# Wisconsin Science Matters: Resources and Opportunities for Wisconsin Educators October 2015

## **State Policy Updates**

1) ACT science – The new Forward Exam this spring will test students in grades 3-8 in English Language Arts and Mathematics. It will also assess students in grades 4 and 8 in science. The administration of the ACT in grade 11, which includes a science test, will be used as the accountability measure in science at the high school level. There will be no separate test in science in 10th grade as there has been in the past with the WKCE. Science is part of the ASPIRE tests but the accountability for science will now be at the 11<sup>th</sup> grade as assessed in the ACT.

## Student/Teacher Contests

1) PAEMST Awards – <u>www.paemst.org</u> - Do you know an excellent mathematics, science, or STEM teacher in grades K-6? Nominate them for the 2016 Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). Teachers can also nominate themselves. This year WSST and I will be supporting a virtual book study of <u>Inquiring Scientists</u>, <u>Inquiring Readers</u>, as part of the mentoring process of this award. Any teacher who finishes the first steps of the application process will receive a free copy of the book. The book study will take place January through April – more details to come, but you can get your books now.

### **Instructional Resources**

1) Videos of classroom instruction highlighting practices -

https://www.teachingchannel.org/videos/cross-discipline-lesson-achieve (9-12) and https://www.teachingchannel.org/videos/claims-evidence-science-lesson-achieve (2-3) - There is a new series of videos from Achieve and the Teaching Channel that highlights classrooms engaged in the science and engineering practices, see related videos list for more. Videos can also be found from NSTA.

2) NGSS implementation suggestions -

<u>http://www.resa.net/downloads/science\_pd/curriculum\_20150708\_093829\_1.pdf</u> - Wayne Regional Education Service Agency (RESA) developed this graphic w/ links to various implementation tools. 3) Phenomena – <u>http://news.nationalgeographic.com/2015/10/151007-apollo-moon-photos-nasa-</u>

<u>space/</u> – an article about the release of 10,000+ high-quality NASA images. These images illustrate fascinating phenomena that students could investigate. I'd have them generate questions about an image or a set of images. In this case, they might ask, what is lunar soil like? Why? What evidence does this image provide about characteristics of the lunar soil? Why are there mountains on the moon, how does their creation differ from mountains on earth? All images:

https://www.flickr.com/photos/projectapolloarchive/albums

4) Science ethics – <u>http://goo.gl/p2LOuM</u> - The NY Times provides teacher lesson ideas and text excerpts from the book, *The Immortal Life of Henrietta Lacks*. Reading and discussing this book would support a very interesting biology unit in upper middle or high school.

5) KEEP Energy Courses - <u>http://www.uwsp.edu/cnr-ap/KEEP/Pages/Professional-Development/Course-Schedule.aspx</u> - KEEP is offering energy education courses across the state over the next couple of months.

## Opportunities

1) Go Fund Grants - <u>http://eeinwisconsin.org/core/item/page.aspx?s=122383.0.0.2209</u> – get a grant from the Wisconsin Environmental Education Board to take your students outdoors and study topics related to forestry!

2) Wisconsin Science Education Leadership Association (WSELA) – on October 13<sup>th</sup>, WSELA will be hosting a networking meeting in Madison, WI, where educators will be discussing course pathways in MS and HS linked to the NGSS, and integrating science in elementary schools. This group meets about three times a year. If you'd like to attend on the 13<sup>th</sup> or be placed on the listserv for more information on future events, contact Kevin Niemi: <u>kjniemi@wisc.edu</u>.

Cheers, Kevin

Please, forward this e-newsletter to others and ask them to contact me if they'd like to be on the email list. In the future, I expect to send out a monthly newsletter, and WSST will also be sending out a monthly newsletter to this list with science resources. Please, let me know if you would like to be taken off this list.

\*Note, I'm providing NGSS resources in these emails to support the local decisions of over 75% of our schools; they are not our state standards.