



Hello Science Education Leaders,

I hope the new school year is starting well for you! Below are the latest science education resources and opportunities I've heard about. There is also some new information regarding science licensing that has been sent to districts that I'm sharing here as well. Please, let me know if you have any questions about the topics in this email or if I can come out and support science work in your district.

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

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Details

Announcements

- Changes to Licensure - New Emergency Rule

On Aug 18th, 2016, Superintendent Evers signed an emergency rule for teacher licensure to help address shortages of licensed teaching candidates. This rule allows for teachers with a 6-12 (EA-A) mathematics, ELA, science, or social studies license, whether initial or professional, to add any other secondary license which has an option for a content test pathway. For example, a high school mathematics teacher could take the Praxis test in physics and add that license. Or, a physics teacher could take the Praxis test in computer science and add that license. Here's a link to the technical details on these changes: <http://dpi.wi.gov/sites/default/files/imce/policy-budget/PI%2034%20Emergency%20Rule%20signed.pdf>

- Environmental Science Licensure Clarification

After a series of discussions this summer, policies related to who can teach environmental science have been clarified. Previously, the intent was that a teacher needed to have either a 1606 or 1615 license to teach a high school environmental science/studies class. Biology teachers with a 605 license were technically unable to teach environmental science, though there may have been some inconsistency with that. Now, a teacher may teach an introductory level environmental science course with a 1605, 1606, or 1615 license. In order to teach AP environmental science, it's expected that the teacher has either the 1606 or 1615 license, which are intended to include a greater environmental background.

- Robotics Team Grants - \$5000 - Applications due Oct. 14th

<http://dpi.wi.gov/stem/grants/robotic-league> - Eligible teams include students in grades 9 through 12 and have at least one mentor. Allowable expense will include fees, kits, supplies required to participate in robotics competitions, travel expenses, and a stipend for the mentor of an eligible team. Applications and details are on this website.

- Congratulations PAEMST Awardees and Finalists!

<https://recognition.paemst.org/view> - Congratulations to Lori Baryenbruch, River Valley Elementary, the K-6 National Science Awardee from Wisconsin for the 2014 Presidential Awards for Excellence in Mathematics and Science Teaching. And, congratulations to Juan Botella, Monona Grove High School, the 7-12 National Awardee from Wisconsin for the 2015 Presidential Awards for Excellence in Mathematics and Science Teaching. They both receive a trip to Washington D.C. for themselves and a guest, a reception at the White House, and \$10,000. The 2016 Wisconsin finalists for the PAEMST in science are Leigh Kohlmann, 6th grade teacher at Rock River Intermediate School in Waupun, and Jay Garvey Shah, 5th grade teacher at Creekside Elementary School in Sun Prairie. They'll be recognized at a ceremony on October 12th in Milwaukee. The national committee is still determining which of them will head to DC next summer as the state awardee.

- Feedback on the Implementation of the Every Student Succeeds Act (ESSA)

https://docs.google.com/forms/d/1MJNn6nHP6qCtILScMjpKO5WG6o_6_ilgmYCsJ1la2Uw/viewform - DPI would love to get your feedback on priorities in the state for ESSA programs and

funding. We have more flexibility with these funds than in the past. You can select one area of funding at a time (i.e., College and Career Readiness, school improvement, and/or the “other” categories) to suggest work needed around the state. For example, that could include increased funding and professional development support for science and STEM education.

- Dollar-for-Dollar Matching at DonorsChoose

http://www.kohleducation.org/userimages/hk_press_release_donors_choose.pdf - You may be or know one of the lucky teachers who had a [DonorsChoose](#) project proposal online, as the Kohl Education Foundation on Tuesday decided to fund all of them in Wisconsin! Even if that wasn't you, you still have the opportunity to have the Kohl Foundation match donations to your new DonorsChoose proposals for the time being - great way to get materials for exciting new projects this year!

- NCWIT Awards Application for Female HS Students in Computing

<https://www.aspirations.org/aspirations-community/wisconsin> - This award is for HS females interested and involved in IT and computing, also showing solid leadership ability, good academic history, and plans for post-secondary education. The application period for the 2016-2017 Award for Aspirations in Computing will be from September 1, 2016 through November 7, 2016. Winners get cool prizes, gadgets, and scholarships, and can join a community of like-minded technical women and meet IT professionals in WI. Along these lines, there's also a [Girls Who Code Club starting at UW-Milwaukee](#).

- High School Science Teacher Survey - Got Milk?

<https://www.research.net/r/NGT66XQ> - A piece of trivia about Kevin Anderson - my favorite drink is chocolate milk! Please, take 5 minutes and fill out this survey for the Wisconsin Milk Marketing Board. They're working to create some free science educator resources connecting to contexts of dairy science. A research group called Vivayic is conducting the survey for them. If you have any questions, please contact info@vivayic.com. Thanks!

Opportunities/Resources

- Effective Science Classroom Observations - Workshop on Sept 29

<https://www.regonline.com/Effectiveobservationsofscienceteachersconnectingto> (registration link and further details) - Educator Effectiveness is continuing under ESSA, as it's part of state law. In this workshop we'll review key characteristics of the Next Generation Science Standards and what those suggest for observing and documenting effective science instruction. We'll build from tools developed by the <http://www.sciencepracticesleadership.com/> research group out of Boston. We will connect this work to the Danielson model for teacher evaluation, and Mark Mueller and/or Katie Rainey from the DPI Educator Effectiveness Team will be with us for the day to support those connections. As part of the workshop, we'll view videos of classroom practice and discuss how we'd score them relevant to the NGSS and the Wisconsin effective instruction rubrics. Location: Monona Grove School District Office, 3rd floor PD space. Time: 9am - 3pm. Cost: \$20.

- NSTA Area Conference in Minneapolis - Oct 27-29

<http://www.nsta.org/conferences/area1.aspx> - Join 1000's of your fellow science teachers for the

NSTA Area Conference in Minneapolis - lots of sessions on STEM, NGSS, and literacy/science connections. This opportunity is especially convenient for teachers in Western and Northwestern Wisconsin. Here's a [sample letter](#) to provide your administrator to support attendance. The earlybird registration deadline is Sept 16th.

- 2017 NSTA Area Conference in Milwaukee - Call for Session Proposals

<http://www.nsta.org/conferences/sessions/meetingsacceptingabstracts.aspx> - In the 2017-18 there will not be a traditional Wisconsin Society of Science Teachers (WSST) annual conference. Instead on Nov 9-11, 2017, WSST is partnering with NSTA to support the NSTA Area Conference in Milwaukee. Please, consider submitting a proposal to present at this conference - share the story of effective science and STEM in your classroom, school, or district!

- Upcoming CESA Science Workshops

Science workshops and networking opportunities are coming up this fall at CESAs around the state: CESA 2 - Nov 29; CESA 3 - Oct 21; CESA 4 - Nov 18; CESA 7 - Sept 30, Nov 4, Dec 15; CESA 9 - Nov 3; and CESA 11 - Oct 7. See your local CESA website for registration information.

- Bat Professional Development and Bat Festival at the Milwaukee Public Museum - Oct 1st

<https://batslive.pwnet.org/> - Project EduBat is providing a free workshop for teachers from 9:30 to 2:30 as part of Bat Day at the Milwaukee Public Museum. With current challenges such as white nose syndrome, bats are clearly a species of concern in Wisconsin. Work with wildlife biologists from the U.S. Forest Service! You can also bring your family for the Bat Festival (I'm taking my kids!) - <http://wiatri.net/inventory/bats/news/batfest.cfm>. During Bat Week, Oct 25-28, The U.S. Forest Service is also supporting a series of short student webinars featuring students doing citizen science bat research in their communities - <http://www.batweek.org/index.php/bat-squad-webcasts>.

- Field Study Grants - GO Fund

<http://eeinwisconsin.org/resource/about.aspx?s=122383.0.0.2209> - get your students doing science outside with support from the Go Outside Fund! Applications are due by Oct. 15th. Teachers of all content areas and grade levels can apply. Grants have a \$500 max.

- Field Day Lab - Become a Fellow Designing MS Science Games/Simulations

<https://docs.google.com/document/d/10BuSYOsPzbAShINtspxptdVVzRqkxzQPKL1aB0uVPtM/edit> - learn more about game-based learning through this year-long experience. See previous work done at theyardgames.org

- MakerFaire Milwaukee - Sept 24-25

<https://makerfairemilwaukee.com> - this is a great event for educators, students, and families. There is a day-long workshop for educators on the 24th - <http://www.makermke.org/education>. Students 16+ can enter the GE Design and Build Challenge: <https://makerfairemilwaukee.com/design-build-challenge/>

- The Wongs - Effective Teaching Workshop in Fond du Lac - Oct 6

<https://www.eventbrite.com/e/the-wongs-and-how-to-be-an-effective-teacher-tickets-23191421165> - national speakers Harry and Rosemary Wong will be presenting a one-day workshop on effective teaching practices at Marian College from 8:30 to 3:30 on Oct 6th. Registration is only \$25.

- P21 - 21st Century Learning Exemplar Program Application

www.P21.org/apply - Join P21's 21st Century Learning Exemplar Program! The application period opens 10/15/16.

- Free Science News Mag for HS

<https://www.societyforscience.org/science-news-high-schools> - This is a limited, free offer through foundation funding - high school teachers can get 10 print copies of each issue of Science News and access to all of the online materials. Nice way to connect to science literacy.

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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