

## VDOE Science Update

### August 6, 2014

Good afternoon all,

We hope all is well. We gave the science update a short break, but now that we are gearing up for the school year it is back. We hope you will find this information helpful. Please let us know if you have any questions.

We appreciate the Virginia Association of Science Teachers for posting an archive of Science Updates at <http://vast.org/vaeducation.html>.

## NEWS

### ***Presidential Awards for Excellence for Mathematics and Science Teaching – 2014 State Finalists***

Three Virginia teachers have been selected as state finalists for the [2014 Presidential Award for Excellence in Mathematics and Science Teaching](#). The award — regarded as the nation's top honor for mathematics and science teachers — recognizes teachers who develop and implement high-quality instructional programs that improve student learning. Visit [www.paemst.org](http://www.paemst.org) for more information about the PAEMST program.

The Virginia science nominees — two public school teachers and one private school educator — are as follows:

- Barbara-Ann Adcock — Pocahontas Elementary, Powhatan County Public Schools
- Susan Eckenrode — John Wayland Elementary, Rockingham County Public Schools
- Ryan McKinney — The Langley School in McLean

### ***First Review of Proposed Local Assessment Guidelines Developed in Response to 2014 Acts of Assembly***

The 2014 Acts of Assembly (House Bill 930 and Senate Bill 306 ) eliminated the Grade 3 Science SOL test along with other SOL tests. In addition, the legislation requires school divisions to administer alternative assessments, consistent with Virginia Board of Education guidelines, to students in grades three through eight in each subject area in which SOL assessments were eliminated by the legislation. According to the legislation, the Virginia Board of Education is to develop guidelines that “(1) incorporate options for age-appropriate, authentic performance assessments and portfolios with rubrics and other methodologies designed to ensure that students are making adequate academic progress in the subject area and that the Standards of Learning content is being taught; (2) permit and encourage integrated assessments that include multiple subject areas; and (3) emphasize collaboration between teachers to administer and substantiate the assessments and the professional development of teachers to enable them to make the best use of alternative assessments.”

The proposed guidelines contained in this [Board of Education agenda item](#) were developed using input from the organizations listed above and from other school division personnel. The proposed guidelines acknowledge that the legislation's timeline provides school divisions with an immediate deadline to implement the local assessments. As such, the guidelines for the 2014-2015 year provide school divisions considerable flexibility. The Board will review the guidelines after the 2014-2015 school year and may revise them based on the experiences of the first year of implementation.

### ***VDOE Names Chief Academic Officer***

Superintendent of Public Instruction Steven R. Staples today announced that [John William “Billy” Haun](#) of Charlottesville will become the Virginia Department of Education's chief academic officer, taking the position of assistant superintendent of instruction on September 1.

## Teacher Resources

## ***Performance Assessment Links in Science***

---

In reaction to the Proposed Local Assessment Guidelines, several schools and school divisions have contacted our office to ask about sample performance assessments. The Performance Assessment Links in Science (PALS) is an on-line, NSES-based, resource bank of science performance assessment tasks indexed via the 1996 National Science Education Standards (NSES) and various other [standards frameworks](#). The Office of Science and Health Education is not suggesting you use these assessments; however, these are one of several resources that might serve as an example of performance assessments you can consider as you are developing your performance assessments or other alternative assessments.

## ***Virginia Science Activities, Models, and Simulation***

---

The [Virginia Science Activities, Models and Simulations](#) project engages students in middle and high school in practices that are essential for learning science through inquiry. The activities involve asking questions or defining problems, using models or sensors, collecting data, interpreting results, using mathematics, technology and computational thinking, constructing explanations and designing solutions based on evidence.

The activities, models and simulations, were developed by teachers participating in the [Innovative Technology in Science Inquiry Scale Up \(ITSI-SU\)](#) project funded by the National Science Foundation.

The SAMS project is a partnership between VDOE, Longwood University's Institute for Teaching Technology through Innovative Practices (ITTIP) and the Concord Consortium.

## ***eMediaVA***

---

eMediaVA is Virginia's premier statewide digital media distribution system featuring the best purpose-built educational content available. Brought to you by Virginia's Public Media Stations\* and PBS, eMediaVA is constantly evolving to better meet the needs of Virginia's teachers and students. What's even better, eMediaVA is free for Virginia's teachers and students! Please visit the [About Us](#) page to get connected.

## **Teacher Opportunities**

### ***2014 Virginia Association of Biology Teachers Annual Meeting – September 12-14, 2014***

---

Spend the weekend or the day. Experience biology, environmental science, polar science, monarch & bumblebee studies and much more in the beautiful surroundings of the 700-acre UVA Blandy Experimental Farm. Onsite amenities include bike paths, horseback riding (bring your horse), native plant trail, birding (bring your binoculars), Wilkins Lane Drive Tour, Conifer Trail, Walking Trails, American Chestnut and Meadow reclamation sites, and much more. For more information and to register by August 29th, contact Kathy Frame ([chuckframe@aol.com](mailto:chuckframe@aol.com)). See attachment for registration and information about the meeting.

### ***Earth System Science Series: Special Session – Ask a Climate Expert with Dr. Fred Lipschultz***

---

**Date and time:** Wednesday, August 13, 2014 from 2:00pm – 3:30pm ET

**Location:** Adobe Connect room – link obtained once education specialist is contacted at [Marile.ColonRobles@nasa.gov](mailto:Marile.ColonRobles@nasa.gov)

**Grade Level:** all grade levels

**Audience:** In-Service teachers, Pre-Service teachers, Informal Educators, and Home-school teachers

Earth System Science Series is a three part series designed to help teachers explain Earth's natural processes. In this special session with Dr. Fred Lipschultz, explore highlights of the National Climate Assessment and learn how climate change has impacted the United States. Also, explore hands-on activities with NASA education specialists perfect for the classroom to explore climate change in your area along with Standards of Learning. A special focus will be given to the Southeast and Caribbean region. Read more about how climate change has impacted this region by visiting -

<http://nca2014.globalchange.gov/highlights/regions/southeast>. For more information please contact NASA Education Specialist Marilé Colón Robles at [Marile.ColonRobles@nasa.gov](mailto:Marile.ColonRobles@nasa.gov)

## Student Opportunities

### *eCYBERMISSION*

eCYBERMISSION is one of several science, technology, engineering and mathematics (STEM) initiatives offered by the Army Educational Outreach Program (AEOP). The U.S. Army is committed to answering the nation's need for increased national STEM literacy and expanding STEM education opportunities across the country to open doors to new career paths for America's students that lead to a brighter tomorrow. Visit <http://www.ecybermission.com/>.

## Highlighted Superintendent's Memos

- [MEMO #211-14](#)  
[Science, Technology, Engineering, and Mathematics \(STEM\) Teacher Recruitment and Retention Incentive Awards](#)
- MEMO #210-14  
[2014-2015 Verizon Innovative App Challenge](#)
- MEMO #198-14  
[Announcing Statewide Pilot Testing for the College Board's College Level Examination Program \(CLEP\)](#)
- MEMO #195-14  
[Formative Assessment Pilot](#) 

## Articles

### [\*Teaching and Learning Ecologically\*](#) *By Jaclyn Stallard*

Combining a passion for education, research, and action will shape the Next Generation of PLT. Learn how an ecological approach to teaching and learning has the potential to change PLT's instructional materials and one educator's outlook on life.

### [\*Institute Helps Kids Stick with Science - VISTA\*](#)

Free Lance-Star, 8/4/14 Fourth-grade teacher Brenda Black is adding a twist—and some gravity-defying turns—to her lessons on force in motion this coming year.

As always, please contact one of us if you have questions.

Barbara Young ([Barbara.young@doe.virginia.gov](mailto:Barbara.young@doe.virginia.gov))

Jim Firebaugh ([jim.firebaugh@doe.virginia.gov](mailto:jim.firebaugh@doe.virginia.gov))

Eric Rhoades ([eric.rhoades@doe.virginia.gov](mailto:eric.rhoades@doe.virginia.gov))