

Volume 5, No. 1

August 29, 2007 - Building a Presence for Science: Ohio eBlast

Contents:

1. From the Ohio Resource Center: Start the school year right!
2. From the Ohio Department of Education: Resources for the busy science teacher
3. Gr 4-9: Apply now to be a NASA Explorer School
4. Gr PK-16: NSTA Fall Conference Highlights: Detroit, Oct. 18-20
5. Gr P -12: Volunteers Needed for NSTA in Detroit
6. Gr 7-12: NSTA New Science Teacher Academy
7. Gr PK-16: 37th Annual Fall CRCST Conference,
8. Gr PK-16: The North West Ohio Symposium on Science, Math and Technology
9. Gr 4-9: MIT Technology Center Offers Free Software to Students and Teachers.
10. Gr PK-12: Explore the Wonder of Microscopic Life
11. Gr 9-12: Help your students explore what it's really like to be a physicist!
12. Gr K-6: Science Grant
13. Gr K-12: NEW \$800K for innovative technology use
14. Gr 9-12: High School Physics Teacher Grant:
15. Gr 7-12: Youth Incentive Award from the Coleopterists Society

List: Upcoming Events and Opportunities

>>>>>

1. From the Ohio Resource Center: Start the school year right with new science resources!

<http://ohiorc.org/for/science/Default.aspx>

New Teacher Survival Guide

http://www.ohiorc.org/for/science/new_teacher.aspx

This feature is a must for new science teachers at any grade level! We've organized selected resources into "just in time" mini-collections focusing on laboratory safety, plants, and animals in the classroom, science reference materials, science in the elementary classroom, special needs students in the science classroom, and teaching science as a whole. The New Teacher Survival Guide puts needed information at your fingertips -- no searching required.

Staying Up-To-Date with Science

<http://www.sciencenews.org/index.asp>

Staying up-to-date with scientific advancements is difficult to do given the pace at which new information becomes available. The Science News section of the Science Community Bulletin Board helps out by linking to 3 sources of current scientific information. We link to Science News, CNN Science, and New York Times Science. These science news sources will help keep you up-to-date with advancements announced in the last week or the last hour.

ORC Science Projects

Be sure to take a look at the Science Bookshelf (<http://www.ohiorc.org/bookshelf/>), Ohio Achievement Tests: Science, Grades 5 and 8 (<http://www.ohiorc.org/for/science/oat.aspx>), and The ORC Promise (http://www.ohiorc.org/pm/science/Science_Intro.aspx). Each of these

projects targets a specific need of Ohio's science educators. The Science Bookshelf aligns selected science trade books for grades K-5 to Ohio's standards, provides suggestions for instructional use, and identifies related ORC resources. Ohio Achievement Tests: Science, Grades 5 and 8 compiles ORC resources into benchmark specific mini-collections. Each mini-collection incorporates a variety of experiences and scientific explorations that build process skills while addressing the science content. The ORC Promise provides pacing guides, aligned ORC resources, and inquiry challenges to support the Ohio Department of Education's Science Program Models.

The ORC PROMISE for High School Science

http://www.ohiorc.org/pm/science/Science_Intro.aspx

ORC has worked with teachers and teacher educators from all over Ohio to prepare materials to support the ODE Science Program Models. Materials for each course include the course overview, enduring understandings, common student misconceptions, pacing guides (in list and calendar formats), and a list of additional reference materials. Extensive inquiries have been developed for six of the courses. These inquiries focus on real-world applications of science and offer unique approaches for addressing standards-based scientific concepts. Visit The ORC PROMISE for High School Science to see how these materials fit into your curriculum.

2. From the Ohio Department of Education: Resources for the busy science teacher

Results Available for the 2007 OAT in Science

The Ohio Achievement Tests in Science for grades 5 and 8 were administered for the first time in May 2007. Results of this administration have been sent to schools and are available on the ODE Statewide Testing Web site <http://portal.success-ode-state-oh-us.info/>

When reviewing results of the OAT in Science, administrators and teachers should use OAT data cautiously. The current OAT data for Science represent just one administration of the test, with only 38 test questions. Scores for the first administration of a test provide static information for one school year and one group of students – limiting the ability to interpret trends in the data. The 2007 data can point to potential areas of difficulty, but caution should be used before planning large-scale projects or changes based on one set of data.

Annotations for OGT and Achievement Tests

<https://ims.ode.state.oh.us/ode/ims/Default.asp?bhcp=1>

Annotations of released questions from the 2007 OGT and OAT have been posted on the Instructional Management System. These annotations provide explanations of the concepts tested in the questions as well as statewide performance data of the questions. Tip: In the “Quick Search” box, select “Assessments”, then “Science”, and the grade level of interest (5, 8, or 10), then click on “Search” for these annotated files.

OAT Toolkit

The ODE science consultants have developed tools for use by teams of teachers to inform their interpretation of OAT data and to plan for instruction. To find the toolkits on ODE's Web site

follow the link at <http://ims.ode.state.oh.us/ode/ims/oattoolkit/>. This site is currently under construction with approximately one-fourth of the resources posted. However, we will have the site completely populated by October 15. Your input on how you are using these tools and suggestions for additions and/or improvements will guide that work. Please use the “Feedback” button found in the toolkit.

3. Gr 4-9: Apply now to be a NASA Explorer School

<http://explorerschools.nasa.gov/portal/site/nes/menuitem.3a9dc5f6e0302a448258f708c41a5ea0/>

Applications are now available for educators interested in joining NASA Explorer Schools during the 2008-2009 school year. Schools from the 50 states, the District of Columbia, Puerto Rico and the Virgin Islands may apply for the NES 2008-2009 school year. NES offers unique opportunities designed to engage and educate the future scientists who may someday advance U.S. scientific interests through space exploration.

Teams composed of full-time teachers and a school administrator develop and implement a three-year action plan to address local challenges in science, technology and mathematics education for grades 4-9. Schools that are selected are eligible to receive funding during the three-year partnership to purchase technology tools. The project also provides educators and students with content-specific activities that can be used within the curricula to excite students about science, technology, engineering, and math.

Applications are due Jan. 31, 2008.

4. Gr PK-16: NSTA Fall Conference Highlights: Detroit, Oct. 18-20

Be on the lookout for the Conference Preview about the Detroit Conference. In color and reformatted to locate details quickly and easily, the Preview is your guide to all the programs available in Detroit. Check it out online at www.nsta.org/conferences/2007det

Bring fresh ideas to your classroom teaching. Detroit’s Conference on Science Education offers over 400 exciting presentations, symposia, and events on topics such as:

- The Great Nanotechnology Revolution
- Cafeteria as Lab: Waste Analysis Studies
- Bringing Writing and Reading into the Earth Science Classroom
- Innovative Assessment Ideas
- Multicultural Science for a Multicultural Society
- Put Some Spark into Science Investigations

You are invited to the following sessions for BaP participants in particular:

BaP: Want to Join the Network?

Friday, October 19, 2007

9:30 – 10:30

Room O2-37 Cobo Center

BaP Key Leaders Meeting (by invitation only)

Friday, October 19, 2007

3:00 – 5:00 pm
DaVinci Room, Marriott Renaissance Center Hotel

BaP: Points of Contact Meeting (by invitation only)
Saturday, October 20, 2007
10:00 AM-12 Noon
DaVinci Room, Marriott Renaissance Center Hotel

NSTA members can save as much as \$109 off the onsite price to attend the NSTA Conference of Science Education. Early bird deadline for the Detroit conference is September 14. See you there?

5. Gr PK – 12: Volunteers Needed for NSTA in Detroit

The leaders of the NSTA Regional Conference would like you to consider volunteering for the conference. You are a critical link! You will need to report to the Macomb Hall, at the COBO Center, a little before your times, which will be in four-hour shifts. Volunteers who do not wish to attend the conference will receive a volunteer ribbon when they arrive at COBO. Each volunteer who plans to attend the conference needs to register to receive a name badge. If you work 16 hours you will receive complimentary registration. If you work 8-15 hours you will receive 50% off of your registration. Volunteers will be sent a yellow complimentary voucher (16 hours) or a green 50% off voucher (8-15 hours) to attach to your registration form. You cannot register on line. NSTA needs the voucher in order to give you the discount. You should mail your registration form along with the voucher and payment to the address stated on the registration form. You may download and print the registration form at:

<http://www.nsta.org/conferences>

Your response is needed before September 28 (preferably much sooner). You will then be sent a confirmation email along with other details. To volunteer, please contact:

Mike Mansour
NSTA Detroit Planning Committee
Mmansour001@comcast.net

6. Gr 7–12: NSTA New Science Teacher Academy

With significant support from Amgen, the NSTA *New Science Teacher Academy* is an initiative designed to encourage and support new middle and secondary school science educators in their first few years of teaching. Co-founded by the Amgen Foundation, this innovative professional development program aims to

- * Strengthen quality science teaching,
- * Enhance teacher confidence and classroom excellence,
- * Improve teacher content knowledge.

The Academy will initially support up to 200 science teachers across the nation this year.

There are two tiers of participation in the New Science Teacher Academy: NSTA Fellows and NSTA Associate Fellows. Both Fellowships include a yearlong immersion in a host of science-related activities and professional development opportunities. A comprehensive NSTA membership package and an NSTA funded trip to attend NSTA's national conference are among the wide array of learning experiences available to participants. NSTA Fellows will also receive online mentoring with trained mentors who teach in the same discipline. Through the support of the Amgen Foundation, the selected candidates will be named Amgen–NSTA Fellows and Amgen–NSTA Associate Fellows. A selection committee comprised of NSTA leaders will choose the participants for the 2007–2008 Academy.

NSTA Associate Fellows

Promising first- and second-year teachers* can apply to become an Associate Fellow at the New Science Teacher Academy for a yearlong term with access to a wide array of professional development opportunities:

- * Comprehensive NSTA membership benefits;
- * Participation in a variety of web-based professional development activities including a specially designated “community of practice” for new science teachers;
- * Resources including vetted web links for lesson plans, links to state and national standards, professional organizations, safety tips, and more;
- * Attendance at NSTA's national conference including coverage of travel, accommodations, and registration fees;
- * Participation in special workshops at the NSTA conference;
- * Top priority in the selection process to apply to become a “Fellow” for the following year.

See <http://www.nsta.org/academy/> for more, and the application for Associate Fellows. The NSTA New Science Teacher Academy has a limited number of Fellowships available. Applications will be considered until all positions are allocated, no later than September 30, 2007. Notification of conditional acceptance will be on or before October 15, 2007.

Note: for the 2007-2008 school year, *NSTA Fellows* will be selected from a set of states that already have e-mentorship programs in place; Ohio is not one of them, but watch for more opportunities to become a mentor in year 2.

7. Gr PK-12: 37th Annual Fall CRCST Conference,

to be held at the Cleveland Museum of Natural History on October 13, 2007

Registration – 7:30 – (continental breakfast items available)

Concurrent Session I – 8:15 to 9:05

Keynote Address & Brief Membership Meeting – 9:20 to 10:20

Concurrent Session II – 10:45 to 11:35

Concurrent Session III – 11:50 to 12:40

This promises to be a first rate conference for content, critical issues and networking. Don't wait, send in your registration now and pass the word. Please car pool if possible, parking at the site is limited.

Membership in CRCST or CRABS is required. The cost of the conference is \$20. If your membership expires after 11/07, you may choose to register for the conference only, without renewing your membership. The chart below lists membership and registration options. You may register on the day of the conference for an additional fee of \$5.00

Questions? Pam Keiper - pkeiper@jcu.edu

8. Gr PK-16: The North West Ohio Symposium on Science, Math and Technology
<http://www.nwohiosymposium.org/> (The site has information on the 2006 Symposium; revisions are expected soon.)

The North West Ohio Symposium on Science, Math and Technology will be held on November 3, 2007 at Owens Community College in Toledo, Ohio. The organizers are preparing for an event expected to attract over 300 PreK-16 educators from Northwest Ohio and South East Michigan.

The Symposium aims to bring together science, mathematics, and technology educators to share best practices with one another to enhance science, mathematics, and technology teaching throughout Northwest Ohio.

For more information, please contact Amy Boros, Coordinator at 419.380.0365 or aboros@bgnnet.bgsu.edu

9. Gr 4-9: MIT Technology Center Offers Free Software to Students and Teachers.

Try Scratch for free: <http://scratch.mit.edu/pages/educators>

For those of you familiar with Seymour Papert and MIT's LOGO projects, a new generation of online collaborative problem solving software been released. Called "Scratch", after the way that hip-hop DJs mix different sounds and beats, the software allows a collaborative community to work toward solving programming problems using the new-look LOGO-based language. Interested?

10. Gr PK-12: Explore the Wonder of Microscopic Life

http://www.exploratorium.edu/imaging_station/index.php

In 2004, the Exploratorium launched the most ambitious microscope facility ever created for use by the general public, the Microscope Imaging Station. The project gives museum visitors the ability to view living specimens, as well as control the microscopes themselves to change the magnification, focus, and even the lighting. The project's companion web site reflects the diversity of topics and specimens that users might see on a typical visit; its goal is to recreate some of the excitement and wonder that the earliest biological researchers found as they discovered another world all around them. Through images, text, and video, visitors to the site can learn about blood cells, stem cells, what happens when the immune system goes awry, how the zebra fish is helping biomedical researchers understand how our hearts function, and how the sea urchin helps scientists understand such topics as genes, reproduction, and cancer.

11. Gr 9-12: Help your students explore what it's really like to be a physicist!

<http://www.adoptaphysicist.org>

Adopt-a-Physicist connects high school students with physics graduates via supervised online discussion forums. During this free, 3-week long session students and physicists are free to discuss careers, school, work and family balance, and more.

Fall 2007 Schedule

- * Physicist Registration: Now - Sept 7 (or until full)
- * Teachers adopt Physicists: Sept 10 - 14
- * Discussion Forums Open: Sept 17 - Oct 5

Today's physicists aren't cookie-cutter Einsteins bent over notebooks or blackboards. They rarely study the block on the incline plane and most of them don't spend much time drawing circuit diagrams.

Today's physicists are professors, journalists, computer programmers, researchers, lawyers, physicians, managers, engineers, teachers, men, women, Hispanics, Asians, African-Americans, mothers, fathers, neighbors, volunteers, musicians, and rock climbers.

The fall 2007 Adopt-a-Physicist session will take place Sept 17 - Oct 5. Visit <http://www.adoptaphysicist.org> to find out more and for registration! Space is limited.

12. Gr K-6: Science Grant

http://www.toshiba.com/tafpub/upload/page/100045/applic_K-6.pdf

The Toshiba America Foundation Grants Program is providing \$1000 grants for innovative math and science programs for K-6 Science and Math educators. The deadline for applying for the grant is October 1, 2007. The mission of Toshiba America Foundation is to promote quality science and mathematics education in U.S. schools. Grants are made for programs and activities that improve teaching and learning in science and mathematics. The foundation focuses its grant making on inquiry-based projects designed by individual teachers, and small teams of teachers, for use in their own classrooms.

13. Gr K-12: NEW \$800K for innovative technology use

<http://communications.bestbuy.com/communityrelations/teach.asp>

Grant Title: Best Buy Teach Awards

Organization: Best Buy

Eligibility: K-12 schools

Value: Eight awards of \$100,000 each

Deadline: September 30, 2007

Applications are now available for the 2008 Best Buy Teach Awards, which award innovative use of technology in K-12 classrooms. Winners will be announced in February 2008, and eight \$100,000 district-level awards will be announced in May 2008. All accredited, public and private

nonprofit elementary, middle and secondary schools located within 50 miles of a U.S. Best Buy store are eligible.

14. Gr 9-12: High School Physics Teacher Grant:

<http://www.aapt.org/Grants/hsgrant.cfm>

The American Association of Physics Teachers wants to encourage high school teachers to experiment and improve on their teaching practices. It is their belief that as teaching practice improves, then physics enrollment and excitement among students increase. As a result, they offer the High School Physics Teacher Grant, in hopes that this grant can provide the funds to kick start the implementation of these practices.

The grant(s) are given each year to teachers whose proposal meets the goal of the grant. That is, the procedure should result in better teaching practice, student understanding and interest, and/or increased enrollment. Also, the proposal should contain some innovative ideas. For example, the proposal may use a new teaching method or an adaptation of an existing idea. Get more information on the grant and the application process from the URL above.

15. Gr 7–12: Youth Incentive Award from the Coleopterists Society

<http://www.coleopsoc.org/coleout.shtml>

The Coleopterists Society, an international organization of professionals and hobbyists interested in the study of beetles, has established a program to recognize young people studying beetles. The Society has pledged to provide up to \$300 each year for the Youth Incentive Award Program. In addition to monetary grants of \$150, award recipients will receive up to \$200 (Junior Award) and \$400 (Senior Award) of equipment credit from the BioQuip Products catalog. In addition to monetary grants of \$150, award recipients will receive a one year subscription to the society journal, The Coleopterists Bulletin

Upcoming Events and Opportunities

August 30, 2007: Deadline to request free DVD on Algal Blooms from Shelly.Nance@noaa.gov

September 7, 2007: Deadline to apply for the 2008 Toyota International Teacher Program to Costa Rica. (See BaP Ohio Vol4, No12.) For information and an application form, please visit: <http://www.iie.org/toyota>

September 10-14, 2007: Adopt a Physicist for your classroom. <http://www.adoptaphysicist.org>

September 14, 2007: Early Bird Deadline to register for the NSTA Regional Conference in Detroit, MI. <http://www.nsta.org/conferences/2007det>

September 30, 2007: Deadline to apply for the Best Buy Teach Awards <http://communications.bestbuy.com/communityrelations/teach.asp>

September 30, 2007: Deadline to apply for the NSTA New Teacher Academy Associate Fellow positions. <http://www.nsta.org/academy/>

October 1, 2007: Deadline to apply for the Toshiba America Foundation Grants Program http://www.toshiba.com/tafpub/upload/page/100045/applic_K-6.pdf

October 13, 2007: 37th Annual Fall CRCST Conference, to be held at The Cleveland Museum of Natural History Questions? Pam Keiper - pkeiper@jcu.edu

October 18-20, 2007: National Science Teachers Association North/Midwestern Area Convention—Detroit <http://www.nsta.org/conferences/2007det/>

November 1, 2007: Deadline to apply for the High School Physics Teachers Grant <http://www.aapt.org/Grants/hsgrant.cfm>

November 3, 2007: The North West Ohio Symposium on Science, Math and Technology <http://www.nwohiosymposium.org/>

November 15, 2007: Deadline to apply for the Youth Incentive Award from the Coleopterists Society (Gr 7 – 12) <http://www.coleopsoc.org/colayout.shtml>

December 30, 2007: Deadline to apply for the Tool Factory Podcasting Grants. http://www.toolfactory.com/olympus_contest/olympus_podcasting.htm

January 31, 2008: Deadline to apply to become a NASA Explorer School. <http://explorerschools.nasa.gov/portal/site/nes/menuitem.d601ef1f9fdc2c2d7010ea1051008a0c/>

February 7-9, 2008: SECO Annual Conference in Akron, Ohio <http://www.secoonline.org/conference>

March 27-30, 2008: NSTA National Convention in Boston, MA <http://www.nsta.org/conferences/>

To subscribe to the Building a Presence Science eBlast, please visit: <http://nsta.org/bap>
Follow the directions in the lower right hand corner of the page to become a Point of Contact.

To unsubscribe from the Building a Presence Science eBlast, please contact your Key Leader or email Mary Lightbody, State Coordinator for Building a Presence for Science in Ohio, at Lightbody.1@osu.edu