

Hello Science Education Leaders,

Because I've been getting a lot of questions about where we're at with standards, I decided to send a newsletter sooner than usual. The standards work is moving forward - I can't make an official announcement yet, but look for something in the next month or two. I should have some official examples of new Forward Exam science questions to share by then as well.

Today is the last day for administrators to sign up for an admin workshop I'm facilitating in the Madison area on supporting instruction with the new science standards (with an Educator Effectiveness lens in mind) -

https://www.regonline.com/registration/Checkin.aspx?EventID=2037315.

Below are the latest science education resources and opportunities I've heard about. I'd particularly encourage you to consider how you might support students in getting involved in deeper level science projects--several examples of opportunities to share such projects are noted.

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. And, please forward this email to your science colleagues!

Cheers, Kevin

Student Opportunities

- Science Fairs MS and HS interest form due Nov 15
- Junior Science and Humanities Symposium (JSHS) interest form due Dec 1
- EngineeringGirl Essay Contest due Feb 1st
- Samsung Solve for Tomorrow deadline of Nov 9
- Army Education Outreach Programs eCybermission and Junior Solar Sprint

Educator Learning Opportunities

- Wisconsin Science Festival (Educator and student learning) Nov 2-4
- Wisconsin Science Education Leadership Association (WSELA) Oct 10
- Wisconsin Association for Environmental Education Conference Oct 19-21

- Formative Assessment Webinar Series fall/winter
- sySTEMnow Conference Oct 31
- Environmental Education workshops at CESAs around the state fall/winter
- Pilot Evolution course from HHMI applications due Oct 12
- Green and Healthy Schools Solution Summit Oct 27

Resources

<u>Fabulous phenomena database</u>

Details

Student Opportunities

Science Fairs - MS and HS - interest forms due Nov 15

https://dpi.wi.gov/science/science-fairs/csef - HS - Capital Science and Engineering Fair - takes place Feb 17th in Madison, though HS students from anywhere in the state are welcome. Entrants of this fair, or really anyone from across the state, can enter the Badger State Science and Engineering Fair (Mar 17) - bssef.org - There is also a middle school level science fair in Madison, with anyone welcome, https://dpi.wi.gov/science/science-fairs/masters. Due dates will be early April, with the fair in early May (TBD).

Junior Science and Humanities Symposium (JSHS) - interest form due Dec 1

https://www.uwlax.edu/conted/jshs/ - JSHS is another great venue to share investigations and research papers students have created. I see this type of project-based work and formal presentation as a critical part of a high school science experience (it is just for high school students). The actual showcase is Jan 27-28.

EngineeringGirl Essay Contest - due Feb 1st

https://www.engineergirl.org/GetThere/Contest/42593/42868.aspx - This contest is open to girls and boys in grades 3-12. Students write a letter to local city officials detailing and proposing solutions to a problem in the community - transportation, power, recreational opportunities, healthcare, public safety, and waste management are some of the suggested topics. This could be a nice engineering and ELA extension to a science unit!

Samsung Solve for Tomorrow - deadline of Nov 9

http://www.samsung.com/us/solvefortomorrow/ - The contest challenges students in grades 6-12 to show how STEAM/STEM can be applied to help improve their local communities. The ideas have to be fleshed out by the Nov 9th deadline and submitted by teachers.

Army Education Outreach Programs, eCybermission and Junior Solar Sprint

eCybermission - http://www.usaeop.com/ecybermissioncompetition/ - is for student groups in

grades 6-9, where they conduct and write up a science or engineering investigation.

Junior Solar Sprint - http://www.usaeop.com/programs/competitions/jss/ - is for students in grades 5-8 where they build and compete with small, solar race cars.

Educator Learning Opportunities

Wisconsin Science Festival (Educator and student learning) - Nov 2-4

WiSciFest.org/teachers

- *Statewide field trips Field trips options across the state at UW campuses, museums, etc.
- *Science in your community We can help you bring the science festival to your location!
- *Teacher workshops in Madison Saturday Nov 4 Great workshops including <u>Free foldscope origami microscope</u> classroom kits and Physics neutrino detector kits for limited registrants (first come first serve for these high value educational resources). <u>Full Workshop Information pdf Registration Link</u>
- *Field trips at UW-Madison Unique field trip stops throughout campus on November 2-3, still available early afternoon on Nov 2 and Nov 3, including the free Discovery Expo and robot zoo with dozens of hands-on exploration stations; limited transportation assistance is available.
 - Wisconsin Science Education Leadership Association (WSELA) Oct 10

This networking group meets 3x a year to discuss science programming efforts in schools. The group includes science coordinators, dept chairs, higher ed representatives, administrators, and teachers who help support effective science programming. Recently, the meetings have included a lot of discussion of NGSS implementation efforts. The Oct 10th meeting will be held at MSOE. More details come out through the WSELA listserv, a low traffic list where I post resources on occasion too - to get on the list and get further details about the WSELA meeting, send an email to Kevin Niemi, UW-Madison WISCIENCE Coordinator, kiniemi@wisc.edu.

Wisconsin Association for Environmental Education Conference - Oct 19-21

http://www.waee.dreamhosters.com/2017-conference-registration - The WAEE annual conference will be in Mequon at the Concordia Univ Center for Environmental Stewardship. Thursday will be pre-conference sessions requiring additional registration. The conference gather educators, natural resource professionals and stakeholders dedicated to sharing and celebrating significant innovations and advancements in the field of environmental education. The theme of the conference is "Water Rising," with conference strands on community engagement; best practices in environmental education; diversity, equity and inclusion; and early childhood education.

Formative Assessment Webinar Series - fall/winter

https://docs.google.com/document/d/1SZcS476vstCAl87Nu3ozS4s4PNze4q-<u>Tt1LWpWJp5BQ/edit</u> - This series of webinars on formative assessment in math and science is being provided by the Michigan Math and Science Centers. Presenters are experts from around the country. Science presenters are NGSS experts, who will connect formative assessment practices with these standards. The information page also has a link to recorded sessions.

sySTEMnow Conference - Oct 31

http://www.stemforward.org/systemnow/ - This annual STEM conference shares details of great programs happening in SE Wisconsin. It's 8:00 to 3:30 pm at the Italian Community Center in Milwaukee. The lunchtime keynote speaker this year is Donald Bassi, the President of FIRST Robotics.

Environmental Education Workshops at CESAs (and around the state) - fall/winter

https://drive.google.com/file/d/0B2s2PQaAUEj2Y3paaVI1WWICQW8/view - CESA 1 will be doing a series of four environmental education workshops from fall through spring of 2017-18. CESAs around the state and other organizations will also be conducting these workshops throughout the year - more details here: https://www.uwsp.edu/cnr-ap/wcee/Pages/Professional-Development-Old-Page.aspx

Pilot Evolution course from HHMI - applications due Oct 12

https://www.surveymonkey.com/r/evolution-app - Howard Hughes Medical Institute's (HHMI) BioInteractive is soliciting applications from high school biology teachers to provide feedback on our brand new, self-paced online course about evolution. If you are selected to pilot the course, you will be compensated for your time and effort. Piloting the course will require reliable internet access and your dedication of a grand total of 10-15 hours during a 30-day window. Because the course is self-paced, how you allocate that time is up to you, we just ask that you complete the course and the course evaluation within 30 days. If your application is selected, you will be compensated with a \$500 gift credit card upon completion of the course and course evaluation.

Green and Healthy Schools Solution Summit - Oct 27

http://eeinwisconsin.org/net/calendar/details.aspx?s=130298.0.0.2209&c=5994280 - Get inspired by the best place-based education practices in sustainability. Learn skills and content to advance school sustainability. Join with like-minded professionals in your field who believe education is the best way to make this world a better place. Walk away with practical steps to enhance your practice. Schools are encouraged to bring a team. Contact Susan.Schuller@uwsp.edu for schools sending 3 or more representatives to receive a registration discount code. Lunch is provided. 9am to 3:30pm.

Resources

Fabulous phenomena database

https://www.georgiascienceteacher.org/phenomena/ - Thanks to Jo Miller, CESA 8, for sending me a link to this awesome database of phenomena. It was developed by the Georgia Science Teachers Association, where teachers submitted phenomena ideas, linked to the NGSS-like Georgia standards and including instructional ideas.