



Hello Science Education Leaders,

I hope that you're enjoying your summer! Here is the latest in science education news, resources and opportunities. 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. Apologies to those receiving this email for a second time!

Cheers,
Kevin

State Science Education News

- [Changed cut scores for Wisconsin Forward Exam in Science](#)

Learning Opportunities

- [Science Classroom Observations in an Era of NGSS](#) - Workshop on Sept 29
- [Science Assessment and NGSS Webinar](#) - Sept 15, 2pm
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Resources

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Details

State Science Education News

- Changed cut scores for Wisconsin Forward Exam in Science
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This summer, a group of science education leaders reviewed current proficiency level scores for the science Forward Exam. This group, along with DPI, recommended changing the scores required for proficiency to better reflect college and career ready skills and knowledge in science. Because of this change, in your districts and schools you may see lower percentages of students scoring in the proficient and advanced categories than in previous years. Please, send me (Kevin) any questions.

Learning Opportunities

- Science Classroom Observations in an Era of NGSS - Workshop on Sept 29

<https://www.regonline.com/Effectiveobservationsofscienceteachersconnectingto> (registration link and further details) - 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, though it will also be relevant for those using the Stronge model. 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, which includes lunch and light snacks.

- Science Assessment and NGSS Webinar - Sept 15, 2pm

<https://wested.webex.com/wested/j.php?MTID=m62fb763fe1b044900746ea977377ce7a> - Meeting number 592 367 606. Or, join by phone: 1-877-413-2826, code - 833 399 8743. Experts from WestEd and Washington State will be sharing their work and challenges with creating standardized assessment questions aligned to the NGSS. They will detail a recently released 5th grade assessment item (lower left): <http://www.csai-online.org/spotlight/science-assessment-item-collaborative>.

- Save the Rainforest Fellowship - Summer 2017

www.saverfn.org - High school Spanish and science teachers who are interested in traveling to the tropics to learn about rainforest ecology, Latin American culture, and conservation are invited to apply for a Save the Rainforest fellowship to attend a Take Flight program in Belize, Panama, or Costa Rica in the summer of 2017. We had one Wisconsin teacher attend this summer! Fellows will be eligible to earn three graduate credits in education through Edgewood College. Deadline to apply is October 1, 2016.

Resources

- New Report - Evolving Notions of Science Inquiry

http://dpi.wi.gov/sites/default/files/imce/science/Evolving%20Notions%20of%20Scientific%20Inquiry%20August%202016_EXT%20version.pdf - over the last year, I've been working with the Midwest Comprehensive Center (part of the American Institutes for Research) on a report detailing how ideas of what science inquiry is have changed over time. The report specifically notes how notions of inquiry connect within the Next Generation Science Standards (NGSS). Spoiler alert - the idea of inquiry as students using "the scientific method" has been outdated for

over 20 years!

- Formative Assessment and Rubrics in the NGSS - recent blog posts

<http://wisdpiscience.blogspot.com/> - my last few blog posts have been on formative assessment and rubrics in relation to the NGSS/NRC Framework. My newest post that further details creation of NGSS-aligned rubrics will be out in the next week. I'd be happy to talk further about these ideas or provide district/regional support in relation to them.

- "Bundling" Performance Expectations in NGSS - new Achieve resources

<http://www.nextgenscience.org/glossary/bundlesbundling> - this summer Achieve has released several new resources on "Grouping elements or concepts from multiple PEs in lessons, units, and/or assessments that students can develop and use together to build toward proficiency on a set of PEs in a coherent manner."

- WSST Retired Teachers Group - available for district support

Retired science teachers who belong to the Wisconsin Society of Science Teachers are looking for ways to keep sharing their skill set with local schools. They are putting together a list of people and the activities in which they are willing to help. So far that list includes volunteering to help with Science Olympiad, Science Fairs, field trips, and presentation of lessons in the classroom (especially elementary). Are there other needs that you have in your district? Email klmesmer@gmail.com and we'll put them on our list as we construct a database of volunteers that will then be shared with districts.

- NSTA's New Safety Blog

<http://nstacommunities.org/blog/category/safety> - Anyone can subscribe to this new blog from the National Science Teachers Association on safety. Go to the website and click on subscribe at the top of the page to be notified of new posts. The blog will be sharing the latest information on safety standards and challenging safety incidences. It will also allow for community questions to be posed.

- Wisconsin STEM Grants for Non-Traditional Occupations

<http://dpi.wi.gov/stem/grants/dpi-stem-grants> - The Department of Public Instruction is offering a competitive grant to school districts to address non-traditional fields or occupations (NTO) in Science, Technology, Engineering, and Mathematics (STEM) education. Only school districts who are current recipients of Carl Perkins formula funds (either directly or through a consortium) are eligible to apply. The grant period is November 1, 2016 through June 30, 2017. There is a minimum of \$3,000, with a maximum of \$7,000 per application. Applications must be submitted electronically to Cassandra Fabian at cassandra.fabian@dpi.wi.gov and received by 11:59 pm on September 20, 2016.

- How Do You Define STEM Education? - New Report

http://dpi.wi.gov/sites/default/files/imce/stem/doc/Exploring%20Evolving%20Notions%20of%20STEM_August%202016.pdf - Over the last year, I've also been working with the Midwest Comprehensive Center (part of the American Institutes for Research) on a report detailing how

ideas of STEM education have been changing over the last 20 years. The report discusses the DPI and STEM Wisconsin notions of STEM education in relation to other states, other educational organizations, and national groups.

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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