

Hello Colleagues,

I hope you're enjoying this lovely autumn. Please, let me know if I can ever help with some resources, a facilitated discussion, some training, etc. (always free).

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

- DPI/WSST Virtual Book Study The Devil's Element starts in Nov
- AP Science Summit Dec 12, Wisconsin Dells
- Program for Inquiry and Science Instruction Discovery World, apply by Oct 20
- STEM Forward's sySTEMnow Conference Nov 1 in Milwaukee
- K-6 Teacher? Apply for PAEMST or nominate another great educator!
- WSST New Science Teacher Network virtual, starts Nov 2

Resources

- Wisconsin Science Week and Wisconsin Science Festival! Oct 16-20
- Yerkes Observatory (near Lake Geneva) is Open for School Visits
- Videoverse Bank of NGSS-Based Videos from BSCS to support your learning
- Phenomena of Global Temperature Trends
- Student Green Team Mini-Grants
- Equity in Science Education research and ideas briefs

Student Opportunities

- National STEM Challenge entries due Nov 12
- ECybermission Competition and Mini-Grants

Details

Learning Opportunities

DPI/WSST Virtual Book Study - The Devil's Element - starts Nov 13

https://forms.gle/buyMu2C1oiP4KUTS7 - We are planning to dig into a more mass market science book this year for our book study, The Devil's Element: Phosphorus and a World Out of Balance, by Wisconsin author Dan Egan. This book has strong place-based relevance for Wisconsin educators, and we hope it will be an interesting shift from the more pedagogy focused books we have used recently. Please, sign up ASAP to get a copy of the book before we get started on November 13 (tentative start date, time of 4pm).

• AP Science Summit - Dec 12, Wisconsin Dells

https://forms.gle/hrezyA2JU6ggJgLk9 - WSST and DPI are planning to host a AP Science Teacher Summit this year, like the ones that used to be held annually. Given that the AP Summer Institutes have gone virtual, many educators have expressed interest in an opportunity to get together in-person to learn and network together. It will cost <\$50 per person (depending on final numbers attending), and will take place at the Glacier Canyon Conference Center in the Wisconsin Dells on December 12th. We are still finalizing the agenda and need to hear from you on what you'd like the day to look like - please, go the survey and share your interest and ideas. We'll send a registration link out later.

Program for Inquiry and Science Instruction - Discovery World, apply by Oct 20

https://discoveryworld.org/education/program-for-inquiry-and-science-instruction-pisi/- This is a free professional learning series at Discovery World for grades 3-8 teachers in Milwaukee County. There are 6 full-day sessions to deepen your understanding of high-quality, NGSS (WSS) instruction (have to attend all 6). Your school can also be reimbursed for the price of a substitute. You will also get equipment to take back to your classroom to implement your new lesson ideas. The theme is energy this year, and applications are due Oct 20th.

STEM Forward's sySTEMnow Conference - Nov 1 in Milwaukee

https://www.stemforward.org/systemnow-conference - This annual conference is a great way to connect with new STEM ideas and learn from districts doing unique work in STEM education. If you're not familiar with STEM Forward, it is a regional STEM hub/non-profit in Milwaukee, with relevance for work across the state. They have a great newsletter too that you can receive.

• K-6 Teacher? Apply for PAEMST or nominate someone else!

https://paemst.nsf.gov/ - Nominate yourself or someone else for the Presidential Award for Excellence in Math and Science Teaching! K-6 teachers with 5+ years of experience are eligible this year (next year it will be grades 7-12). This is the highest teaching award from the White House, with \$10k given to two Wisconsin educators. Lessons focusing on STEM, computer science, CTE, math, science, and technology can be highlighted.

WSST New Science Teacher Network - Nov 2

Registration - Have you been teaching for four years or less? If so, connect with other new teachers via the WSST New Science Teacher Network! This new group is facilitated by

veteran teachers committed to helping new science education teachers navigate the profession. The group will meet the first Thursday of the month from 6:30-7:00 pm to help you connect with other new science teachers and

resources. Email <u>jayneryczkowski@gmail.com</u> with any questions. First meeting is Thursday, November 2. It is free for WSST members, and new teachers can sign up for a free one year membership!

Resources

Wisconsin Science Week and Wisconsin Science Festival! Oct 16-20

https://dpi.wi.gov/news/dpi-connected/gear-wisconsin-science-week-and-wisconsin-science-festival - Next week is the Wisconsin Science Festival and Wisconsin Science Week, as proclaimed by State Superintendent Dr. Underly and Governor Evers! There are so many options for what you might do in your school and community. It might be late to plan something for this year, but not too early to start planning for next year! Events are listed on the Wisconsin Science Festival website.

Yerkes Observatory (near Lake Geneva) is Open for 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 <u>Yerkes website</u>. Plan your school visit today and reach out to Mallory Conlon (<u>mconlon@yerkesobservatory.org</u>) with any questions.

Videoverse Bank of NGSS-Based Videos - from BSCS to support your learning

https://videoverse.bscs.org/- accessing the videos requires a free registration. There are lots of videos at different grades/subjects allowing you and your PLC to observe what WSS/NGSS looks like in action in classrooms. There are also lesson plans connected to the videos and teacher professional learning materials.

Phenomena of Global Temperature Trends

https://www.theclimatebrink.com/p/visualizing-a-summer-of-extremes - It was a hot summer and September. This article discusses the unusual heat extremes this year and provides some interesting data and data visualizations to put them into perspective. Could be a useful classroom phenomenon for investigation!

Student Green Team Grants

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Green Team Mini-Grants - Support your students' sustainability ideas with mini-grants from KEEP! Students do the applying. :) To learn more about the program, they can join a free informational Zoom meeting October 18 at 4:00 pm. Teachers are welcome to join too. Once students have a basic project concept, they'll share that idea with KEEP via the Idea Form by October 27, then meet with KEEP staff to help refine their project. With those suggestions and baseline energy data for their schools, they'll develop a full grant proposal, due December 8. Schools which are awarded grants will receive their funds in early January and have until May to work on their projects. A second round of grants will open spring 2024 for

shorter-scale projects.

Equity in Science Education - research and ideas briefs

https://stemteachingtools.org/brief/15 - The STEM Teaching Tools group has a lot of resource documents for reflecting on and considering various aspects of equity in science education --working to meet the needs of ALL learners in your classroom. This brief has general ideas, but there's a whole list of further possibilities.

Student Opportunities

• National STEM Challenge - entries due Nov 12

http://nationalstemchallenge.com/ - Entries for this new student program are due Nov 12. Individual students (not teams) create/design an innovative process or product to solve a challenge in the world. This new competition has some big names supporting it (like Kari Byron). There are several other competitions that students could also enter using the same project (see listing on my website).

ECybermission Competition and Mini-Grants

https://www.ecybermission.com/minigrantprogram- ECybermission is a program where students solve local problems in teams and write up their ideas. The program is coordinated by NSTA and sponsored by the U.S. government. They offer mini-grants up to \$20+ per student involved for supplies along with a teacher stipend upon completion of the competition.

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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