

Hello Science Education Leaders.

Here are the latest science education 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

- WSS/NGSS Free Webinar series from Einstein through the year
- <u>USGS Groundwater Workshops</u> apply by Nov 7
- <u>UW-Madison Ed Outreach Science Readiness Symposium</u> Mar 14

Resources

- New Science Forward Exam One Page Overview starts spring of 2019!
- Squirrels Phenomenon from DNR
- Dream Big Video inspiring students to become engineers

Student Opportunities

- <u>Samsung Solve for Tomorrow</u> sign up through Oct 30th
- <u>Capital Science and Engineering Fair</u> intent due Nov 15 (fair on Feb 16)
- State Science Experience on Lunch Waste ongoing

Details

Learning Opportunities

• WSS/NGSS Webinar series from Einstein - free!

http://einsteinportal.2bsolutions.net/prodev-main/einstein-online/ - this series of webinars form the Einstein Project in Green Bay are FREE and will provide a nice overview of the Wisconsin Standards for Science (and NGSS). Topics include 3D instruction, assessment, and sense-making.

USGS Groundwater Model Workshops - apply by Nov 7

https://www.uwsp.edu/cnr-ap/watershed/Pages/GroundwaterModelWorkshop.aspx Educators from schools and nature centers are invited to apply for a free groundwater sand tank model and workshop (valued at \$900). Open to educators of grades 6-12 students. Twenty models will be given away at two workshops. This year workshops will be held January 30th at the Wisconsin Geological and Natural History Survey Core Lab, 211 Blue Mounds Street, Mount Horeb; and February 20th at Bay Beach Wildlife Sanctuary, 1660 East Shore Drive, Green Bay. Workshops will be taught by staff from the Center for Watershed Science and Education and the Wisconsin Geological and Natural History Survey. Two teachers from a school or nature center must complete the application form describing how they will use the model. Money is available to reimburse schools for substitute teachers. The deadline for applications is November 7, 2018.

UW-Madison Ed Outreach Science Readiness Symposium - Mar 14

https://eop.education.wisc.edu/eop/professional-learning/conferences-institutes/education-outreach-partnerships-academic-symposia - After great feedback last year, the UW-Madison Ed Outreach group will again hold a symposium on what it means to be college ready in science. Middle and high school science educators, and curriculum directors, are encouraged to attend and consider how you're preparing students for college - this website has basic information for the March 14th event, but 2019 registration isn't up yet.

Resources

New Science Forward Exam One Page Overview - starts spring of 2019!

https://dpi.wi.gov/sites/default/files/imce/science/Overview-of-Forward-Exam-Specs-10-12-18.pdf - This "draft" one page overview notes the related standards and reporting categories for the new Forward Exam in science that will be given in grades 4 and 8 this spring.

Squirrels - Phenomenon from DNR

https://dnr.wi.gov/wnrmag/2018/fall/readers.html - The last entry in the "Reader's Write" column of this quarter's Wisconsin Natural Resources magazine features 3 different photos of morphs of gray squirrels seen in Waupaca and Omro. This would be a great phenomenon for a genetics unit. Scroll to last entry. But, don't just give students the likely answer noted in the article, ask what they think is going on here. *Thanks to Jo Miller of CESA 8 for suggesting this phenomenon!

Dream Big - Video inspiring students to become engineers

http://discovere.org/dreambig - I just watched this Dream Big video with my children, and they were inspired (so was I)! It goes through stories of engineering feats and some young engineers and engineering students working on them. If we're going to be in the same place coming up, I'd be happy to loan you my copy.

Student Opportunities

Samsung Solve for Tomorrow - sign up through Oct 30th

https://www.samsung.com/us/solvefortomorrow/ - this is a challenge for students in grades 6-12 to propose solutions to STEM-related problems in their communities. Teams have to apply by Oct 30th, but the actual work, such as the activity plan, isn't due until Dec 4th. This could easily connect to the new Wisconsin Standards for Science, and yes, it's worth involving students in projects like this one!

• Capital Science and Engineering Fair - intent due Nov 15 (fair on Feb 16)

https://dpi.wi.gov/science/science-fairs/csef - The Capital Science and Engineering Fair welcomes grades 9-12 students from across the state to submit science, engineering, math, and/or STEM related projects to this annual fair. Project Lead the Way projects are welcome. An intent to participate form is due by Nov 15th, though that is somewhat flexible. The \$15 registration and full form is due Dec 15th.

• State Science Experience one Lunch Waste - ongoing

https://drive.google.com/file/d/1xG4yuNYULTYQfI-LrjRwzpUKyWCRwBME/view - If you didn't have a chance to participate in the "Lunchroom Leftovers" state science challenge last week with the Wisconsin Science Festival, there's still time! Data can be submitted for the next few months, and you can join in the WSST session talking about experiences and results. See this newspaper article for how Reedsburg's Science Club led the way for their participation in this project: https://madison.com/wsj/news/local/education/local_schools/lunchroom-leftovers-make-for-an-eye-opening-science-project/article_f19ad427-cd16-52b6-bb0e-bc7ae8d5acd6.html

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

"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