

Hello Science Education Leaders,

I'm going to again say that I hope you're finding some joy in your work and the world around you. I continue to need to consider self-care - <u>some resources here</u> - and clearly, a primary focus on <u>student well-being</u> continues to be important.

Please, let me know if I can help with some resources or a facilitated discussion, like a brief after-school dig into virtual science teaching ideas, assessment, standards, etc. Send me an email!

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**

- Monthly Book Study on Equity Nov 16th at 4pm all welcome!
- Presidential Awards new application cycle for grades 7-12 teachers

#### Resources

- WSELA meeting notes from Oct 15th and 27th
- Equity in Science Education new DPI website
- FabLab grants Due Jan 8
- Reflection on Effective Virtual Instruction
- Wildlife Ecology Resources

## **Student Opportunities**

- <u>Junior Science and Humanities Symposium</u> and Science Fairs
- 2021 Space Camp Scholarships deadline Jan 19
- 2021 Wisconsin Aviation Art Contest now under way, deadline Jan 19
- Careers in Urban Forestry panel discussion Nov 12
- Jacobs Teen Innovation Challenge sign up by Nov 20

#### **Details**

# **Learning Opportunities**

Monthly Book Study on Equity - Nov 16 at 4pm

https://forms.gle/ChkVDbzgGBm82yge6 - sign up here or just email Kevin for info. Anyone (!) can join - you don't need to have attended previously, as we do new articles and chapters each month. This month Matt Lindsey and Karen Mesmer will be facilitating, with a discussion on chapter three of the NSTA book Helping Students Make Sense of the World, by Megan Bang et al, and the recent NSTA Navigator on Anti-Racist Teaching. Join your colleagues for an important and relevant discussion on equity in science education!

Presidential Awards - new application cycle for grades 7-12 teachers

https://www.paemst.org/ - This award for science (and math, engineering, and computer science) teachers celebrates the amazing work of grades 7-12 classroom teachers this year. You can nominate someone else or yourself. Awardees receive a trip for two to DC (maybe now with a meeting with Dr. Jill Biden) as well as \$10,000. We even have a fabulous mentor to support your application process. Email Kevin for more details.

#### Resources

WSELA - meeting notes from Oct 15th and 27th

The Wisconsin Society Education Leadership Association meets throughout the year to support science educators and network around current needs. Anyone is welcome to join these meetings, regardless of whether you have any formal leadership role. On October 15th educators shared details on what's working in their virtual/hybrid/in-person environments, and on October 27th we discussed virtual assessment strategies. Our next (virtual) meeting will be in February. Email Kevin for more information and to get on the listserv.

Equity in Science Education - new DPI website

<u>https://dpi.wi.gov/science/equity</u> - A DPI workgroup continues to develop resources focused on equity and access in science education. This website shares some of the work to date. If you have further suggestions, please share!

FabLab grants – due Jan 8

www.wedc.org/fablabs - These grants help public school districts create or expand labs in amounts up to \$25,000 per district or up to \$50,000 for consortiums of two or more districts. Consortium applications may be submitted by a lead public school district or a cooperative education service agency (CESA). The funds may be used to purchase equipment used for instructional and educational purposes by elementary, middle, junior high, or high school students. A match of 50% to 1 is required -- all applicants must match 50% of the grant amount of funding provided by WEDC. The FY21 Fab Labs Grant Program will

include a moratorium on districts who have already received three Fab Labs Grants, unless it's a one-time grant to establish a FabLab for K-8 students or if it's from MPS.

Reflections on Effective Virtual Instruction - article

https://wisdpiscience.blogspot.com/2020/10/what-do-we-really-mean-by-effective.html - In this article, I describe some key principles and ideas for effective online instruction, which mirror effective in-person science. I encourage educators to reflect on who's really doing the work in the classroom - is it mainly you?

• Wildlife Ecology Resources

Amanda Leeman and Steve Schmidt from UWSP shared a series of Wildlife Ecology resources. The Wildlife Society has developed Project WildLIVE resources that feature UWSP student-led wildlife research projects around the central Wisconsin area. More are under development, but the current two have a short video highlighting the research process of that project in the field, a fact sheet on the animal species, and an optional lesson plan idea with further education resources for educators. The lessons are generally at the upper elementary level. And, here's a related high school level "Mark and Recapture" lab from Steve.

## **Student Opportunities**

• Junior Science and Humanities Symposium (JSHS) and Science Fairs

https://web.cvent.com/event/72fca633-b825-4e18-b66e-02b9ac1980c5/summary - JSHS is a fabulous way to have students share a research project, with the registration deadline being Nov 20th. There are lots of opportunities for students to share their projects noted on this page - <a href="https://dpi.wi.gov/science/science-fairs/opportunities">https://dpi.wi.gov/science/science-fairs/opportunities</a> - which is a great option for personalized learning!

2021 Space Camp Scholarships - deadline Jan 19

Are you or your students especially interested in space? The Geek Partnership Society, a non-profit in Minnesota, is accepting applications for 2 scholarships to attend Space Camp in Huntsville, Alabama in 2021. One scholarship is for educators, another is for students, ages 10-14. The scholarship will cover the cost of one session plus airfare. For more information, visit the website: <a href="https://geekpartnership.org/programs/spacecamp/">https://geekpartnership.org/programs/spacecamp/</a> (hoping they'll be able to do it!).

2021 Wisconsin Aviation Art Contest - now under way, deadline Jan 19

Calling all artists and STEM/aviation enthusiasts! The Wisconsin Department of Transportation (WisDOT) invites students to participate in the International Aviation Art Contest. This year's theme is "A Friendlier World with Air Sports." The contest is open to Wisconsin students in multiple age groups, and the top 3 entries in each age group will receive a \$25 gift card sponsored by the Wisconsin chapters of Women in Aviation International and the Wisconsin Space Grant Consortium. Winning artwork will also be

displayed in the Wisconsin State Capitol and will advance to the national competition. For more information, visit the Art Contest webpage: <a href="http://wisconsindot.gov/artcontest">http://wisconsindot.gov/artcontest</a>.

Careers in Urban Forestry - panel discussion Nov 12 2:30 to 3:15

https://wcee.asapconnected.com/ClassDetail.aspx?pk=1801532 - Ever wonder what urban forestry is or different careers you might pursue within this field? This career panel for students/educators will help with those questions. Urban forestry is a diverse and emerging career pathway that works in the forests outside your door - panel will include scientists, city planners, artisan furniture makers, and business people. Educators who register will get free access to the PLT Green Jobs: Exploring Forest Careers Curriculum e-book and a set of student quiz codes after the live session.

Jacobs Teen Innovation Challenge – sign up by Nov 20

https://www.pactful.org/jtic/ - New program! What if you could build a better world? The Jacobs Institute for Innovation in Education at the University of San Diego is calling for middle- and high-school educators to join us in our effort to make a local and global impact. Through the Jacobs Teen Innovation Challenge in fall 2020 and spring 2021, educators and teenagers will develop an innovator's mindset and the skills to create solutions to local or global problems.

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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