



Hello Science Education Leaders,

After several rounds of revisions, our new Wisconsin Standards for Science are heading to the Superintendent's Standards Advisory Council on Sept 18th. I'll send an email soon after with more formal news on next steps.

**To prepare for new science standards implementation, please take 10-15 minutes and fill out the statewide science needs survey: <https://goo.gl/forms/5jWnDLfgg74caCvv2>**

If you provide permission, statewide survey results will be shared in a GIS map format, providing valuable networking information and details about what work other districts are doing in science. We will also be **providing prizes** to six people who complete the survey - free registration to the [NSTA Area Conference on Nov 9-11 in Milwaukee](#) (\$175 value), or one of five NSTA Press books - [Big Data, Small Devices](#); [Argument-Driven Inquiry](#) (in variety of topics); [Picture-Perfect STEM K-2](#) or [3-5](#); or [NGSS For All Students](#).

Below 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](http://dpi.wi.gov/science/social-media).

Cheers,  
Kevin

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### Learning Opportunities

- [NSTA Area Conference in Milwaukee](#) - Nov 9-11
- [Principal and Instructional Coach Workshop - Getting to Know the NGSS and new Wisconsin Science Standards](#) - Oct 3
- [Plasma Physics Teacher Workshop and Student Expo](#) - Oct 24, 26-27
- [Wisconsin Center for Environmental Education Workshops](#) - at CESAs this Fall and next Spring
- [Aerospace Jam at the Milwaukee Bucks Stadium](#) - Oct 21

### Resources

- [DPI OER Innovation Grants to Create Instructional Materials](#)
  - [Wisconsin Space Grant Consortium](#) - Grant Opportunities - due Oct 16
  - [DoT Aviation Art Contest](#)
  - [Career and Tech Ed Non-Traditional Occupations Grants](#) - due Sept 30
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- [Phenomena of the Month](#) - Deep Seas Are Alive with Light!

## Announcements

- [Congratulations 2016-17 PAEMST State Finalists!](#)
- [Encourage Female Students Interested in CS and IT to Apply for the NCWIT Award](#)

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## Details

### Learning Opportunities

- NSTA Area Conference in Milwaukee - Nov 9-11

<http://www.nsta.org/conferences/area2.aspx> - There will not be a WSST conference this school year, instead we'll have the much larger-scale NSTA Area conference. You'll hear from national speakers like Sean Carroll, Will Allen, and Jo Handelsman! Many sessions will support use of the NGSS (and the new Wisconsin science standards). There's a special strand for connecting science and literacy, as well as equity in science teaching.

- Principal and Instructional Coach Workshop - Getting to Know the NGSS and new Wisconsin Science Standards - Oct 3

<https://www.regonline.com/supportingandevaluatingthenextgenerationssciencecla> - With the new Wisconsin standards for science anticipated at the beginning of October, I'd like to give leaders the opportunity to learn more about these standards and how to support teachers in effectively implementing them. We will explore how science instruction looks different with the Next Generation Science Standards, which have formed the basis of our new state standards. We'll delve into how a teacher's learning targets, instruction, and assessment might look in a "three dimensional" science system. The workshop will particularly have a coaching emphasis, though we'll also relate the work to elements of the Educator Effectiveness system. Located at the Monona Grove School District Office, register by Sept 27 - \$25 includes coffee, snacks, lunch (9am to 3pm, though you can attend for just the morning).

- Plasma Physics Teacher Workshop & Student Expo (free) - Oct 24 & 26-27

<http://fusioned.gat.com/dppoutreach/> - We have a great opportunity for free science education opportunities offered by the American Physical Society this fall in Milwaukee. You can now register for free science teacher workshops (October 24, 2017) and a plasma science expo for students (October 26-27), sponsored by the American Physical Society Division of Plasma Physics, along with MIT, Princeton University, General Atomics and more. Appropriate for middle and high school physical science and physics teachers/classes.

- Wisconsin Center for Environmental Education Workshops at CESAs this Fall and next Spring

<https://goo.gl/mBECJm> - The Wisconsin Center for Environmental Education (WCEE) is collaborating with several CESAs this fall and next spring to offer a series of professional

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development events. Workshops include “Addressing Middle and High School Disciplinary Literacy through Forestry Education”, “Step Outside and Into Engagement: Outdoor Classroom Leadership”, and “Utilizing the School Building as a Teaching Tool: Investigations in Energy Efficiency”, just to name a few. Substitute reimbursements up to \$125 available! Graduate credit through UW-Stevens Point is also available. Additional PD opportunities include a number of workshops on Project Learning Tree’s new curriculum called e-units and online graduate courses through KEEP.

- Aerospace Jam at the Milwaukee Bucks Stadium - Oct 21

[BUCKS.COM/JAM](http://BUCKS.COM/JAM) - The Wisconsin Space Grant Consortium will co-host the inaugural Aerospace Jam with the Milwaukee Bucks, Wisconsin Economic Development Corporation, and the Wisconsin Aerospace Partner at the BMO Harris Bradley Center in Milwaukee. This half-day student event will feature some of the 300+ aerospace industry companies in the state of Wisconsin and many of the WSGC Academic Institutions. College and high school students will have an opportunity to: network with aerospace industry leaders, discover available careers, and explore academic programs. The first 300 students (and chaperones) to register will receive a free ticket to the Buck's game, along with a \$10 Concession voucher.

## Resources

- DPI OER Innovation Grants - due Dec 1st

<https://dpi.wi.gov/wiselearn/oer-innovation-grants> - these grants support consortiums in creating core-curricular materials that are Open Education Resources (OER, which basically means free and online). For example, this could be a group of physics teachers coming together to make or adapt lessons to connect to the NGSS. It could be a group of elementary teachers from across a district creating interdisciplinary lessons. All materials will then be uploaded in the [DPI WISELearn system](#). Grants are up to \$10,000.

- Wisconsin Space Grant Consortium - Grant Opportunities

<https://spacegrant.carthage.edu/live/files/3635-aop18aopdf> - Aerospace Outreach grants up to \$5000 available to any established organization (such as K-12 schools). Focus is on aerospace/aviation connected programs. Deadline is Oct 16th.

<https://spacegrant.carthage.edu/live/files/3634-sip18aopdf> - Special Initiative grants up to \$5000 available for STEM programs. Special consideration for connections between formal and informal education organizations. Deadline is Oct 16th.

- Wisconsin Aviation Art Contest

<http://www.nasao.org/education/nasao-center-for-aviation-research-and-education/international-aviation-art-contest/> - Calling all scientists who are also interested in art! The International Aviation Art Contest is now underway and the theme for this year is “Flight Into the Future.” Deadline is Jan 19th. The contest is open to WI students in multiple age groups, and the top 3 entries in each age group will receive awards: 1<sup>st</sup> place – \$100 art supply gift certificate or an airplane ride for the winner and a guest; 2<sup>nd</sup> place – \$75 gift certi; 3<sup>rd</sup> place – \$50 gift cert. Winners’ artwork will also be displayed in the Madison Capitol

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Rotunda and will advance to the national competition. For questions, please contact Meredith Alt, WI DOT Aviation Education Program Manager at [meredithl.alt@dot.wi.gov](mailto:meredithl.alt@dot.wi.gov).

- DPI Career and Tech Ed Non-Traditional Occupation Grants - due Sept 30

<https://dpi.wi.gov/stem/grants/dpi-stem-grants> - This one-time award of funds is available for CTE STEM activities with a specific focus on engaging CTE students in non-traditional occupations (NTO) for November 1, 2017 - June 30, 2018. Grants are from \$3000 to \$7000.

- Phenomena of the Month - Deep Seas Are Alive with Light!

[www.nytimes.com/interactive/2017/08/21/science/the-deep-seas-are-alive-with-light.html](http://www.nytimes.com/interactive/2017/08/21/science/the-deep-seas-are-alive-with-light.html)

## Announcements

- **Congratulations 2016-17 PAEMST State Finalists!**

[www.paemst.org](http://www.paemst.org) - Please, join me in congratulating our three Wisconsin State Finalists for science for the Presidential Award for Excellence in Mathematics and Science Teaching. They are: Danielle Carlson (Balistreri) - Fennimore HS/MS, Rick Erickson - Bayfield HS, and Kristin Michalski (East Troy HS). Next, they'll be judged at the national level, where one of them will become our Wisconsin awardee and win \$10,000 and a trip to DC! Stay tuned for an announcement this fall for the 2017-2018 program - it will be for teachers in grades K-6.

- Encourage Female Students Interested in CS and IT to Apply for the NCWIT Award

<https://www.aspirations.org/aspirations-community/wisconsin> - The National Center for Women in Information Technology (NCWIT) Aspirations in Computing (AiC) Program provides technical young women with ongoing engagement, visibility, and encouragement for their computing-related interests and achievements from high school through college and into the workforce. High school award recipients are selected for their aptitude and interest in IT and computing, solid leadership ability, good academic history, and plans for post-secondary education. Winners and honorable mentions are selected at both a National and State level.

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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