

Hello Colleagues,

I hope your transition back to school is going well - woo-hoo!

I would first like to congratulate three amazing Wisconsin science teachers who are state finalists for the <u>Presidential Award for Excellence in Mathematics and Science Teaching</u> (PAEMST) this year:

- Stephanie Ballard Campbellsport Middle-High School
- Karen Olson Baraboo High School
- Connie Rauterkus Oconto Falls Public Schools

These three educators will now go onto the national review committee, which will decide which one receives the \$10,000 award from the National Science Foundation and trip for two to Washington, DC. This next year K-6 teachers can apply or be nominated, starting at the end of November.

Below 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

- Discovery World Professional Development Opportunity apply by Sept 6
- WSELA Technology in the Science Classroom Mini-Conference Oct 16
- WSST Summer Science Institute stay tuned for details!
- National Involvement Opportunity for Essential Elements in Science
- Equity Work in Science

Resources

- <u>DPI OER Innovation Grants</u> Want \$10k to develop science resources?
- OpenSciEd free middle school science instructional materials and resources
- Forward Exam Scores Are Out Note: they're just one data point!
- Environmental Education Grant Get outside and do projects!
- Wisconsin School Garden Network
- State Environmental Education Conference and Community Engagement Workshop Nov 14-16 in Madison

- STUFF Magazine new from BizTimes highlighting STEM careers
- Why Aren't Reading Scores Progressing? Hint: not enough science!

Student Opportunities

- Wisconsin Science Festival host an event!
- Samsung Solve for Tomorrow

Details

Learning Opportunities

Discovery World Professional Development Opportunity - apply by Sept 6

https://www.discoveryworld.org/learning/professional-development/ - Elementary and middle school educators can apply for this incredible, free year-long professional learning experience brought to you by the experts at Discovery World. Learning will be focused on the crosscutting concept and content area of energy (of particular note in the grade 4 standards, which are tested on the Forward Exam). Substitutes costs are paid for the 6 days of learning through the year, and classroom supplies are provided. Applications are due by Sept 6, but will be accepted until the program is full.

WSELA Technology in the Science Classroom Mini-Conference - Oct 16

Instead of the typical Wisconsin Science Education Leadership Association (WSELA) meeting, we're having a day-long mini-conference on the theme of effective use of technology in the science classroom. Fill out this quick form to volunteer to present during the meeting: https://forms.gle/PTHa8ZDmT8CbHiJJ8. The meeting is free for first-time attendees or \$20 if you've been before. At this meeting we will also have a bonus session - an Admissions Counselor from UW-Madison join us for a Zoom call to discuss routes for university preparation in science. The meeting will take place from 9 to 3 at the DeForest Comfort Inn just off the Interstate. Email Kevin Niemi - kjniemi@wisc.edu - to RSVP.

WSST Summer Science Institute

At this <u>summer's WSELA meeting</u> we discussed plans for a Summer Science Institute. We'll be looking for about 20 educators, new and veteran, to be involved in this 3.5 day learning experience that will dig into a 3D storyline and help you learn effective science instructional coaching strategies to support other educators back in your district. We'll be looking for educators who haven't been involved in this type of experience before but whose districts would benefit from their learning. Stay tuned for further details!

National Involvement Opportunity for Essential Elements in Science

https://kusurvey.ca1.qualtrics.com/jfe/form/SV 5nzhxvT2Q5s11E9 - The Dynamic Learning Maps national team is looking for individuals to support the ongoing development of Essential Elements in Science resources. More information here on this November event in Kansas City. These standards and guidance documents support educators with science learning for severely cognitively disabled students. Wisconsin recently released a resource document that

<u>details a progression of lesson ideas</u> and regular ed science standards connections for these Essential Elements.

Equity Work in Science

Through the course of this year, the WSST Professional Development committee is going to support work on an equity position statement for WSST and a series of workshops across the state focused on equity. Let me know if you'd like to be involved in the planning - stay tuned for initial dates and details. For reference, the national Council of State Science Supervisors has this equity statement.

Resources

DPI OER Innovation Grants - Want \$10k to develop science resources?

https://dpi.wi.gov/wiselearn/oer-innovation-grants - There are two calls for grant applications listed on this website, science folks can apply for either (even though the website states otherwise). These grants provide up to \$10k in funding for the development of lessons, assessments, and other instructional resources to be placed in the WISELearn Resources Portal. Applications are due Sept 30th - must be a school district or partnered with a school district.

• OpenSciEd - free middle school science instructional materials and resources

https://www.openscied.org/ - OpenSciEd is a national group of science experts developing free, full-year instructional materials for grades 6-8. Currently, one unit of each grade is available along with resource materials. I will be doing a series of workshops across the state this year to introduce educators to these materials and provide practice in how these excellent units work. Stay tuned for details on that.

• Forward Exam Scores Are Out - Note: they're just one data point!

https://dpi.wi.gov/science/assessment - With the release of scores for the new Forward Exam, many districts are reflecting on how their students did. I want to caution districts on the use of these scores for high-stakes decisions. Collaborative educator conversations to guide science program and instructional decisions should focus on data from a system of assessments, not placing too much emphasis on any one score. With a completely redesigned test, these Forward Exam scores should be considered a new baseline, not comparable longitudinally to past 4th and 8th grade scores.

• Environmental Education Grants - Get outside and do projects!

The Go Outside Fund provides grants up to \$500 (supplies, subs, transportation, etc.) for projects that connect children with outdoor, nature-based learning experiences. <u>Applications are due September 30th</u>.

Wisconsin School Garden Network

<u>https://wischoolgardens.org/</u> - Wisconsin School Garden Networks want to help Wisconsin youth meet their learning goals this year by providing free curricular materials, technical assistance, and workshops to help educators take learning into the garden to increase

student engagement, social and emotional health and well-being, and learning outcomes. Does your school already have an outdoor garden, aquaponics, or containers in the classroom? Add your school to the state-wide map of garden-based education programs. There are already more than 600 programs on the map. Join the community here: https://wischoolgardens.org/put-yourself-on-the-map-3/

 State Environmental Education Conference and Community Engagement Workshop -Nov 14-16 in Madison

http://www.waee.org/2019-annual-conference - WAEE Annual Conference: Connect, Explore, Engage! is happening November 14-16, 2019 at UW-Madison Union South. The three strands are: Diversity, Equity & Inclusion; Creating Strong EE Programs and Centers; and Wisconsin Waters and Coasts. Also at the conference this year on Nov 15th is the "Community Engagement: Guidelines for Excellence Workshop." More information about the guidelines can be found at https://naaee.org/eepro/resources/community-engagement-guidelines. Also, a train-the-trainers workshop will take place on these guidelines on November 17, by invitation only. If you would like to be considered, please contact Becca Franzen - bfranzen@uwsp.edu.

• STUFF Magazine - new from BizTimes highlighting STEM careers

https://issuu.com/biztimesmedia/docs/stuff-se_2019_digital_edition?fr=sOTdkYjg4NjQ - this fabulous magazine from Southeast Wisconsin highlights loads of STEM careers and interesting STEM-related organizations. It would be a worthwhile tool for educators to highlight career pathways for students, particularly related to ACP, Maker Spaces, and STEM initiatives.

• Why Aren't Reading Scores Progressing? Hint: not enough science!

https://www.theatlantic.com/education/archive/2018/04/-american-students-reading/557915/ This recent highlights evidence that the reason reading/ELA scores are often stagnant is that students spend too little time in content-based learning, such as science and social studies! More time for these subjects rather than extended literacy blocks can be beneficial to students.

Student Opportunities

Wisconsin Science Festival - host an event!

https://wisconsinsciencefest.org/host/ - It's not too late to host an event at your district, university, library or other site as part of the Wisconsin Science Festival October 17-20. This year we are also encouraging and supporting a Statewide Inquiry Experience related to water, where we'll be sharing data and projects. Stay tuned for further details on that.

Samsung Solve for Tomorrow

https://www.samsung.com/us/solvefortomorrow/ - This STEM competition for grades 6-12 is a great way to get students involved in an authentic project that can be flexibly connected to the standards at your grade level. You can scroll down on the Washington Island Schools website to see information about last year's winner from Wisconsin. See this resource page for lots of ways to get students involved in project-based learning.

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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