

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: <u>dpi.wi.gov/science/social-media</u>.

Cheers, Kevin

Learning Opportunities

- Connecting Science and Social Studies K-8 @CESA 6 Nov 18
- <u>2020 WSST Annual Conference New Elementary Strand</u> and Call for proposals
- WSELA Elementary Science Summit on Feb 12 and Review from Oct 16
- <u>Summer Materials Science Workshop</u> June 22-26
- Smithsonian STEM Education Summit (free!) March 6-8

Resources

- <u>2020 Book Study and Presidential Awards</u> w/ a DC Ceremony!
- <u>Why Trust Science?</u> new book and related podcast from Naomi Oreskes
- <u>STEM Grant for those involved in science fairs</u> + Science Fairs Reminder!
- <u>Wisconsin Science and Street Art Project</u>

Student Opportunities

- <u>State Water Inquiry Project</u> ongoing, w/ funding still available
- <u>Submit Science-based Ornaments for the State Capitol Holiday Tree!</u>
- Junior Science and Humanities Symposium register by Dec 13
- Middle School Science Bowl Jan 25 (register by Jan 1)
- <u>Girls Who Code</u> 100th club started in Wisconsin!
- JASON K-12 Recycling Video and Poster Contest deadline Dec 20
- Biomimicry Youth Design Challenge for MS or HS register by Mar 1

Details

Learning Opportunities

• Connecting Science and Social Studies K-8 - @CESA 6 - Nov 18

<u>https://login.myquickreg.com/register/event/event.cfm?eventid=24793&from_cms=1</u> - In this workshop I'll be leading, we'll dig into commonalities across effective instruction in both science and social studies. We'll dig into sample lessons and related resources, with time for individual/team work as well. Register by Friday, 11/15.

• 2020 WSST Annual Conference - New Elementary Strand and Call for proposals

<u>https://www.wsst.org/conference-2020</u> - New - on Thursday, March 19th, we'll have an elementary strand at the WSST conference. While there will be elementary sessions throughout the conference, on this day there will be one during every session. And, please, consider presenting a session or a workshop at the annual WSST conference -<u>https://forms.gle/Gpmzv9Rc4hPr73438</u>. It's in the Wisconsin Dells this year from March 19-21. Formal, informal, higher ed, etc. - all are welcome to present. Deadline for workshop proposals is Nov 30, 2019. Deadline for all other sessions is Dec 14, 2019.

• WSELA Elementary Science Summit on Feb 12 and Slides from Oct 16

For our next Wisconsin Science Education Leadership Association meeting on Feb 12 we're going to focus on elementary science! All are welcome. This will include set time to discussion instructional materials in groups with other districts using them (such s Mystery Science, Amplify, FOSS, Smithsonian STC, EiE/PLTW, etc.). We'll also discuss topics such as finding time, effective integration, working with administration, and successes. Location is TBD. Email <u>kjniemi@wisc.edu</u> to rsvp. And, here is a link to the <u>slides from the Oct 16 WSELA meeting</u>.

• Summer Materials Science Workshop - June 22-26

https://www.asmfoundation.org/who-we-impact/teachers/camp-calendar-application/ -The Prairie School in Racine, WI and ASM Materials Education Foundation are sponsoring a no-cost (nationally-based) STEM workshop (\$1200 value) for Science, STEM, industrial/career and technical education teachers. It introduces teachers to tools for engaging students in science and engineering practices of NGSS through real-world application and hands-on activities. The workshop will include cost-effective activities, field trips, career connections, and meals. Credits available. Application Form: https://www.surveymonkey.com/r/VYX3P3P

• Smithsonian STEM Education Summit (free!) - March 6-8

https://ssec.si.edu/event/stem-education-summit-building-coalition-attracting-andretaining-diverse-stem-teaching - The Smithsonian Science Education Center is accepting applications for its "STEM Education Summit 2020: Building a Coalition for Attracting and Retaining a Diverse STEM Teaching Workforce." The summit will be held at Xavier University in New Orleans on March 6-8, 2020. District teams of 3-5 and mentors should apply by Dec 1. Those selected will be notified by Dec 31st and will receive round-trip airfare, lodging, and meals served at the summit—all at no cost to the district team.

Resources

• 2020 Book Study and Presidential Awards - w/ a DC Ceremony!

https://dpi.wi.gov/science/standards/learning/book-study - There is still time to sign up for the virtual book study I'll be coordinating w/ WSST, starting in January. As you may know, members of WSST and applicants for the <u>Presidential Award for Excellence in</u> <u>Mathematics and Science</u> (PAEMST) get the book for free if they sign up early enough. Speaking of PAEMST, there was an amazing, three-day ceremony in Washington DC in October celebrating the National Awardees from 2017 and 2018, who included **Michelle Howe (Lodi) and Rick Erickson (Bayfield).** You can <u>sign up for the book study here</u>. You can apply for PAEMST or <u>nominate a K-6 science, math, STEM teacher here.</u>

• Why Trust Science? - new book and related podcast from Naomi Oreskes

<u>https://www.sciencefriday.com/segments/naomi-oreskes-why-trust-science/</u> - this Science Friday podcast includes some great insights on what science is, building from a new book titled, <u>Why Trust Science</u>, from Harvard professor Naomi Oreskes. I especially liked her discussion of ways science is done (hint - not the scientific method). She had another past book worth checking out too, <u>Merchants of Doubt</u>, about issues of corporate-funded science (think tobacco and big oil). Students and educators should be reading these texts!

• STEM Grant for those involved in science fairs + Science Fairs Reminder!

<u>https://www.societyforscience.org/stem-action-and-research-grants</u>- The national Society for Science is offering STEM grants for educators who have had students involved in ISEF connected science fairs (that would be <u>CSEF</u> and <u>BSSEF</u> in Wisconsin). I encourage you to also publicize CSEF and BSSEF to your students and encourage them to share the science and engineering projects from your classroom (such as the <u>water-related inquiry</u> <u>projects</u> you may be doing or planning connected to the state initiative). The link to the application is here: <u>https://societyforscience-gr.fluidreview.com/</u>

• Wisconsin Science and Street Art Project

https://madison365.com/ginger-ann-contreras-seeks-to-connect-science-with-street-

<u>art/</u> - How do we connect more students with science? This arts project in Madison takes an interesting approach to that equity-based question.

Student Opportunities

• State Water Inquiry Project - ongoing, w/ funding still available

<u>https://dpi.wi.gov/inquiry</u> - The State Water Inquiry project is ongoing through this year (and through the next few years). We aim to build momentum for science literacy and community-based science through real-world inquiry projects. <u>There are small grants</u> <u>available for equipment</u> such as refractometers to test salinity (important in winter!). This website has a core project idea (evaluating surface run-off), as well as other sample ideas at each grade level linked to the standards -<u>https://dpi.wi.gov/science/water</u> (scroll down). If you do water projects, please share pics, data and ideas at <u>https://siftr.org/WisconsinWater/</u>.

• Submit Science-based Ornaments for the State Capitol Holiday Tree!

Students from across the state are encouraged to create science-themed ornaments for the Capitol holiday tree and submit them by Friday, November 22nd. Perhaps a <u>borax</u> <u>crystal ornament</u>? Ornaments can be mailed to: Claire Franz, Wisconsin Department of Administration, Division of Facilities Development & Management, 17 West Main Street, Suite 119, Madison, WI 53703.

• Junior Science and Humanities Symposium - register by Dec 13

<u>https://www.uwlax.edu/ex/jshs/</u> - As I continue to say, students should be doing longterm science investigations in their science classes from K-12, and they should be sharing those projects with the public in some way. That might be a family STEM night, the state or regional science fair, or the Junior Science and Humanities Symposium. This is the type of work that truly builds scientific literacy and sticks with students throughout their lives (unlike answering the questions at the end of the chapter).

• Middle School Science Bowl – Jan 25 (register by Jan 1)

<u>https://science.osti.gov/wdts/nsb/Regional-Competitions/Middle-School-</u> <u>Regionals/WI_Wisconsin-Middle-School-Regional-Science-Bowl</u> - Registration is now open for the 6th regional National Science Bowl competition

for Wisconsin middle school students on Jan 25, 2020 at UW-Madison. The team that wins this regional competition will go on an all-expenses-paid trip to compete at the National Science Bowl finals in Washington D.C. this spring. The event is a fast-paced question-and-answer competition focused on math and science. The teams include four students, an alternate student, and a coach -- and can be from public schools,

independent schools, and home school groups. There is no registration fee. Lunch, tshirts, and hands-on science activities throughout the day will be provided. For more information contact Matt Bowman, <u>mdbowman@wisc.edu</u>.

• Girls Who Code – 100th club started in Wisconsin!

<u>Girls Who Code Clubs</u> are FREE after-school programs for 3rd-5th or 6th-12th grade girls to join a group of supportive peers and role models and use computer science to change the world. Participants not only learn hard coding skills and computational thinking, but they'll also learn project management skills, collaboration, bravery, resilience, and how to positively impact their community. When you start a GWC Club, you'll gain access to free resources, flexible plug and play curriculum, a \$300 clubs fund, ongoing support, and alumni opportunities. There's no computer science experience needed to get started. Contact Megan Cindric (megan.cindric@girlswhocode.com) to learn more.

• JASON K-12 Recycling video and poster contest - deadline Dec 20

<u>https://www.jason.org/2020-recycling-contest</u> - K-12 students are invited to participate in the recycling contest by creating a video or a poster that imagines what recycling will look like in 50, 75, or even 100 years by designing a solution to a current problem today.

• Biomimicry Youth Design Challenge for MS or HS - register by Mar 1

<u>https://youthchallenge.biomimicry.org/en/challenge/youth-design-challenge-2020</u> - The Youth Design Challenge (YDC) is a free, hands-on, project-based learning experience that provides educators with a new framework to introduce biomimicry and an interdisciplinary approach to science and environmental literacy. Working in middle or high school teams with an adult coach, students create innovations based on nature that support a healthier planet.

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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