AMAZING! Students from around the country gather in a beautiful facility in the forests of WV for three weeks of learning from national experts, connecting to other students, and going to advocate for science in Washington DC. The deadline for students to submit their applications is Feb 29th, so nominating them before the holiday break could help with their timing. Two students from WI can attend. I'm happy to offer application advice, such as 12th graders getting a slight advantage over 11th graders, but both are encouraged to apply.

Kevin J. B. Anderson, PhD, NBCT
Wisconsin Department of Public Instruction
Science Education Consultant
dpi.wi.gov/science
kevin.anderson@dpi.wi.gov
(608) 266-3319

“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