



Hello Science Enthusiasts,

I first want to acknowledge the horror of the war in Ukraine. I hope you're talking to your students about it. I also think there's a strong energy science and [global energy market](#) (podcast link) to be discussed in this context - possibly connecting to an renewable energy unit. Additionally, from EdWeek, "[8 Resources Teachers are Using to Discuss Russia's Invasion of Ukraine](#)" and [Fake News and Ukraine](#). From the New York Times: [Lesson of the Day: 'The Invasion of Ukraine: How Russia Attacked and What Happens Next'](#) and "[A Forum for Young People to React](#)". The Choices Program from Brown University has released [a lesson on the Ukraine crisis](#). And The Economist has a webpage dedicated to [Ukraine at War](#), with all of their coverage.

Are you feeling a bit burnt out like me? [Here's a one-pager](#) based on a Morgane Michael book with some strategies I found helpful to consider, and [a podcast with the author](#).

A record of these emails can be found on my website: dpi.wi.gov/science/social-media.

Finally, let me know if I can help with a workshop, resources, or a facilitated discussion such as an after-school dig into equity in the science classroom. Send me an email!

Cheers,
Kevin

Learning Opportunities

- WSST Conference, Apr 7-9
- WINGS Summer Institute, July 17-21
- Rural Educators 3D Science Course Research Project (get paid \$1600)
- Learn Deep Fellows - Community/Network for Science/STEM Teachers
- Biotechnology Courses at the BTC Institute (Madison) - July (w/ stipends)
- The Hill Future of Education Broadcast – March 17 (today)

Resources

- Wheels to Woods Field Excursion Grants - up to \$350
 - Support English Learners in Science - WIDA course and article
 - Earth Day Resources and Events - UW-Madison Nelson Institute, Apr 21
 - Research on Increasing Salinity in Freshwater Bodies - Phenomenon!
 - Edutopia article - Supporting Group Work
 - PBS/KQED article - Traditional Grades Do Not Support Learning
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Student Opportunities

- National Youth Science Camp (for graduating students) - apps due Mar 31
 - UW-Madison Science Expeditions - April 8-10
 - UW-Whitewater TechSavvy - Conference for grades 6-9 - Apr 30
 - Great Lakes Bioblitz - Apr 22 - May 20
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Details

Learning Opportunities

- WSST Conference, Apr 7-9

<https://www.wsst.org/conference-20222> - I hope to see you at the Wisconsin Society of Science Teachers conference in April! You can find more details on what's happening in WSST in their [latest newsletter](#).

- WINGS Summer Institute, July 17-21

[Wisconsin Institute for Next Generation Science](#) (WINGS) - WINGS is an upcoming WSST event that will take place this summer from the evening of July 17 through the morning of July 21. It will take place at the Conserve School in Northern WI with meals, a room, and fun activities provided. There is a small fee to reserve your spot, but participants will receive it back (plus more) to support their classrooms. Topics will include phenomenon-based learning and assessment, modifying lessons to connect to community-based phenomena, and being a science leader in your school/district. Email me with questions - it's going to be fabulous learning and a lot of fun!

- Rural Educators 3D Science Course Research Project - get paid \$1600

[Details here](#) - You can join a Midwest online course about equity-based 3D science instruction and assessment and get paid \$1600! It will take about 25 hours of your time over a semester (3 hrs/wk) and about 10 hrs of time outside of class. Data collection is centered on how well people learn from the course and will take place during your normal instructional time. Additional tasks will take ~30 min. I know some of the people involved and think it will be good!

- Learn Deep Fellows - Community/Network for Science/STEM Teachers

<https://community.learndeep.org/> - This Milwaukee area network supports educators in designing community-based projects for students. They hold networking events and help you connect to community partners. It is an amazing program if you hope to make learning "deeper" for your students. There are ongoing in-person events in Milwaukee as part of this work, so you would likely need to live in that general area.

- Biotechnology Courses at the BTC Institute (Madison) - July (w/ stipends)

<https://www.btc.org/k-12-programs/programs-for-teachers/> - Looking to incorporate more biotechnology into your curriculum? The BTC Institute in Madison is offering two, week-long

summer courses in-person. They have Biotechnology: Beyond The Basics from July 11-15, and Biotechnology: The Basics in-person from July 25-29. Both courses are offered for stipends and optional graduate education credit.

- The Hill Future of Education Broadcast – March 17 (today)

<https://thehillthefutureofeducation.splashthat.com/> - Starts at 12 CT, but you can sign up and watch the recording later. There is an impressive line up of speakers, including a few teachers, Secretary Cardona and a couple governors.

Resources

- Wheels to Woods Field Excursion Grants - up to \$350

<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 (can mean, but not limited to, diverse racial, ethnic, gender, age, and economic backgrounds). 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, so 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. Funding support from the Wisconsin Society of Science Teachers (WSST).

- Support English Learners in Science - WIDA course and article

First, there is the WIDA online course Engaging Multilingual Learners in Science: Making Sense of Phenomena, which is available for free through your district's WIDA portal (talk to your administrators or help@wida.us). This interactive eWorkshop is designed specifically for science educators and language educators who support multilingual learners in science classrooms. There is also a new practical resource for teachers on the synergy of NGSS and WIDA Standards: <https://www.cesa2.org/whitepapers/Multilingual-Learners-as-Scientists.pdf>, where WSST member Emily Miller is an author.

- Earth Day Resources and Events - UW-Madison Nelson Institute, Apr 21

<https://earthday.nelson.wisc.edu/> - Water and life are inextricably intertwined. Without access to adequate water, humanity suffers. Yet, water in extreme abundance can also become a destructive force. We invite you to join us as we explore these concepts and more during the "Nelson Institute for Environmental Studies Earth Day 2022: Water on the Rise" on April 21, 2022. This day-long community learning event, featuring both in-person and virtual experiences, will examine how communities across the globe are facing, responding to, and mitigating critical water issues. This event is free and open to the public. For questions, contact Emily Reynolds (ereynolds2@wisc.edu)

- Research on Increasing Salinity in Freshwater Bodies - Phenomenon!

<https://www.pnas.org/doi/10.1073/pnas.2115033119> - Increasing salinity is an important phenomenon with significant ecosystem impacts on the way. This research could inform and inspire

to some accessible youth-led research and action in your communities. It's also a nice connection to our [statewide inquiry-based learning emphasis on the topic of water](#).

- Edutopia - Supporting Group Work

<https://www.edutopia.org/article/setting-effective-group-work> - students often don't know how to effectively work in groups. Here's an article with some useful suggestions. A key aspect is that it takes explicit teaching and support - it takes time from other tasks, but it's worth it in the long run. Another important point here is that groups are much less meaningful when the task is all about answer finding - in that case groups just rely on the student who is known to be best in this subject, and it's not really "group" work.

- PBS/KQED article - Traditional Grades Do Not Support Learning

<https://www.kqed.org/mindshift/58155/grades-have-huge-impact-but-are-they-effective> - based on research (yes, research and evidence that isn't anecdotal), traditional grading structures are not equitable or effective for supporting learning. I'd encourage you to start some conversations at your school.

Student Opportunities

- National Youth Science Camp (for graduating students) - apps due Mar 31

Application page <https://nysf.smapply.io/> and information page - <https://www.nysf.com/w/programs/nyscamp/2022-nyscamp/> - This national program invites two students from every state to engage in learning from top scientists and policy makers in the country. This year it is again virtual for four weeks during the summer, and it has a flexible daily schedule for kids who work or are involved in other activities. We don't generally get a lot of applications in Wisconsin (so encourage your students to apply!). Applications are due March 31st.

- UW-Madison Science Expeditions - April 8-10

<https://science.wisc.edu/science-expeditions/>

- This is the annual UW-Madison Open House for all things science. There are virtual opportunities as well as in-person events each day, so field trips could be an option (if you're not going to the WSST conference). All events are free and open to the public.

- UW-Whitewater TechSavvy Conference for grades 6-9 - Apr 30

<https://uww.edu/ce/camps/additional/techsavvy> - Tech Savvy 2022 is a one-day conference tailored for girls in grades 6-9 and their parent(s)/guardians, designed to inspire and encourage them in STEM fields. Registration is also open to interested boys. The students who attend Tech Savvy will experience exciting hands-on activities led by professional women in STEM fields. There will be a program for adults to learn more about working in the STEM fields, encouraging their children in STEM, and helping them to prepare for college or technical school. Limited to the first 125 students and 125 parents/mentors. Sat, April 30, 2022 from 8:00 a.m. - 3:30 p.m.

□ Great Lakes Bioblitz - Apr 22 - May 20

<https://www.cgll.org/2022-great-lakes-bioblitz/> - Participating in a BioBlitz is a good way to engage youth in an outdoor activity, teach about biodiversity, and promote environmental stewardship. It can provide teachers with a tool to get students outside and engaged in making observations. Through the simple process of making observations, teachers, youth, and their families can participate in an online community of observers by photographing their observations using the [iNaturalist](#) app on their cell phone or tablet, or by uploading their photos into [iNaturalist](#) using a computer. Uploaded photos can be used by the iNaturalist community to track biodiversity across the Great Lakes Basin. During the CGLL Great Lakes BioBlitz, participants can add observations to their state's iNaturalist project. Youth 18 and under can also submit their best photo to the CGLL Great Lakes BioBlitz [Photo Contest](#).

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
@wiscileaders

“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

Luck of the Irish! Happy St. Paddy's Day!