



Hello Science Education Leaders,

First, I want to update you on the timeline for new state science standards. The first meeting of the science standards writing committee will be April 26th. They'll be wrestling with questions such as to what extent to use the Next Generation Science Standards to guide their work. We hope to have a draft of the standards out by July, followed by a public comment period. By early fall, we expect to have revisions made and new standards published.

Second, I want to share a little about the work we're doing with the Forward Exam in science. With our test developer, DRC, we're creating questions that require students to analyze a science or applied science (engineering) scenario. They then use scientific practices and crosscutting science ideas to make sense of and explain aspects of that scenario. A couple initial scenarios are on the test this spring, with a goal of having the test completely revised by spring of 2019. This test will align to our new Wisconsin science standards.

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

- [FabLab Training and Resources at UW-Stout](#) - July 17-21
- [CESA 9 Science Network and Workshop](#) - Apr 20
- [CESA 5 Science Network and Workshop](#) - Apr 25
- [WITESOL Conference at MSOE on Supporting ELLs in Science and Math](#) - May 13
- [28th Annual Energy Fair](#) - Custer, WI - June 16-18
- [Professional Development in Environmental Education Series this Summer](#) - WCEE

### Resources

- [New National Academies report on classroom NGSS/science assessment](#)
- [New Book from NSTA Press on implementing NGSS Practices w/ free chapter](#)
- [Free NSTA Modeling Webinar](#) by Cynthia Passmore and Jennifer Horton
- [Phenomenon of the Month!](#) - Acquired drug resistance of cancer cells

### Student Opportunities

- [Host a Wisconsin Science Festival Site in Your Community](#) - Nov 2-5
  - [Junior Science and Humanities Symposium](#) - Tomahawk, WI - registration by Dec 1
  - [AGI Earth Science Week Art, Photo, Video, and Essay Contests](#) - due Oct 13
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## Details

### Learning Opportunities

- FabLab Training and Resources at UW-Stout - July 17-21

<http://www.uwstout.edu/profed/WiFAB.cfm> - Do you have a fab lab or are you planning one? Get help in taking it to its fullest potential! Get ideas for great projects that connect digital fabrication with the community. Testimonials can be found at: [tinyurl.com/wifab](http://tinyurl.com/wifab). Also, they were funded to develop a website for teachers using digital fabrication. It will be beta tested during the retreat. They need instructors who are doing fab lab type projects to take a brief survey to get it right: <https://www.surveymonkey.com/r/MLVCWR8>. You can also join a fab lab discussion board here: [mutt.com/wifab](http://mutt.com/wifab).

- CESA 9 Science Network and Workshop - Apr 20

<http://login.myquickreg.com/register/event/event.cfm?eventid=17585> - In this workshop, Kevin Anderson, DPI Science Guy, will facilitate work on lesson and assessment development relevant to the WMASS, NRC Framework for Science Education, and the Next Generation Science Standards. We'll have time to network and share efforts in standards implementation across schools districts. The deadline to register is noted as today, April 15th, so contact Linda Myer to still get in on Monday the 17th: [lmyers@cesa9.org](mailto:lmyers@cesa9.org).

- CESA 5 Science Network and Workshop - Apr 25

<http://login.myquickreg.com/register/event/event.cfm?eventid=15590> - In this workshop and networking meeting, Kevin Anderson, DPI Science Guy, will facilitate work on lesson and assessment development built from the Next Generation Science Standards. We'll have time to network and share efforts in standards implementation across schools districts. Free for CESA 5 member districts, \$75 for others.

- WITESOL Conference at MSOE on Supporting ELLs in Science and Math - May 13

<https://www.eventbrite.com/e/english-language-stem-literacy-convergent-zones-tickets-32167788722> - The Milwaukee School of Engineering is hosting a WITESOL regional, 1/2 day conference on May 13th. This is a great opportunity for current or future ELL and content teachers (especially Science and Math) to explore different strategies to enhance the success of ELLs, as well as other students, in language and content areas. PDP credits (0.3) will also be available and there is a discounted student rate. Early bird registration ends today, April 15th. Please contact [verneze@msoe.edu](mailto:verneze@msoe.edu) with any questions.

- 28th Annual Energy Fair - Custer, WI - June 16-18

The Wisconsin Center for Environmental Education (WCEE) and the College of Natural Resources at the University of Wisconsin-Stevens Point will again be hosting the Educator Tent at The Energy Fair. The Educator Tent provides classroom resources, hands-on activities, and ways to engage students to support and promote sustainable communities. Each year, The Energy Fair offers more than 250 workshops related to renewable energy, energy efficiency, and sustainable living. [Credits are available](#). There are also free [buses heading up from Madison and Milwaukee](#) areas on Sat., June 17th.

- Professional Development in Environmental Education Series this Summer

[www.uwsp.edu/wcee](http://www.uwsp.edu/wcee) - Enhance your integration of environmental education. Connect your curriculum to standard-based activities using the outdoors. Advance your utility of place-based resources to engage learners. This summer series of one-

day workshops offered by the Wisconsin Center for Environmental Education allows participants to select from a suite of offerings. Workshops run from 9:00 am - 4:30 pm. The cost is \$100 per workshop. University credit (1-3 credits) is available through UW-Stevens Point for those attending two or more. Discounted workshop rate for people who opt for credit. Register at

<https://docs.google.com/forms/d/e/1FAIpQLSe1rL-eioclm5Q1Nn81mx9WmQV0RIkP4LzLhi5PILhWZ2dTXQ/viewform>

## Resources

- New National Academies report on classroom NGSS/science assessment

<https://www.nap.edu/catalog/23548/seeing-students-learn-science-integrating-assessment-and-instruction-in-the> - the National Academies released a new report on assessment, *Seeing Students Learn Science*. It particularly supports teachers in creating classroom assessments related to the NGSS, though ideas certainly apply within any science standards.

- New Book from NSTA Press on implementing NGSS Practices w/ free chapter

[https://www.nsta.org/store/product\\_detail.aspx?id=10.2505/9781938946042](https://www.nsta.org/store/product_detail.aspx?id=10.2505/9781938946042) - This new book, *Helping Students Make Sense of the World Using Next Generation Science and Engineering Practices*, is a fantastic resource for digging into what NGSS, practice-based instruction really looks like in the classroom. You can check on the chapter on modeling for free - <http://static.nsta.org/files/PB351Xweb.pdf>.

- Free NSTA Modeling Webinar by Cynthia Passmore and Jennifer Horton

<https://learningcenter.nsta.org/resource/?id=10.2505/9/WSCar170412> - This was one of the best webinars from NSTA that I've sat in on! Whether you're an old hand on scientific modeling or want to do more with your students, this webinar will have some new ideas for how to get your students working with models. This is a science instruction topic worthy of significant time in your PLCs! You will need to sign up for a free NSTA Learning Center account to access the webinar.

- Phenomenon of the month! - Acquired resistance of cancer cells

<http://www.the-scientist.com/?articles.view/articleNo/48998/title/How-Cancers-Evolve-Drug-Resistance/> - I enjoy it when I see a science headline that pulls me in, and then keeps me pulled in to read the full article! This was one such article on cancer cells gaining drug resistance.

## Student Opportunities

- Host a Wisconsin Science Festival Site in Your Community - Nov 2-5

<http://www.wisconsin-science-fest.org/media/837f06b7.pdf> - What better way to engage your community than have a Science Night led by students and other community members? The organizers of the Wisconsin Science Festival can help with marketing, supply t-shirts, and provide ideas and resources for a successful event. Of course, it doesn't have to be a "Science Night," it can be any science related event you'd like to organize- your creativity is the limit. More details - <https://www.wisconsin-science-fest.org/index.wsf>. This could be an event to share new science standards with your community!

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- Junior Science and Humanities Symposium - Tomahawk, WI - registration by Dec 1

<https://www.uwlax.edu/conted/jshs/> - JSHS is January 27–28, 2018 in Treehaven (UW-Stevens Point), W2540 Pickerel Creek Rd., Tomahawk, WI. The primary aim of JSHS is to encourage students at the high school level to engage in original research in the sciences, engineering, or mathematics. JSHS achieves this aim in a symposium format. The program features presentations of research conducted by high school students, public recognition and awards, and interaction with practicing research scientists. Registrations by students, teachers, and guests must be received no later than Dec. 1, 2017. Student presenters need to submit outside assistance form, abstract, and research papers by Dec. 11, 2017. JSHS is sponsored by the United States Department of the Army, Navy and Air Force, with forty-eight regional symposiums throughout the United States, Puerto Rico, and Department of Defense schools.

- AGI Earth Science Week Art, Photo, Video and Essay Contests - due Oct 13

<http://www.earthsciweek.org/contests> - the American Geosciences Institute supports annual competitions to celebrate Earth Science week. Start planning for next year, as they're due Oct 13th. Photo contest is for all ages, video contest (30-90 seconds) is for all ages, visual arts contest is for grades K-5, and the essay contest is for grades 5-9.

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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