



Hello Science Education Colleagues,

If you're experiencing the current snowstorm, I hope you're staying safe and thinking about how it could apply to science learning. :)

Please, let me know if I can help with some resources, a facilitated virtual discussion, or an in-depth and in-person dive into science program work - just reply to this email.

Below are a few 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

- [WI Science Education Leadership Assoc](#) - Feb 13, Oconomowoc - all welcome
- [Forward Exam Science Item Review](#) - July 30-31 in Madison
- [Summer Research Experience for Teachers at UW-Madison in Materials Science](#)
- [Knowles Academy Science Instruction Webinars](#) - winter and spring
- [BSCS High School Teacher Research Opportunity](#) - applications due Jan 14th(!)
- [CDC Science Ambassador Teacher fellowship](#) – apply by Jan 15th
- [Smithsonian Air & Space Summer Teacher Institute](#) - apply by Jan 15th
- [Part-time Farm Bureau Curriculum Writing opportunity](#) - apply by Jan 22nd
- [Free Virtual and Summer Solar Institutes from Madison College](#) w/ free equipment provided
- [WSST Pre-Conference Field Day](#) - April 17th
- [MN Materials \(Mining\) Conference in Duluth](#) - free for teachers - April 15-17

Resources

- [Rise and Thrive K-5 Science Instructional Guide](#) from the National Academy of Science
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- [STEM Teaching Tools Newsletter](#) and NSTA Conference Sessions
- [Science Leadership Resources](#) - adopting and implementing materials
- [Wheels to Woods Grants for Outdoor Field Trips](#) – due Jan 31
- [Media Literacy Now](#) - free classroom resources
- [Sol y Agua Middle School Game-based Resource](#) to Learn about Water/Sustainability
- [Have "quick" learners in your class?](#) Research says they don't exist.

Student Opportunities

- [Nominate a HS Student for National Youth Science Camp](#) by Feb 15
- [WSST Student Essay Writing Contest](#) - due Mar 1st
- [2024 Science Fairs](#) - CSEF and BSSEF - applications due now

Details

Learning Opportunities

- WI Science Education Leadership Assoc - Feb 13, Oconomowoc - all welcome

We look forward to networking at this coming up WSELA meeting and appreciate Corinne Michor for hosting at Oconomowoc HS. Please, RSVP by Feb 2nd, so we have meal counts done. Include agenda suggestions and any food needs in your RSVP. Anyone can attend - first time attendees are free, others are \$20. One agenda topic will be the new guide to effective elementary science from the National Academies (see resources).

- Forward Exam Science Item Review - July 30-31 in Madison

<https://dpi.wi.gov/assessment/forward/educator-involvement/#item-review> - applications are open to be part of the Forward Exam Item Review committee this summer for 4th and 8th grade science. It will be in-person, 7:30 to 4:30 each day, with meals and a \$150/day stipend provided. Lodging is also provided if you live far enough away (>50 miles, I think).

- Summer Research Experience for Teachers at UW-Madison in Materials Science

<https://education.mrsec.wisc.edu/ret-experience/> - The UW-Madison Materials Research Science and Engineering Center (MRSEC) is hosting an amazing, paid, summer professional development opportunity for secondary science, technology, engineering, and mathematics teachers called the Research Experience for Teachers (RET). During this 7-week program, participants will 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 hands-on, interactive classroom activity inspired by their research experience. The 2024 program is full-time and runs 7 weeks, from June 24th through August 9th. Teachers receive a \$7500 stipend (*\$6000 dispersed during the summer program and the final \$1500, after lesson implementation during the 24-25 school year and receipt of all required lesson materials*). They also provide each participant with a \$750 supplies budget to develop their activity and implement it with students in their

classroom. The program does not provide summer housing or transportation. Reach out to program director, Shelly Grandell, at sgrandell@wisc.edu with any questions.

- Knowles Academy Science Instruction Webinars

<https://www.knowlesteachers.org/knowles-academy/upcoming-courses> - These webinars throughout the winter and spring are great - expert educators sharing on important science instructional topics such as group work, project-based learning, engineering, sensemaking, etc. Most are free except for the ones on engineering and PBL with multiple sessions (which are only \$25).

- BSCS High School Teacher Research Opportunity - applications due Jan 14th(!)

https://bscs.org/upcoming_programs/plantingscience-digging-deeper-f2/ - There are still a few spaces available for high school science teachers to take part in a BSCS research study on how in-depth teacher professional learning in combination with a high-quality curriculum module and online mentoring by plant scientists can improve student outcomes and understanding of photosynthesis and cellular respiration. This research study is based around the award-winning PlantingScience Power of Sunlight module. Participation for the study will include activities/expectations carried out in summer and fall 2024. Participating teachers will receive an honorarium.

- CDC Science Ambassador Teacher fellowship – apply by Jan 15th

<https://www.cdc.gov/scienceambassador/fellowship/application/index.html> - this fellowship for middle and high school teachers includes a summer course July 15-19 in Atlanta, with all expenses paid. There is then a year of ongoing, virtual professional learning. This intensive fellowship is an opportunity for STEM teachers and other STEM education leaders to learn foundational epidemiology and public health concepts, collaborate with CDC experts to develop STEM lesson plans, and be an ambassador for teaching public health.

- Smithsonian Air & Space Summer Teacher Institute - apply by Jan 15th(!)

<https://airandspace.si.edu/learn/educator-resources/teacher-innovator-institute> - it's a short turnaround to apply, but this looks awesome! All expenses are paid for this two year summer institute in Washington, D.C. - one week in 2024 and one week in 2025. It is for grades 5-8 teachers. I want to go!

- Part-time Farm Bureau Curriculum Writing opportunity - apply by Jan 22nd

The Wisconsin Ag in the Classroom program of the WI Farm Bureau is seeking an innovative teacher or retired teacher to provide support to the Wisconsin Agriculture in the Classroom program. The individual in this role will develop three hands-on lessons related to soybeans and a soybean materials kit. They hope to have someone start in January and finish in May, with a \$1350 stipend. It is a remote position. Interested? Submit a resume and cover letter to Beth Schaefer at bschaefer@wfbf.com by January 22, 2024. Please indicate availability for spring 2024.

- Free Virtual and Summer Solar Institutes from Madison College w/ free equipment
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<https://sites.google.com/view/2024-stem-educator-virtual/home-and-register> - The virtual institute happens April 13, 17, 20, 24, and 27. You'll receive \$1400 in equipment. The free summer institute - <https://sites.google.com/view/2024-solar-institute/home-and-register> - happens July 9-11 in Madison, with a \$600 stipend and \$1200 in equipment. Lodging and meals are included for the summer institute. Apply soon before it's full!

- WSST Pre-Conference Field Day - April 17th

[Pre-Conference Field Day](#) - The 2024 WSST conference committee added a new event to the annual conference to engage in different types of field trips on a day (Wed) when subs might be easier to find. There is a guided visit to the [Silver Mound Archeological Site](#), a tour of the [WI Cranberry Research Station](#) or Black River Falls State Forest Wolf Tracking and Elk Viewing with Tim Sprain, Pat Arndt and Julie Fitzpatrick. Inexpensive Hostel-Lodging is available at Camp Salem, which is near Millston, WI between Black River Falls and Sparta.

- MN Materials (Mining) Conference in Duluth - free for teachers - April 15-17

<https://www.smemnconference.com/> - At this industry conference there will be a technical track specifically tailored for teachers addressing the history/importance of mining in the Midwest, and opportunities for funding, grants, and training. SME Minnesota is working to secure additional funding for travel and substitute teacher pay. For updates, sign up for news alerts at the website and get added to an email list for specific teacher updates related to this conference. Questions? Email - mnsectionsme@gmail.com.

Resources

- Rise and Thrive K-5 Science Instructional Guide from the National Academy of Science

<https://nap.nationalacademies.org/catalog/26853/rise-and-thrive-with-science-teaching-pk-5-science-and> - this new and amazing resource can support your own professional learning, learning within a PLC, or ideas for someone to facilitate K-5 professional learning in science. You can read it for free online, download a free pdf, or order a print copy. I highly recommend digging into it. It would make a great book study.

- STEM Teaching Tools Newsletter and NSTA Conference Sessions

[Latest Newsletter](#) - STEM Teaching Tools is a series of research briefs, modules, and other sources for NGSS-based science learning and implementation with an equity lens. Their latest newsletter includes slides and resources from their presentations at the 2023 NSTA conference in Kansas City and other new resources from their team.

- Science Leadership Resources - adopting and implementing materials

https://go.info.amplify.com/fy23_science_unlockingthepowerofhqim_national_lhs_pdf-white-orange-paper_content-only_optin - these resources from Amplify support the selection, adoption, and implementation of high-quality science materials (not an endorsement of Amplify).

- Wheels to Woods Grants for Outdoor Field Trips – due Jan 31

<https://www.wisaf.org/w2w/> - Wheels to Woods (W2W) provides grants up to \$350 to cover transportation costs to and from a forest or forestry industry field tour for any Wisconsin K-12 classroom with priority funding for underrepresented student populations. Forestry and the forest related workforce have historically lacked diversity. Recognizing that people with diverse experiences and ideas lead to innovation that can benefit the people and forests of Wisconsin, W2W seeks to inspire a more diverse workforce by offering opportunities for students to learn in and about the forests and forest products of Wisconsin. Underrepresented populations can mean, but are not limited to, people of diverse color, culture, gender, age, and economic status. The application is always open and applications are reviewed twice a year.

- Media Literacy Now - free classroom resources

<https://medialiteracynow.org/impact/science/> - How do you help students evaluate scientific information? It's part of the WSS/NGSS standards and often gets overlooked, even though it's critically important. This new project supports incorporating media literacy into K-12 science classrooms.

- Sol y Agua Middle School Game-based Resource to Learn about Water/Sustainability

<https://solyagua.cybershare.utep.edu/> - Through an NSF grant and in collaboration with the Smithsonian Latino Center, the Sol y Agua project augments the learning environment of middle school students through the creation of a computer game based on regional water issues, including computational thinking and virtual simulations. The game has a theme of water sustainability and stewardship with an emphasis on information analysis, negotiation, and decision-making. The game immerses students in themes concerning biodiversity, sustainability, and the human impact on the environment. The activities challenge students to make informed decisions regarding water sources, maintenance, environmental factors, and sustainability, among others. It is in a Southwest US context, but is applicable to other environments.

- Have "quick" learners in your class? Research says they don't exist.

<https://www.kqed.org/mindshift/62750/a-group-of-scientists-set-out-to-study-quick-learners-then-they-discovered-they-dont-exist> - I have thought that some people (students) can simply learn things more quickly than others. It turns out that isn't an idea based in scientific research!

Student Opportunities

- Nominate a Student for National Youth Science Camp by Feb 15

<https://airtable.com/appvnMV8HQUkV6jMw/shrYKejLoO8brfJ8d> - Juniors and seniors are eligible for this amazing, national experience where they spend 3 weeks in WV learning science from national experts and getting to know other science-minded students from across the country and U.S. territories. Students also travel to DC to engage in science advocacy

and learn from policy experts. All expenses are paid. Student applications are due Feb 29th, so nominate them soon! More details: <https://www.nysacademy.org/programs/nyscamp/>.

- WSST Student Essay Writing Contest - due Mar 1st

<https://drive.google.com/file/d/16vd0NfA84BS3REIW01HRg8VO3s3IgHI3/view> - The essay theme is water, with tailored topics for students in grades K-1, 2-3, 4-5, 6-8, and 9-12. Any WSST member can submit one student essay for each science course they teach. Student winners and their teachers receive cash prizes!

- 2024 Science Fairs - CSEF and BSSEF - applications due now

If they've got a project in process or a detailed plan already in mind, it's not too late for students to sign up for the [Capital Science and Engineering Fair](#) (CSEF) or the [Badger State Science and Engineering Fair](#) (BSSEF). Students do not have to win any local fair to participate - any high school student can enter a project in either fair. A [new documentary from National Geographic](#) might inspire them! *Science Fair The Series* follows students on their paths to Regeneron ISEF and is available free to stream from National Geographic. Nine high schoolers from around the globe navigate rivalries, setbacks, and hormones on their journey to compete at the International Science and Engineering Fair.

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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