



Mississippi Science Spots

September 2008

2010 Mississippi Science Framework Update

The State Board of Education has approved the *2010 Mississippi Science Framework*. The framework, along with the *K-8 Vertical Alignment* and additional framework resources, can be accessed through the MDE website at <http://www.mde.k12.ms.us/ACAD/ID/Curriculum/Science/index.htm>. An overview and description of significant changes in the framework were described in the August Mississippi Science Spots, which has been archived on the website above. Note that the framework will be piloted in 2008-2010 and implemented 2010-2011.

Timeline of Activities/Events

- The framework will be piloted (2008-2010).
- PLD's and Test Item Specifications will be finalized (2008-2009).
- Teaching strategies/resources will be developed (2008-2009).
- First administration of new science assessment (Spring 2011)
- New assessment items will be field tested (Spring 2010).
- Practice tests will be developed (Fall 2010).
- Textbooks will be adopted (2009 Adoption).

Science Workshops

At this time, no additional science workshops to specifically address the content of the new framework are scheduled. Professional development opportunities are planned for the spring and summer of 2009 and will be announced at a later time.

NMSA Conference

The National Middle School Association (NMSA) announces its 35th Annual Conference **October 30- November 1, 2008**, in Denver Colorado. Plan now to attend the largest and most comprehensive middle level professional development event in the world with 400 sessions in more than 40 topic areas. Visit www.nmsa.org/annual or call 800-528-NMSA for more information.

MSTA Conference

The Mississippi Science Teachers Association (MSTA) will hold its annual conference on October 20-21, 2008, in Jackson, MS. Registration forms are available at <http://www.ms-scienceteachers.org/>. Advance registration, which includes a registration discount and free T-shirt, is available until September 26, 2008. Proposals for presentations are being accepted until **September 19, 2008**.

NABT Conference

The National Association of Biology Teachers (NABT) will host its 2008 Professional Development Conference, **October 15-18** in Memphis, TN. The call for (presentation) proposals and advance registration information are now available at www.nabt2008.org.

2009 National Science Teachers Association Conference in New Orleans March 19–22, 2009

Celebrate science in magical New Orleans, one of our most beloved cities. Attendee registration is now open. Register online or download and submit an Advance Registration Form in Adobe Acrobat format. Instructions on making housing reservations will be available by **September 15, 2008**. Find more information at <http://www.nsta.org/conferences/2009new>.

NSTA Conference Funding Awards

A number of awards to fund all or partial conference expenses are available on the NSTA website at <http://www.nsta.org/about/awards.aspx#distteaching>.

Teachers' Back-to-School Night

The Mississippi Museum of Natural Science will host a special evening for teachers of all grades from 4:00 p.m. to 7:00 p.m. on September 11, 2008. There will be opportunities to collect resource materials from the museum as well as other agencies and organizations. To schedule a workshop or field trip, reserve a resource kit, download classroom materials, or hear more about how the museum can help meet classroom needs, call 601-354-7303 or visit www.msnaturalscience.org.

Science Olympiad Workshop

A Science Olympiad Workshop is scheduled for coaches on Friday, September 19, 2008, from 8:00 a.m. until 3:30 p.m. Contact Dr. Sheila Hendry at sheila.hendry@usm.edu or 601-266-6367 for details. The Mississippi Science Olympiad will be held at the University of Southern Mississippi on Friday, March 27, 2009. There are two categories: Division B (Grades 6-9) and Division C (Grades 9-12). Information about the Science Olympiad can be found on the national website, www.soinc.org.

New Scholarship Opportunity

The Davidson Institute for Talent Development is offering high achieving young people across the country the opportunity to be named as 2009 Davidson Fellows, an honor accompanied by a \$50,000, \$25,000, or \$10,000 scholarship in recognition of a significant piece of work in Science, Technology, Mathematics, Music, Literature, Philosophy, or Outside the Box. Download an application at www.DavidsonFellows.org. The deadline to apply is March 4, 2009.

“eCYBERMISSION” Competition

Registration for the U.S. Army's seventh annual eCYBERMISSION competition for students in grades 6-9 is now open. The eCYBERMISSION is a free, web-based science, math, and technology competition that allows students to compete for regional and national awards while working together to solve problems in their community. The competition also promotes self-discovery for all students by helping them recognize the real-life applications of math, science and technology. Learn more at www.ecybermission.com.

Free Energy Workshops

The Energy Division of the Mississippi Development Authority is offering FREE energy education workshops (0.5 CEUs) on September 15 and 16, 2009. The workshops feature practical ideas on teaching energy concepts and implementing interdisciplinary energy units into the curriculum. Contact Gail Simms at 601/359-6600 or e-mail lcampbell@mississippi.org.

Local Astronomy Resources

Rainwater Observatory and Planetarium, French Camp, MS, has posted a list of local facilities that will host school groups. Also visit www.rainwater.astronomers.org to find information about periodicals of interest, slide and video sources, books, websites, and other information.

Science Fair Central

Discovery Education (www.discoveryeducation.com) has launched a new website to provide K-8 teachers with a comprehensive approach to science education. In addition to a wealth of general resources, the site includes a link to science fair ideas and resources. Learn more at <http://school.discoveryeducation.com/sciencefaircentral/?pID=fair>.

Zula International–NSTA Early Science Educator Award

The Zula International–NSTA Early Science Educator Awards will recognize and honor two (2) full-time PreK–2 teachers who successfully use innovative inquiry-based science to enhance science teaching and learning in their classroom. Download an application at <http://www.nsta.org/pdfs/awards/Zula.pdf>.

Ecological Footprint Calculator

Earth Day Network has just released its newest tool, the Ecological Footprint Calculator, as an interesting, engaging and highly educational way to teach sustainability and inspire change. Visit <http://www.earthday.net/ecofprint> to learn more.

Free Technology-based Resources

The State Educational Technology Directors Association (SETDA) has announced the availability of a wealth of free content for K-12 educators on Apple's iTunes U. This initiative creates a destination where professional development, curricula resources, examples of best practices, and student samples are easily accessible. iTunes, a free software download for Mac or PC, is required. For more information, visit www.apple.com/itunesu.

Free Educational Resources

More than thirty federal agencies formed a working group in 1997 to make hundreds of federally supported teaching and learning resources easier to find. The result of that work is the Federal Resources for Educational Excellence (FREE) at <http://www.free.ed.gov>. The following resources have recently been added: "Teaching with Spreadsheets Across the Curriculum" (Grades 7-12), "Cleaning Water" (Grades 3-5), "Engineering Design Challenges: Thermal Protection Systems" (grades 6-9), "Nanotechnology: The Power of Small" (Grades 9-12), and "What Is A Planet?" (Grades 9-12).

Nautical Charts

The National Oceanic and Atmospheric Administration (NOAA) recently released a new multimedia elementary educational program, "NauticalCharts" at http://oceanservice.noaa.gov/education/nautical_charts. Designed in cooperation with NOAA's Office of Coast Survey for students in grades 3-5, the media-rich

activity teaches young people about charting and navigation. The activity uses animation to teach chart symbols, safe boating, and why nautical charts are important. Students have access to movies, sounds, pictures, and links to other resources.

Free DVD's and Teacher Guides

Science Screen Reports offers DVD videos free of charge to schools through corporate sponsorship. Topics related to science, engineering, medicine, technology, conservation and the environment are designed to inform, motivate and pique the curiosity of elementary and secondary students. Each video is accompanied by a comprehensive teacher guide that includes a program overview, topical background information, suggestions for critical thought, discussion and further study, a glossary, career possibilities, and related references and web sites to supplement each topic. Visit <http://www.ssrvideo.com/about.html> for more information.

2008 Earth Science Week Contests

The American Geological Institute (AGI), is sponsoring three national contests in conjunction with Earth Science Week 2008, titled "No Child Left Inside," from October 12-18. All entries must be either postmarked or received digitally by **October 17, 2008**. To learn more about these contests, including further information on deadlines, and qualifications, visit <http://www.earthsciweek.org/>.

Sylvan Dell Publishing Resource Grant

A grant is being offered to one school in every Mississippi school district for a free, one-year site license, providing unlimited access to all 35 Sylvan Dell eBooks. The Science and Math Through Literature series feature flip-viewer technology with selectable English and Spanish text and audio. Find more information at www.SylvanDellPublishing.com/resourceGrant.htm.

Project: Clear Voice Final Report

The Project: Clear Voice final report may be accessed at <http://www.mde.k12.ms.us/mtc/pdf/FINAL%20CLEAR%20VOICE%20REPORT.pdf>. Please contact the Teacher Center at 601-359-3631 for the district access code.

Geoscience Resources

The nation's most extensive collection of digital learning resources for geoscience education is now based at the National Center for Atmospheric Research (NCAR) in Boulder, CO. The Digital Library for Earth System Education (DLESE), <http://www.dlese.org/> developed with funding from the National Science Foundation (NSF), focuses on the special needs of K-12 educators and has tips for finding resources for K-12 classrooms.

Subscribe to MS Science Spots

Administrators and educators who wish to subscribe to this newsletter may add their names to the mailing list by sending a blank email to mwroten@mde.k12.ms.us with the subject line, "Listserve."

Free Classroom Activities

The 2007 Advanced Technology Environmental and Energy Center (ATEEC) is a national center that promotes and supports environmental technology education to address the needs of the national and global workforce. The ATEEC Fellows Institute brought 18 community college and high school instructors from the environmental sciences to Alaska. They explored current energy sources in the United States and discussed alternative energy sources. As a result, over 25 activities were developed for use in the classroom, which are available at <http://www.ateec.org>.

Misconceptions to Avoid When Teaching about Plants

Free teaching literature at <http://www.actionbioscience.org/education/hershey3.html> contains hundreds of plant misconceptions, under-generalizations, over-simplifications, misidentifications, and flawed research.

Free Online Slide Sets

BioEd Online Slide Sets are peer-reviewed and annotated PowerPoint slide sets on topics of interest to middle school and high school teachers. Slides can be viewed in sets or accessed individually with a keyword search (e.g., cloning, diversity of life, infectious diseases, biological classification, nucleic acids, human body systems, ecosystems, scientific inquiry, lab techniques, tsunamis, chemical mixtures, etc.). Find information at <http://www.bioedonline.org/slides/>.

Recycling Fundraiser Program

The EcoPhones Cell Phone & Ink Jet Cartridge Recycling Fundraiser Program provides an easy and profitable way to safely recycle old wireless phones and other potentially harmful products. Find more information at <http://www.green-recycling-fundraiser.org>.

NASA Launches a New Science Website

NASA's Science Mission Directorate has launched a new website (<http://nasascience.nasa.gov/>) that provides enhanced and engaging information about NASA's vast scope of scientific endeavors and achievements. The site provides in-depth coverage of NASA's past, present, and future science missions with expanded "For Educators" and "For Kids" pages to provide access to a broader range of resources for learning the science behind NASA missions and an improved search engine to help find information.

Science Matters Booklet

Science Matters, a free 24-page booklet sponsored by the Medtronic Foundation, was designed as a tool for parents and educators to help K-6 students unlock the world of science and discovery at home and school. With a blend of ideas, activities, and profiles of scientists and their inventions, *Science Matters* reinforces the important role of nurturing a child's natural curiosity and demonstrates that "science is everywhere." The booklet may be downloaded online at <http://www.medtronic.com/foundation/community-ed-science-matters-form.html>.

Free Weekly Science Puzzlers

Receive free thought-provoking science puzzlers for grades 3-8, drawn from the award-winning Cogno science board games. Receive a weekly e-mail with a fully illustrated one-page puzzler about astronomy, forces & motion and/or life sciences, ready to be photocopied for students. Learn more at www.cogno.com/puzzlers.

Free Native Plant Habitat Resources

Creating a native plant habitat garden or restoration project provides countless opportunities for learning. This guide from the Washington Native Plant Society provides student checklists, forms, activities, a school-year flow chart outlining integration of curricular materials, and how-to guides for planning. Go to <http://www.wnps.org/education/resources/middleschool.html> for more information.

Free Cell Slides

Download Free slides of cells and cell physiology at <http://images.wellcome.ac.uk/indexplus/gallery/Image+Awards+2008.html>.

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