

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.

I hope the school year ends well for you and that you have an amazing summer!

Kevin

Learning Opportunities

- Madison Area Summer Science PD (new WSS train-the-trainer) June/July
- Einstein Project Science PD June 18-22, Aug 13-17
- WI Rapids Science PD Offerings June 13-14, July 9-12, Aug 13-16

Resources

- \$10,000 DPI Innovative OER Materials Grants due June 30th
- My Skills Career Exploration Grants from DWD due June 4th
- DPI Science Fair Resources Website
- Volcanoes Phenomenon of the Month
- Tom Wolfe and Scott Kelly The Right Stuff
- Science Safety Caution against open flame tests

Student Opportunities

• STEM Forward - Milwaukee area student STEM opportunities this summer

Details

Learning Opportunities

Madison Area Summer Science PD - June/July

https://docs.google.com/document/d/1q6EQtjARPJ2nPwU_araCku1SZS3KIErhGM_UB3DQsLs/edit - These three PD opportunities support educators in implementing the new Wisconsin Standards for Science. June 11-15 Making Sense of Science workshop for K-8 educators to

strengthen earth science content knowledge - \$100, Edgewood College in Madison. June 25-29 Engineering Design for HS teachers in Oregon - \$1000. And, NEW, a DPI, district, and CESA team has been developing a set of train-the-trainer modules for the new standards. July 17-18 in Madison will be the first opportunity for this new training - free. More details and registration links on the website.

Einstein Project Science PD - June 18-22, Aug 13-17

http://einsteinportal.2bsolutions.net/prodev-main/pd-session-main/?pd=3 - Their professional development will feature sessions that are aimed at helping teachers fine-tune their knowledge base of scientific concepts, how to use formative and summative assessments to measure student learning, and getting a true understanding of Wisconsin Standards for Science based on NGSS. In addition, there will be makerspace workshops and options for participating in an online virtual academy or a special Science Leadership Academy.

Wisconsin Rapids Science PD Offerings - June 13-14, July 9-12, Aug 13-16

https://docs.google.com/document/d/1 Ly5f_89op9pjqKi5I58AJARGp4awfov-TMOEPjxJJw/edit - Professional learning sessions presented by Dave Bergerson in Wisconsin Rapids include: Science Essential Elements - June 13-14 - understanding and implementing the alternative science standards for the 1% of students with the most severe cognitive disabilities; A Deep Dive into the Science and Engineering Practices - July 9-12; and, Crosscutting Concepts in Science - Aug 13-16. Credits through UW-LaCrosse are available.

Resources

• \$10,000 DPI Innovative OER Materials Grants - due June 30th

WISELearn OER Innovation Grants - https://dpi.wi.gov/wiselearn/oer-innovation-grants - are now open! Apply by June 30th for a grant to elevate and share your best projects or start a new initiative. DPI is offering twenty competitive \$10,000 grants to Wisconsin public education entities (schools, CESAs, libraries, etc. - collaboration encouraged). At least 60% of the grants are for implementation and professional learning for mathematics and English language arts standards-aligned open educational resources (OER). The other 40% are available to any other subject area to create, adapt, and support OER. Open educational resources expand your impact by letting other educators freely reuse (and usually adapt) content, all while giving credit where it's due. CESA project staff will provide training and support. Grant work will be shared publicly in the WISELearn content-repository.

My Skills Career Exploration Grants from DWD - due June 4th

MySkills Career Exploration Grant or https://bit.ly/2rZq9DX - DWD is requesting proposals for the MySkills Career Exploration Grant to provide middle and high school students with a career readiness and exploration program. The purpose of this Request for Proposal (RFP) is to ensure that youth, between sixth and tenth grades, are able to choose, experience and reflect on a wide variety of age-appropriate skill and career-related activities. Questions regarding the grant must be submitted on or before 12:00 pm on May 23, 2018. Proposals due on or before 2:00 pm on June 4, 2018.

• Science Fair Resources Website

https://dpi.wi.gov/science/science-fairs - This new DPI website provides ideas, resources, and suggestions for science and engineering fairs. These fairs will ideally move beyond a very traditional project, based on a linear interpretation of a scientific method, toward engaging students in meaningful, community-based sense making and problem solving. This site has ideas for alternative formats to share projects and connect to the WSS/NGSS.

Volcanoes - Phenomenon of the Month

Could we have an eruption in WI? What's your evidence? Having student groups each explore volcano phenomena from the perspective of a different crosscutting concept could provide interesting perspectives to share across the class. The Innovative Schools Network recently provided links to a few volcano instructional resources - Volcanoes National Park USGS Updates Kīlauea Summit Eruption | Lava Returns to Halema'uma'u Video.

• Tom Wolfe and Scott Kelly - The Right Stuff

https://www.nytimes.com/2018/05/16/opinion/scott-kelly-tom-wolfe-.html - This article by former astronaut Scott Kelly details how Tom Wolfe's book, The Right Stuff, inspired him to become a test pilot (leading to work as an astronaut). This book is interesting from a science and engineering perspective, but could also be read with a social lens on bias and sexism in STEM fields.

Science Safety – Caution against open flame tests

https://www.washingtonpost.com/news/education/wp/2018/05/09/a-classroom-science-experiment-turned-into-a-chemical-fire-injuring-17 - this story presents an important caution against open flame tests where different salts are burned in open containers of flammable liquids to produce varying colored flames.

Student Opportunities

STEM Forward - Milwaukee area student STEM opportunities this summer

http://www.stemforward.org/2018-stem-summer-programs/ - STEM Forward provides a nice listing of STEM-related summer camps and opportunities for students, largely in the Milwaukee area. If you have others to share across the state, email them to me and I can have them posted to the STEM Wisconsin calendar: www.wistem.org/stem-pd-calendar.html.

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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