

Congratulations to Dr. Donald French!

NABT Election Results for 2010

The National Association of Biology Teachers is proud to announce the results of the 2010 Election for national and regional offices. These results were certified and presented to the NABT Board of Directors in accordance with the NABT Constitution & Bylaws.

President- Elect: Donald French, Stillwater, Oklahoma (Dr. French is a professor at Oklahoma State University and is very involved in teacher professional development opportunities.)

NASA Explorer Schools

(Teachers, this is a fabulous opportunity for you to organize a teacher team to apply to be an Explorer School. This is open to all schools now.)

The NASA Explorer Schools project is NASA's classroom-based gateway for middle school (**grades 4-8**) and high school (**grades 9-12**) classrooms. NES provides free teaching and learning resources that promote student engagement in science, technology, engineering and mathematics, or STEM. The project provides opportunities for teachers and students to participate in NASA's mission of research and discovery through inquiry-based experiences directly related to the work of NASA scientists and engineers.

Throughout the school year, the NES Virtual Campus website will serve as a portal to dynamic learning experiences, allowing students to examine real-world problems and challenges based on NASA research and exploration. Classroom activities are coupled with special events featuring interactions with NASA's scientific and technical workforce, so students learn firsthand about mission highlights, new technologies and research findings.

Teachers have the opportunity to participate in professional development experiences delivered through NES Virtual Campus technology to support effective classroom implementation of NES resources.

At the end of the year, NES will recognize its best teachers and schools with NASA experiences such as field center training, research opportunities and flights aboard a reduced-gravity aircraft.

All participants must be U.S. citizens. Each must be an administrator, aide, curriculum specialist, educator, guidance counselor, media specialist, resource teacher or student teacher in a state- or nationally accredited K-12 education institution in the United States or a U.S territory.

For more information and to schedule an orientation session, visit

<<http://www.nasa.gov/offices/education/programs/national/nes2/home/index.html>>.

Questions about the new NASA Explorer Schools project should be directed to nasa-explorer-schools@mail.nasa.gov.

Earth Science Resources

These Earth science labs, simulations and demos were designed for teachers that do not have Earth science background. The resources, designed by the Joint Earth Science Education Initiative, target HS students, but could also be used at the MS level. See <<http://www.esta-uk.net/jesei/index2.htm>>.

Early grades web site on caterpillar adaptation

Build Your Own Caterpillar - [reading skills required] Build a caterpillar with the tools for surviving in its environment. Look at the environment and then choose the parts that will help your caterpillar have the best chance for survival.

<http://teacher.scholastic.com/activities/explorer/ecosystems/be_an_explorer/map/caterpillar_play.htm>

K-4 Earth Science Modules

The K-4 Earth Science curriculum is divided into four modules based on topic: Biomes; Weather, Seasons, and Climate; Remote Sensing; and Earth System. Each module contains an overview section, online and hands-on activities, and an Earth action story with small problems for students to address. "User Notes," accessible from any module, contain strategies on implementing this curriculum.

See <<http://www.cotf.edu/ete/modules/k4/k4modules.html>>.

The Biology Corner

The Biology Corner is a resource site for biology and science teachers. It contains a variety of lessons, quizzes, labs, web quests, and information on science topics. You can find lessons related to biology topics in the links listed under "topics" on the sidebar. Topics include: Ecology, Genetics, Anatomy, Cells, Scientific Method, and Evolution.

Visit <<http://www.biologycorner.com/>>.

Earth Learning Ideas

Biology, Life science and earth science teachers don't miss this one! The Earth Learning Ideas group is posting free activities for classroom use. The lessons are categorized as Earth Systems (includes Carbon cycle), Earth Energy, Resources and Environment and more.

Go to:

<http://aegsrv2.esci.keele.ac.uk/earthlearningidea/English/contents_alphabet.html>
and
<http://aegsrv2.esci.keele.ac.uk/earthlearningidea/English/contents_English.html>

NASA's Year of the Solar System (YSS) – A Family Affair!

Our solar system is a family of planets, dwarf planets, comets, and asteroids orbiting our Sun, which share many common features, but have unique personality traits. Studying these relatives helps scientists better understand our own planet and our shared history. Join NASA during December and January in investigations of our planetary family tree. Visit the YSS website <[http://solarsystem.nasa.gov/yss/display.cfm?Year=2010&Month=12\[Marker\]](http://solarsystem.nasa.gov/yss/display.cfm?Year=2010&Month=12[Marker])> to find activities for classroom and informal learning environments, night-sky viewing events and mission milestones, recommended resources, downloadable materials, and more!

Weathering/Erosion video

This short videoclip (3 min) from Scholastic is great for upper elementary/middle school students. (Note from Jana: The first word of the video is BAM!)

Check it out at <<http://www.youtube.com/watch?v=lyysL02ZvQ8&feature=related>>

Challenge to Innovate Awards

The NEA Foundation announces a new initiative, C2i or Challenge to Innovate. This multiphase project includes a close partnership the US Dept. of Education and DonorsChoose.org. C2i provides incentives and creates a community where public school educators can identify, discuss, and solve their most pressing classroom problems. By starting this conversation and recognizing the best ideas, the NEA Foundation hopes to support and reward innovative educators and develop new approaches that will change the way educators teach and our students learn nationwide.

Today we launched the 2nd phase to C2i in which educators are encouraged to offer solutions to 4 classroom-based problems selected by the C2i community. Up to five will receive a \$2,500 cash award from the NEA Foundation.

Here's the link to C2i: <<https://innovation.ed.gov>>.

Seismology Animations

Each series of animations contains text, graphics, animations, and videos to help teach Earth Science fundamentals.

View at <http://www.iris.edu/hq/programs/education_and_outreach/animations>.

OSSM ANNOUNCES ANNUAL MATH CONTEST (please share with math colleagues)

The 9th Annual Oklahoma School of Science and Mathematics Middle School Math: An Awesome Contest is a challenging, two-round, **FREE** competition during the months of January and February. For **registration** and more information visit the OSSM Web site: <www.ossm.edu> and click on the Middle School Math Contest link or e-mail Dan Vossen at dan.vossen@ossm.edu>.

Online resource for Gulf of Mexico oil spill

The National Council for Science and the Environment (NCSE) and its partners, Boston University and Louisiana State University, have created a resource that will allow you to explore the Gulf oil leak.

See <<http://arizonageology.blogspot.com/2010/11/huge-online-resource-released-for-gulf.html>>.

Encyclopedia of Life resources

Explore the diversity of life—five minutes and One Species at a Time. Encyclopedia of Life provides podcasts, videos, teacher resources, and activities for students ages 9-13. All free at: <<http://education.eol.org>>.

Penguin Parenting

Students in grades 4-8 can watch Adelie penguin families raise their chicks, make field journal observations, and find activities at <www.penguinscience.com>.

Inner Life of a Cell

Take a journey through the microscopic world of a cell. View this 8-minute animation at <<http://multimedia.mcb.harvard.edu>>.

Science Behind NFL Football

This resource for students in grades 5-9, features lessons and videos exploring topics such as position, velocity, acceleration, health, motion and parabolas. See <<http://www.nbclearn.com/portal/site/learn>>.

Soil Links for Earth Science

Pictures of soil profiles <<http://soils.usda.gov/gallery/photos/profiles/>>

Soil Facts -- definitions of soil and soil survey, information on careers, some basics on soil formation and classification, soil science glossary, and regulations for moving soils <<http://soils.usda.gov/education/facts>>

State Soils -- find out about your state soil <http://soils.usda.gov/gallery/state_soils/>

Links for students and teachers - Grades K-6

<http://soils.usda.gov/education/resources/k_6/index.html>

Links for students and teachers - Grades 7-12

<http://soils.usda.gov/education/resources/7_12/index.html>

Presidential Awards for Excellence in Mathematics and Science Teaching

The National Science Foundation is currently accepting nominations to apply and applications for the **Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)** program. PAEMST is the highest recognition that a kindergarten through 12th grade mathematics or science teacher may receive for outstanding teaching in the United States. Presidential awardees receive a citation signed by the President of the United States, a trip for two to Washington DC to attend a series of recognition events and professional development opportunities, and a \$10,000 award from the National Science Foundation.

Anyone--principals, teachers, parents, students, or members of the general public--may nominate a teacher by completing the nomination form available on the PAEMST website. Teachers may also apply directly at <http://www.paemst.org>.

An applicant must:

- Teach mathematics or science at the 7th-12th grade level in a public or private school.
- Hold at least a Bachelor's degree from an accredited institution.
- Be a full-time employee of the school or school district as determined by state and district policies, and teach K-12 students at least 50% of the time.
- Have at least 5 years of full-time, K-12 mathematics or science teaching experience prior to the 2010-2011 academic school year.
- Teach in one of the 50 states or the four U.S. jurisdictions. The jurisdictions are Washington, DC; Puerto Rico; Department of Defense Schools; and the U.S. territories (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands).

- Be a U.S. Citizen or Permanent Resident.
- Not have received the PAEMST award at the national level in any prior competition or category.

The **Nomination Deadline is April 1, 2011**. This date gives the nominated teacher enough time to thoroughly prepare an application prior to the application deadline. The **Application Deadline is May 2, 2011** for secondary school teachers (Grades 7-12). Elementary school teachers (Grades K-6) are eligible to apply in 2012.

Please consider nominating outstanding mathematics or science teachers today!

If you have any questions, contact Jana Rowland, Oklahoma PAEMST Coordinator at <Jana_Rowland@sde.state.ok.us> or (405) 522-3524.

Plants and Trees

This site, maintained by Learn NC at the University of North Carolina at Chapel Hill's School of Education, presents students ages 6-9 with interactive ways to learn about plants and trees.

Available at <<http://www.learnnc.org/lp/pages/4108?ref=search>>.

IRIS resources for educators

Interesting lessons, posters, and activities including teachable moments data and visuals on current seismic activity from the Incorporated Research Institutes for Seismology are available at:

http://www.iris.edu/hq/programs/education_and_outreach/resources

eCYBERMISSION for students 6-9

The U.S. Army, in an effort to promote science, technology, engineering, and mathematics (STEM) education, has announced that registration is now open for eCYBERMISSION. The competition encourages and rewards students for innovation, creativity, and interest in STEM education. Managed by the U.S. Army's Research, Development and Engineering Command, eCYBERMISSION is a free, web-based, STEM competition for students in grades six through nine. Throughout the competition year, students and educators are connected to volunteers, called CyberGuides, who interact with eCYBERMISSION participants through various outlets, including online discussion forums, team chat rooms, and interactive webinars. CyberGuides are Army and civilian scientists and experts within the STEM fields, with an active Department of Defense clearance security, who provide online assistance.

Guided by an adult Team Advisor, students form teams of three to four, and identify a problem in their community that they are interested in studying. The students work through the scientific method by researching the problem, forming a hypothesis, conducting experiments to test their hypothesis, draw conclusions and propose potential solutions. **Students on winning teams can receive up to \$8,000 in U.S. EE Savings Bonds.** The 16 regional first-place winning teams also receive an expenses-paid trip to the National Judging and Educational Event, where they present their projects to a panel of National Judges and compete for the national title in each grade. Last year, the Army awarded over \$1 million in U.S. EE Savings Bonds. More details are at <www.ecybermission.com>.

Funds for Teachers – Oklahoma Foundation for Excellence

Fund for Teachers is the national donor-supported organization that awards fellowships of up to \$5,000 for individuals and \$10,000 for teams for self-designed professional growth to teachers who recognize the value of inquiry, the power of knowledge and their ability to make a difference.

Teachers from all public, private, parochial and charter schools within the state of Oklahoma who fulfill certain criteria are able to apply. Applicants must have three years teaching experience, be a full-time employee and spend at least 50 percent of their time in a classroom setting. In addition, applicants must have the intention of returning to their school and/or district following their summer professional development. Applicants will be selected based on each proposal's merit— the potential for teacher growth, as well as student, classroom and school impact. **Application deadline is January 28, 2011.** Online application is available at

<<http://www.fundforteachers.org/apply/guidelines/ok/oklahoma/index.html>>.

Proposal-Writing Information: FFT will be conducting online information sessions. See <<http://www.ofe.org/fft/index.htm>> for webinar schedule.

Teacher Opportunity for research

Accepting applications now for 2011; new courses in Australia and Guyana

Applications are being accepted for 2011 summer/fall graduate field courses and a master's program that offer international conservation studies in 12 countries throughout Africa, Asia, Australia and the Americas. New in 2011 are courses in Australia and Guyana.

Created in 2004 by Miami University's Project Dragonfly and the Cincinnati Zoo & Botanical Garden, Earth Expeditions graduate courses and now the Global Field Program (GFP) master's degree bring together graduate students, scientists, educators and community leaders at critical conservation field sites worldwide. In addition to Australia and Guyana, sites for 2011 include the Amazon, Baja, Belize, Borneo, Costa Rica, Kenya, Mongolia, Namibia, Thailand and Trinidad.

Tuition for seven graduate credits and all basic in-country expenses are covered in the \$1,250 course costs. Accepted students are responsible for airfare.

Earth Expeditions and the GFP, which can be completed part-time from anywhere in the United States or abroad, are open to educators and other professionals from all disciplines and settings, regardless of grade level or academic focus. For information and to apply, please visit:

Earth Expeditions: <http://www.EarthExpeditions.org>

NIH free resources available

Presented by the National Institute of General Medical Sciences, National Institutes of Health. You can also download the 84 page book in pdf format at <<http://publications.nigms.nih.gov/insidethecell/>>.

Other publications available are: Curiosity Creates Cures, The Chemistry of Health, The Chemistry of Health Poster, The New Genetics, Medicines By Design and The Structures of Life available at <<http://publications.nigms.nih.gov/order/index.htm>>.

Toshiba/NSTA Exploravision Awards Program – (K-12)

The Toshiba/National Science Teachers Association ExploraVision Awards Program, sponsored by Toshiba and administered by the National Science Teachers Association (NSTA), is currently accepting applications. Through ExploraVision, students discover the wonders of science and the potential for technological advancement while using their imaginations to contemplate a better future. The program was created to help motivate young students to excel in science and technology. **It challenges teams of 2-4 students to research scientific principles and current technologies as the basis for designing innovative technologies that could exist in 20 years.**

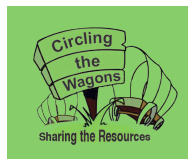
ExploraVision motivates students to excel and helps contribute to building the next generation of scientists, entrepreneurs, and innovators. For more information, or an application for 2011, visit <www.exploravision.org>.

Toyota International Teacher Program

Announcing the inaugural Toyota International Teacher Program to South Africa! The program will take place July 24 - August 10, 2011. Full-time classroom teachers of all subjects and librarians, grades 7 - 12, are now invited to apply online.

The deadline to apply is **January 23, 2011**. The inaugural Toyota International Teacher Program to South Africa will provide teachers first-hand exposure to the social and environmental complexity of South Africa, focusing on sustainable development and emphasizing the links between history, culture, power, and the environment. Teachers will explore the country's natural and cultural diversity through a range of site visits and hands-on activities.

Teachers can visit our website at www.iie.org/toyota<<http://www.iie.org/toyota>> for application instructions, FAQs, and to apply online.



Save the Date

Mark your calendar for the **2011 Environmental Education EXPO** on **Friday, February 11, 2011**. Speakers, vendors and “dynamic panels” (invited experts and YOU) will gather at the Rosser Conservation Education Center at the

Oklahoma City Zoo from 8:00 a.m. to 3:30 p.m. Plan now to join in the excitement of discovering new ways to share nature learning with children! Watch for registration information by January 1, 2011.

Hosted by Oklahoma Association for Environmental Education (OKAEE) and Oklahoma State University (OSU) College of Education. Send email inquires and suggestions to ee-expo@okstate.edu.

Global Ozone (GO3) Project – (High School)

The Global Ozone (GO3) Project is an air pollution research project involving students from around the world. In the project, students measure ground level ozone and meteorological parameters outside their school and upload their data to an overlay in Google Earth to share with other students, teachers and scientists around the world. Project participants come together to exchange results and pollution reduction strategies at the GO3 Network. The project focuses on ground level ozone, formed by

the interaction of various pollutants with sunlight, because it is one of the most dangerous air pollutants. Ground level ozone is created and transported around the world, but is not measured in many locations. The students in the GO3 Project will change this by measuring ground level ozone across the US and the world. Teachers can utilize the GO3 Curriculum to teach students about the science of ozone and how to interpret their data. Since funding is limited, the GO3 Foundation seeks sponsors to provide the funds for the instrumentation required for the project, including an ozone monitor, weather station, netbook computer, and required software.

Each school participating in the GO3 Project will receive an ozone monitoring station in kit form along with detailed instructions on how to assemble its modular components. The assembly, testing, and operation of the instrument will provide the students with a functional understanding of how a scientific instrument works.

Information is available at <http://www.go3project.com/network/go3_home.php>.

Nationwide Video Contest for High School Students – (Grades 9-12)

Human population is set to reach seven billion by the end of 2011. As this historic moment approaches, Population Connection is hosting a nationwide video contest for high school students. The contest challenges students to create a video public service announcement that illustrates the impact of population reaching seven billion as it relates to environmental and global issues. With cash prizes of up to \$1,000 available to winning videos, the deadline for entries is March 1, 2011. But there's something in it for you, the teacher, as well! If at least 10 of your students submit videos, we'll send you a set of free classroom resources. This is a teachable moment you don't want to miss! Contest information and forms are available at <www.Worldof7Billion.org>.

Deadline is March 1, 2011.

We Can Change the World Challenge (K-12)

The Siemens Foundation, Discovery Education and the National Science Teachers Association announce the kick-off of the third annual Siemens We Can Change the World Challenge, a program that educates and empowers students and teachers nationwide to become “Agents of Change” in identifying and solving environmental problems. The national sustainability challenge encourages all students, from kindergarten through twelfth grade, to team up with their classmates to create replicable solutions to environmental issues in their schools, community and world.

Teachers, students and mentors can log on to <www.wecanchange.com> to register for the Siemens We Can Change the World Challenge. Prizes, which vary according to grade level, include savings bonds, school grants, exciting trips and more. Fostering learning, team work and problem solving around sustainability, the website offers robust resource guides, lesson plans and teacher materials to accompany each stage of the challenge. Finalists and winners will be announced in April 2011 and the national winners will be announced in May 2011. For more information, visit <www.facebook.com/wecanchange>.

Entry Deadline March 15, 2011.

Anyone interested in science education is welcome to join the Science Listserv by contacting Jana Rowland at <Jana_Rowland@sde.state.ok.us>.

Jana Rowland, Science Education Director
Standards and Curriculum
Oklahoma State Department of Education
2500 N. Lincoln Blvd.
Oklahoma City, OK 73105
(405) 522-3524
FAX (405) 521-2971
Jana_Rowland@sde.state.ok.us