

**Volume 3, No. 1**

**August 30, 2006 - Building a Presence for Science: Ohio eBlast**

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**1. K-12: Proposals to present at the SECO Conference are due by September 15**

<http://www.secoonline.org>

The deadline to submit proposals to present at the 2007 SECO conference is fast approaching! Be sure to use the proposal form (available at the SECO website) and make your plans to join us as a presenter. Proposals are welcome for the elementary, middle, high school, and college audience, and may be presentations or workshops.

Never presented before? If you need help or tips, we can use the BaP network to connect you to someone in your area who is an experience presenter to help you. Contact your SECO District Director or the BaP State Coordinator if you are interested.

**2. K-12: Pluto and the Nature of Science**

[http://www.ohiorc.org/bookmark/view\\_a\\_folder.aspx?mid=126374742&folderID=5382](http://www.ohiorc.org/bookmark/view_a_folder.aspx?mid=126374742&folderID=5382)

Wow! Talk about teachable moments! You've no doubt heard that Pluto is no longer classified as a planet and is now considered to be a dwarf planet. This change in status for Pluto presents science educators with an ideal opportunity to discuss the dynamic nature of science and the development of scientific knowledge. So gather up your newspaper clippings and magazine articles about Pluto's change in status, couple them with some of the ORC astronomy and inquiry resources presented below, and have fun as you share up-to-date science news and the nature of science with your students.

**3. K-12: Ohio Department of Education BaP Update**

**3a. Check out ODE's New Web site**

<http://www.ode.state.oh.us>

On August 21, 2006 ODE launched the new Web site. For a limited time, a notice will be posted on the front page of the new site, informing customers how to reach the old beige site if they wish. However, the beige site will no longer be updated.

**3b. ODE Program Models**

Program models are being developed to provide alternative ways of delivering instruction to address the educational needs of all students regardless of learning styles, personal challenges, future education or career aspirations. Program models constitute the “How” of education while the academic content standards constitute the “What” of instruction.

Focus Groups and a national expert review involving individuals from secondary education, higher education, career technical centers and the field of business were held to critically review draft program models in science.

Pilot Schools will implement specific models during the 2007-2008 school year. The 2006-2007 school year will be used for planning and professional development.

### **3c. ODE Assessment News**

#### **OAT Practice Tests**

[http://www.ode.state.oh.us/proficiency/Diagnostic\\_Achievement/materials.asp](http://www.ode.state.oh.us/proficiency/Diagnostic_Achievement/materials.asp).

The Ohio Achievement Tests-Half Length Practice Tests in Grade 5 and Grade 8 Science are now available online at

#### **May Testing – OAT**

Current state law requires that beginning in this school year, the Grades 3 – 8 Achievement Tests must be administered during the week containing May 1. For this coming school year the regular testing window is April 30 – May 4, 2007. The make up testing week is May 7 – 11, 2007. Test results from tests picked up as part of the regular testing window will be available to districts by June 15, 2007.

### **3d. ODE Professional Development Opportunities**

#### **Ohio Science Institutes (OSCI)**

During the school year 2006-2007, OSCI training will be available to districts with buildings in school improvement status but not participating in an MSP project. One of six available OSCI academies may meet the needs of your staff. The institutes are:

- OSCI – Earth Science for Grades 7-10 teachers
- OSCI – Life Science for Grades 7-10 teachers
- OSCI – Physical Science for Grades 7-10 teachers
- OSCI – for Grades 3-4 teachers
- OSCI – for Grade 5 teachers
- OSCI – for Grade 6 teachers

Each of these institutes engages teachers in 45 hours of rich science content and inquiry-based activities that will help them implement the science academic content standards. School teams are strongly encouraged to participate together. A minimum of 20 participants are required to offer the training in your district, but you may pair up with another district to meet the minimum number of participants. Contact your Regional Professional Development Coordinator to request OSCI professional development for your district. Contact information is available at:

[http://www.ode.state.oh.us/school\\_improvement/contacts\\_maps/regional\\_map/default.asp](http://www.ode.state.oh.us/school_improvement/contacts_maps/regional_map/default.asp)

#### **Academic Content Standards Books**

The academic content standards will continue to be available on the Instructional Management System (IMS) for downloading. English language arts, mathematics, science, social studies, fine

arts, foreign language and technology academic content standards books are currently available at no charge to all K-12 public schools. Order copies of the technology standards books to ensure your teachers are knowledgeable about what students should know and be able to do to meet the NCLB requirement that all students are technology literate by 8th grade. To place orders contact Karen Paschal by phone at (614) 728-3471 or by email at [karen.paschal@ode.state.oh.us](mailto:karen.paschal@ode.state.oh.us).

### **3e. ODE: For Teaching and Learning Think INFOhio**

<http://www.infohio.org/Toolkit2006.html>

To utilize the thousands of resources available from INFOhio students and educators need the **NEW** home access username and password. The old username/password expires on September 15th so be sure to start using the new one as soon as possible for uninterrupted access. The new username and password are available from your local library media specialist, your regional ITC provider, and INFOhio [central@infohio.org](mailto:central@infohio.org). Check out the updated [INFOhio Toolkit](#) to learn what else is new for this school year as well as promotional flyers, PowerPoint presentations, tools for curriculum coordinators, teachers, administrators and more.

### **3f. ODE: INFOhio resource aligned to Ohio Academic Content Standards**

<http://www.infohio.org/ER/ERcore.asp>

Britannica Online offers standards-based, aligned resources for teacher use in the classroom. Through Britannica's partnership with EdGate, Compton's Encyclopedia by Britannica has been correlated to Ohio standards and benchmarks. "Curriculum Standards" buttons are located at the top of selected Compton's by Britannica articles. The "Curriculum Standards" buttons can also be accessed through the Teachers' Resources link found at the top of all Britannica Online Web pages. This link will take you to the Curriculum Matrix page where you are able to search content areas and grade levels for a complete list of state standards and achievement tools for your chosen topic. INFOhio has also provided several online training videos (<http://www.infohio.org/er/ebhelp.html>) to help teachers know how to utilize the Britannica Online tools.

### **4. K-12: 24 Hours of Science COSI Overnight for Teachers**

September 29-30, 2006 // Registration Deadline: September 21, 2006

Geared for pre-service and new to science teachers who want to get more ideas about science concepts and classroom management, this program provides concurrent sessions on Friday from noon - 10 PM and Saturday from 8:30 AM - noon.

Sessions geared for elementary and middle school level teachers, and a separate track for inquiry-based science. Topics include, but are not limited to:

- \* Chemical & Physical Change
- \* Force & Motion
- \* Investigable Questions
- \* Ice Age
- \* Rocks & Minerals
- \* Erosion
- \* Weather
- \* Odd Pets
- \* How to Find a Job
- \* Classroom Management

Presentations will be led by experts in the field, including Classroom Teachers, Ohio State University and Otterbein College Faculty, and COSI Educators. One graduate credit from Ashland University available for a fee. (Additional coursework required for credit.) Bring a sleeping bag, air mattress, and any other personal items.

For more details & to register, contact Corey Markham at 614.228.2674 or 888.819.2674, x2541.

### **5. K-12: Fulbright-Hays Seminars Abroad**

<http://www.ed.gov/programs/iegpssap/index.html>

The Fulbright program is a scholarship from the US Department of Education, and is designed to give educators and administrators an opportunity to travel overseas and learn more about another country and another culture. The program pays for a majority of expenses. The participants are not expected to teach or exchange- just to learn. For 2007 there is a seminar that is open to Math and Science educators- this is the first time this program is open to these disciplines. The seminar goes to India from June 26-August 2, 2007. The deadline to apply is September 28, 2006.

### **6. K-12: TeachEngineering**

<http://www.TeachEngineering.org>

provides more than 500 lessons and activities for teaching engineering content in K-12 science and math classes. Topics include oil and energy consumption, water and electricity, mass and volume, various energy sources, heat transfer, solar heating systems, collisions and momentum, electrons, cellular respiration, biomedical engineering, and more. Lessons connect real-world experiences with concepts and skills already taught in K-12 classrooms.

### **7. K-12: U.S. Antarctic Program**

<http://www.usap.gov/scienceAndEducation.cfm>

Help your students understand the world's coldest, windiest, driest, and harshest continent -- its ecosystems and its effects on global processes such as climate. Read breaking news from a newspaper written in McMurdo Station, Antarctica. Learn about important discoveries. See articles about a killer crater found under the ice and the melting of polar ice sheets.

### **8. K-12: Special Report: Altered Oceans**

<http://www.latimes.com>

Scroll to the bottom of the home page for this special report: *Our Seas Are in Crisis*: a 5-part series looks at the state of the world's waters. This story includes text, and short multimedia video clips, images, graphics, and is a treasure trove of information about the current state of our oceans. See where there are dead zones, and learn how and why they have appeared.

### **9. Gr 2-4: 11th annual art contest sponsored by the Institute for Global Environmental Studies (IGES)**

<http://www.strategies.org/ArtContest>

If you think the North and South poles are boring, lifeless places that have no impact on your life, think again.

The planet's northern (Arctic) and southern (Antarctic) polar areas are teeming with plants, animals and even people. Polar bears and penguins aside, these icy regions at opposite ends of the globe are important pieces in Earth's climate system.

This art contest for grades 2-4 challenges students to pick a polar region, explore it and then draw a picture showing what they learned. The contest supports national science education standards for grades K-4.

Entries are due Nov. 10, 2006.

This year's theme -- Polar Exploration: Going to Extremes! -- relates to the upcoming 2007-2008 International Polar Year (IPY), a coordinated effort by the international science community to learn more about the roles of the polar regions in global processes. IPY will also serve as a mechanism to attract and develop a new generation of scientists and engineers with the versatility to tackle complex global issues.

### **10. Gr 4-9: Junior Solar Sprint and Hydrogen Fuel Cell Car Competitions**

[http://www.nrel.gov/education/jss\\_hfc.html](http://www.nrel.gov/education/jss_hfc.html)

This site focuses on designing and building solar and hydrogen fuel cell cars. Explore components of solar cars. Conduct experiments to improve car performance. Find activities for measuring solar cell output, tips on vehicle construction and transmission design, and formulas for calculating vehicle performance. See a list of regional competitions sites. Find out how to integrate solar vehicle activities into the curriculum.

### **11. Gr 5-9: An EarthWatch Opportunity**

<http://www.earthwatch.org/ecoteam/schools>

Show of Force, an Emmy Award-winning production company, in association with Earthwatch Institute, is looking for middle school classrooms (grades 5-8) to conduct science experiments and correspond with field scientists to explore environmental issues in their community.

Beginning in January of 2007, a team of high school students will be sent on a mission around the world to work with top research scientists to confront critical environmental issues like pollution, deforestation, endangered species, etc.. The EcoTeam's primary goal as they explore these exotic, remote locations will be to pass their ecological findings on to students back in the US. For every research site that the EcoTeam visits, there will be a corresponding Middle School science class, studying how a similar environmental problem is affecting their local community. The partner schools will communicate with the EcoTeam and scientists in the field as well as conduct their own ecological research that is relevant to the theme of a particular episode.

The selected partner schools will have a professional film crew in their class during the week that they are assigned to correspond with the EcoTeam. The class will then be featured in the final televised episode.

Show of Force is accepting applications from interested teachers and schools until October 20, 2006.

### **12. Gr 9-12: A New Evolution Resource from AAAS**

<http://www.aaas.org/spp/dser/>

The American Association for the Advancement of Science (AAAS) is proud to announce the publication of *The Evolution Dialogues: Science, Christianity and the Quest for Understanding*. Developed in consultation with scientists, educators and theologians, this plain-language resource seeks to correct widespread " misunderstandings about what biological evolution is, what science itself is, and what views people of faith, especially Christians, have applied to their

interpretations of the science." By exploring evolutionary theory along with the rich diversity of Christian responses to the theory, the book challenges the notion that evolution and Christianity are incompatible. It is an excellent resource for science teachers, many of whom have students whose religious views cause them to doubt evolution.