Hello Science Education Leaders,

I hope you're finding time to relax and staying safe as we prepare for an interesting fall learning experience! Below are the latest science education resources and opportunities I've heard about, with some particularly for digital learning and safe in-person learning. 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.

You may have noticed that there is no banner/header for this newsletter. Out of respect for the Black Lives Matter movement and with guidance from the WSST Board of Directors, I'll be changing the name of the newsletter to "Wisconsin Science Digest." Along these lines, I'm very excited about the new Equity Position Statement out from WSST and DPI Science - see more details below.

Cheers, Kevin

- Wisconsin Equity in Science Education Position Statement
- Lab Safety Resources for the era of COVID-19
- Wisconsin Discussion on Current Lab Safety Issues August 17 at 10am
- DPI, PBS, and WSST Survey what are your needs for this fall?
- 2020-21 WSST and DPI Book Study Sign-Up Equity focus
- CSSS Resources on Return-to-School
- Open-Sci-Ed Virtual Learning Resources
- Curated List of Virtual Labs and Simulations
- NSTA Webinar Series on Virtual Teaching and Amplify Webinars on Equity in STEM
- Congratulations to Karen Olson PAEMST Science Awardee!
- Building an Inclusive Classroom Culture learning module
- Research-based Resource Stop Pre-Teaching Science Vocabulary
- Teaching about Bias and Facts in Media

Details on these Resources and Opportunities

Wisconsin Equity in Science Education Position Statement

https://docs.google.com/document/d/1UZyioeMzhCiUxk3oG4XKvozHuXrU70y2o9qGiefyju4/edit?usp=sharing - This document was drafted and revised by the DPI Science Education Equity Workgroup. It was then reviewed, revised, and adopted by the WSST Board of Directors. It is a living document that can evolve with our collective understanding. It is based in research and lived experience. It will be a key discussion focus for the first WSST/DPI Book Study this year (see Book Study below). Please, read and share!

Lab Safety Resources for the era of COVID-19

These resources are for guidance purposes only and should not be taken as legal advice. Final decisions about lab safety must be in accordance with district and local/state health policy. The

DPI Forward Education resource has sections on <u>mitigation procedures</u> and <u>safety protocols</u> that can be referenced as well.

https://www.youtube.com/watch?v=GyilhajkBg8&feature=youtu.be - Lab Safety in the world of COVID - Webinar from the Council of State Science Supervisors featuring Ken Roy, NSTA Safety Officer, and Kevin Doyle, Morris Hills SD (Note: the slides are intellectual property and must not be duplicated).

NSTA has a collection of <u>science safety resources</u>, although they are not specific for the COVID-19 situation. <u>NSTA Safety Resources</u> position statements and safety issue papers. Ken Roy did write a blog for them - <u>Safety Recommendations for Opening the New School Year</u> - as well as guidance on <u>At-Home Science Labs</u>.

<u>CDC Guidance for General Laboratory Safety Practices during the COVID-19 Pandemic</u> though focused on research and academic labs. Also, <u>CDC Recommendations for Cleaning and Disinfection and Corning provides a business angle on lab safety.</u>

Wisconsin Discussion on Current Lab Safety Issues - August 17 at 10am

https://widpi.zoom.us/j/97005909848 - no registration needed, simply join at 10am at this Zoom link or at this phone number: (312) 626-6799, w/ code 970 0590 9848. To avoid any unintended ramifications of statements made by participants, it will not be recorded. Recorded webinars and resources on safety are listed above.

DPI, PBS Wisconsin, and WSST Survey - what are your needs for this fall?

https://forms.gle/c4J5r18oUeroJTwv7 - Please, fill out this brief survey on your needs to better support learning this fall. DPI, WSST, and PBS Wisconsin will use the results to tailor professional learning and resource development. I value your insights.

2020-21 WSST and DPI Book Study Sign-Up - Equity focus

https://forms.gle/mfPLky5gdQDUNcSA8 - registration form. Please, complete this form if you're interested in participating in the 2020-21 WSST and DPI/PAEMST Virtual Book Study. This year will be a bit different, as we won't have one set book, but we'll dig into a variety of articles, books, and resources on the topic of equity in science education. We'll meet the 3rd Monday of each month, starting September 21st, where we'll dig into the Wisconsin Science Education Equity Statement. More details and links for joining will be shared with registrants. There is no deadline to sign up or requirement to join every month -- instead you're welcome to register and join anytime.

CSSS Resources on Return-to-School

http://cosss.org/projects - This series of resources provides suggestions and thoughtful questions on preparing for effective instruction, assessment, and student well-being this fall. There are new documents for this fall, as well as a series of documents created last spring that are still relevant.

Open-Sci-Ed Virtual Learning Resources

https://www.openscied.org/remote-teaching/ - A webinar on "staying grounded when teaching remote" as well as resources for supporting unit storylines, phenomenon-based learning, and effective norms when teaching online.

Curated List of Virtual Labs and Simulations

https://onlineteacheryouniversity.com/54-resources-for-creating-a-low-cost-virtual-lab-experience-for-your-online-students/ - A curated list of online labs and simulations that can be used to supported online or distanced learning environments.

NSTA Webinar Series on Virtual Teaching and Amplify Webinars on Equity in STEM

NSTA - has an inexpensive webinar series on virtual learning in science coming up: https://my.nsta.org/event/nsta-web-seminar-series-sept20-topic-study-for-k-12-science-teachers-distance, and there is a free NSTA webinar on resources supporting a return-to-school: https://my.nsta.org/event/web-seminar-back-to-school-with-nsta-nsela-and-cs3-august-20-2020.

Amplify has a series of webinars on equity and inclusion in STEM subjects on Sept 21 and 22 that also look good and are free: https://go.info.amplify.com/getintouchoption-webinar-fy20 stem virtualforum national register

Congratulations to Karen Olson - PAEMST

https://www.paemst.org/finalist_profile/5116 - The Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) is the highest teaching honor coordinated by the National Science Foundation and White House staff. The grades 7-12 awardee from Wisconsin fro 2019 was released this month - it is Karen Olson, Baraboo High School Teacher. Congratulations to Karen! She'll receive \$10,000 and a trip to Washington DC at a later date. The next grade 7-12 application cycle will begin in December.

Building an Inclusive Classroom Culture - learning module

https://sites.google.com/view/5die-culture/structure - Cindy Kern at Quinnipiac University developed a learning module for her pre-service teachers on understanding what culture means from a science lens and supporting teachers in building a welcoming culture within their classrooms. These lessons and ideas would be a great tool for building an equitable science classroom, though they will take some work to make your own (not a simple plug and play, but that's a good thing).

Research-based Resource: Stop Pre-Teaching Science Vocabulary

http://stemteachingtools.org/news/2020/new-tool-why-you-should-stop-pre-teaching-science-vocabulary-and-focus-on-students-developing-conceptual-meaning-first - Research suggests that all students, including English Learners, learn best when they learn vocabulary when it's needed in their sense-making work, not when it is pre-taught.

Teaching about Bias and Facts in Media

https://chicago.suntimes.com/2020/8/3/21353300/news-literacy-fake-news-newsguard-vaccine-safety-sarah-brandt - We need to build relationships with students to be able to thoughtfully discuss bias and misleading (or false) statements in news and media. This is a critical skill for students and effective instruction takes a lot more than simply presenting evidence and telling them they're wrong. They have to know how to figure it out and feel valued in that process.