

E-Blast # 2 March 2011

The Louisiana Practitioner Teacher Program (LPTP) is recruiting 2011-2012 Math and Science Seminar Leaders (SLs) for its alternate certification program, which serves Teach For America, teachNOLA, and Teach Baton Rouge in the New Orleans, Baton Rouge, and Louisiana Delta areas. The compensation for this part-time opportunity is \$6000. If you are interested in a more detailed job description, please contact, Diana Leonardo at dleonardo@tntp.org.

For information the following educational offers and resources please visit the LSTA website at: <http://www.lsta.info>. Select the E-Blast button from the menu on the home page and then click on the March #2 link.

1. NASA's year of the Solar System; March 19th Sun Earth Day
2. PBS Teacher Innovation Awards; Deadline March 31
3. NFW Foundation's Nature of Learning Grant Program; Deadline April 1
4. Google Science Fair – Ages 13-18; Deadline April 4
5. Student Art & Language Arts Contest; Deadline April 21, 2011.
6. Elmer's Teacher Toolkit Application; Deadline April 30
7. Grants for Marine Science Education; Deadline May 2
8. Toyota Teach Program in Costa Rica; Deadline May 4
9. Futures Channel Defined STEM: Providing Application and Understanding
10. ACS's new free middle school chemistry resource
11. RUBIK'S Cube Classroom STEM Lessons
12. America's Blood Centers resources for middle and high school
13. Online STEM textbook service
14. *Canopy In The Clouds* media project
15. NSF in partnership with NBC Learn "Changing Planet" video series

1. March 19th Sun Earth Day

March's topic for NASA's Year of the Solar System (YSS) – Ancient Astronomers / Modern Tools: Celebrating Sun-Earth Day

We have always built bridges to the sky. Our earliest ancestors were skywatchers, making careful observations of the Sun and Moon, making drawings and paintings and keeping count of changes on sticks and tablets. These cosmic connections later were immortalized in stone, through ancient observatories like Stonehenge, the pyramids, Macchu Picchu, and Chichen Itza. By the 17th century, new tools were being used to reach the sky -- telescopes were allowing us to discover new worlds and a new Universe. Telescopes and their instruments changed over the years, as we built bigger observatories on remote mountains. Today, our bridges reach farther still as telescopes and other instruments aboard spacecraft have journeyed from our home planet and are touring our solar system.

Join us this month as we celebrate Sun Earth Day and its theme of Ancient Mysteries,

Modern Discoveries (<http://sunearthday.nasa.gov/2011/index.php>). Explore how increasingly advanced telescopes and instruments – like those aboard the MESSENGER spacecraft - have deepened our understanding of our solar system.

Celebrate the insertion of the MESSENGER spacecraft into orbit around Mercury on March 18, 2011! Learn more about the mission at <http://messenger.jhuapl.edu/>.

Visit the YSS website:

<http://solarsystem.nasa.gov/yss/display.cfm?Year=2011&Month=3&Tab=Overview> to find activities for classroom and informal learning environments, night-sky viewing events and mission milestones, recommended resources, downloadable materials, and more!

2. K-12: PBS Teachers Innovation Awards <http://www.pbs.org/teachers/innovators/>
Here's your opportunity to share your innovative learning ideas with fellow PBS Teachers! Deadline: March 31, 2011

PBS has issued an invitation to educators to submit a video clip and brief description showing how you innovate in your classroom and engage students with PBS resources. The top 12 winners will participate in a week-long "innovation immersion experience" at The Henry Ford in Dearborn, Michigan, plus receive a SMART Slate wireless slate, and a free PBS TeacherLine course! Thirty-six second prize winners will receive a bag chock-full of PBS goodies! A great opportunity to showcase the innovative programs you may have in place using the excellent PBS resources.

3. K-12: Promote Understanding of Conservation Issues <http://www.nfwf.org/>
The National Fish and Wildlife Foundation's Nature of Learning Grant Program seeks to use National Wildlife Refuges as outdoor classrooms to promote greater understanding of local conservation issues and utilize field experiences and student-led stewardship projects to connect classroom lessons to real-world issues as well as build partnership among local schools, community groups, natural resource professionals and local businesses. The amount of the grant is \$5,000 and the deadline: April 1, 2011.

4. Google Science Fair – Ages 13-18 Deadline April 4
Google has launched the inaugural Google Science Fair. This is a global competition open to any student aged 13-18. Registrations and submissions will be made online, and there is no cost to enter. The Science Fair will culminate in a celebratory event at Google headquarters in California in July. Submissions are due by April 4th. For more information, please visit <http://www.google.com/sciencefair>.

5. Student Art & Language Arts Contest Deadline April 21, 2011.
Theme for 2011: Louisiana Outdoors: A Beautiful Experience!

Categories for both art and language arts contests:

Group 1 – Ages 5-7

Group 2 – Ages 8-10

Group 3 – Ages 11-13

Group 4 – Ages 14-18

Louisiana students may enter original work in art and/or the language arts area.

Prizes awarded to contest winners:

1st place in each category – \$200

2nd place in each category – \$100

3rd place in each category – \$75

Winning art and language arts entries will be published in our 2012 calendar!

All winners will be honored at a reception to be held at the Governor's Mansion.

An official entry form and release must accompany each entry. Entries that do not comply with contest rules will be disqualified. The reproducible registration form can be downloaded from our website and MUST accompany the entry and MUST be signed by the contestant and parent or guardian.

For more information, full contest guidelines, and contest entry form, please visit

<http://www.wlf.louisiana.gov/environmental-awareness-art-language-arts-contest>

6. Elmer's Teacher Toolkit Application http://kinf.org/elmers/2011_application.php

The purpose of these grants is to provide teachers with the means to replicate projects found in the Elmer's Teacher Tool Kit catalog in their own classrooms. These projects, previously funded by the Kids In Need Foundation, make creative use of common teaching aids, approach curriculum from an imaginative angle, or tie nontraditional concepts together for the purpose of illustrating commonalities.

Eligibility: K-12 certified teachers teaching in the subject of the project at public, private, charter, or parochial schools within the U.S. Special consideration will be given to first year teachers.

Grant Amounts: \$100 to \$500. In exceptional cases, a project from the catalog may be budgeted for more than \$500. The teacher must prove that additional funds from another source are secured to do the project before funding will be granted from Elmer's Teacher Tool Kit. If you are receiving additional funds for the project, please indicate it in the budget section of the application. The deadline to apply is April 30, 2011.

7. Grants for Marine Science Education

The Center for Microbial Oceanography: Research and Education (C-MORE), based at the University of Hawaii, awards grants (up to \$1500) to foster education in microbial science. Any educator (from any of the 50 states) may apply for one of these grants, but preference will be given to public school teachers, non-profit organizations, and first-time applicants.

The application is short and simple (see attached)! You can request funds for any project related to microbial science. Past teachers have received funds for equipment and consumable supplies, to attend conferences and professional development workshops, and for school field trips. Please visit the GEMS webpage for further information and to read about past projects (<http://cmore.soest.hawaii.edu/education/teachers/gems.htm>).

Note that every project requires a sponsor. Any UH faculty member (any campus) or any member of the C-MORE team can be a sponsor (<http://cmore.soest.hawaii.edu/team.htm>). Contact us if you have any trouble finding a sponsor and we can help!

The next application deadline is May 2, 2011. Please address any questions or concerns to Dr. Michelle Hsia, GEMS Program Coordinator (956-3715) or email gems@soest.hawaii.edu.

8. Toyota Teach Program in Costa Rica

We are very pleased to announce the 2011 Toyota International Teacher Program to Costa Rica, which will take place November 19 through December 3, 2011. Full-time classroom teachers of all subjects and librarians, grades 7 – 12, are now invited to apply on-line. Please visit our website at www.iie.org/toyota for more information and application instructions. The deadline to apply is May 4, 2011.

The Toyota International Teacher Program is a **fully-funded** international professional development program for U.S. teachers. Funded by Toyota Motor Sales, U.S.A., Inc., and administered by the Institute of International Education, the program advances environmental stewardship and global connectedness in U.S. schools and communities. The Program to Costa Rica will explore environmental and cultural preservation, biodiversity, and sustainability through a variety of site visits, discussions, lectures, and hands-on activities. Program participants will have an opportunity to meet with local experts, visit schools and museums, and experience the rainforest first-hand.

The Toyota International Teacher Program values diversity and encourages educators of all backgrounds, subjects, and school types to apply for this unique professional development opportunity.

Please help us reach out to educators by sharing this information with your members and constituents. If you post programs and professional development opportunities on your website, listserv, or newsletter, we would greatly appreciate you posting information on the program as well.

If you have any questions or would like more information, please do not hesitate to contact us by email at toyotateach@iie.org or by phone at 1-877-832-2457.

9. Defined STEM: Providing Application and Understanding

Defined STEM is a new service that incorporates the Futures Channel's videos along with additional educational resources such as supplemental lesson plans, interactive

simulations and performance-based learning tasks to engage students in Science, Technology, Engineering and Mathematics (STEM).

<http://stem.definedlearning.com/demo.cfm?id=5>

These resources coupled with the Futures Channel video content allow teachers to bring relevance into the classroom, while providing the understanding and application of concepts that are the cornerstone of the STEM education movement.

Find out more about the Defined STEM: <http://stem.definedlearning.com/>

10. The ACS has just released a new free middle school science resource at <http://middleschoolchemistry.com>. It is a completely free source of activity-based lesson plans for teaching basic chemistry concepts at the middle school level. The lessons cover all the main concepts in middle school chemistry so any part of a lesson or the entire lesson can be used on its own or in conjunction with the curriculum the teacher is already using. Each lesson also contains integrated animations and video that a teacher can use to help explain student observations on the molecular level. Online professional development will also be available to introduce and familiarize teachers with the demonstrations, activities, and chemistry content in the site.

If you have any questions or need any other information about <http://middleschoolchemistry.com> or would like to know about upcoming online professional development, please [contact](#) Jim Kessler, ACS Education Division

11. RUBIK'S Cube Classroom STEM Lessons

On the heels of President Obama's State of the Union Address calling for a greater classroom focus on science, technology, engineering, and math, teachers nationwide now have access to a new resource: STEM lessons built around the Rubik's Cube. The You CAN Do The Rubik's Cube community initiative, currently in its second full school year, has developed STEM lessons in conjunction with the Common Core State Standards, National Standards, and the National Council of Teachers of Mathematics, providing the lessons to teachers for free via download at www.YouCanDoTheCube.com. The STEM lessons provided by You CAN Do The Rubik's Cube program were developed for elementary, middle, and high school classrooms and aim to help teachers foster STEM skills.

One of the lessons focuses on three-dimensional thinking and representation. The goal is to have students know orthographic projection -- design representation based on 3-dimensional projections of a cube -- and how to use them to describe and design something that can be manufactured. Students are introduced to multi-view sketches that will be used by others to produce a final product. "All scientific progress occurs in incremental steps, with one discovery building upon another. Learning to solve the Rubik's Cube is a good way to understand how scientific process occurs," said Rohrig. Since its release in 1980, the Rubik's Cube has since found its way into over 350 million

homes worldwide and has continued to fascinate, bewilder, and challenge millions of people.

12. America's Blood Centers

If you want to know more about blood biology, blood circulation, and the importance of blood in our bodies visit www.mybloodyourblood.org. The My Blood, Your Blood web site is an award-winning science education program that teaches all about the amazing journey of blood in our bodies.

The program was designed by a team of physicians and educators as a low-prep time, turnkey package to be used either in the classroom or the home-school environment. Through sophisticated animation and microscopy, the My Blood, Your Blood program captures the imagination of students of all ages and helps foster an interest in science. The program also emphasizes the value of community service through blood donation and the importance of a healthy lifestyle.

Select either "Elementary School" or "Middle & High School" on the home page. Louisiana contacts are found by entering your zip code.

13. Resource for educators in any STEM field. CK-12 <http://www.ck12.org/flexbook/> has put together an online STEM textbook service. There are a variety of texts from Science, Technology, Engineering, and Mathematics. Teachers can log in, select the chapters from the available textbooks that they want to be included in their "flexbook", edit the chapters as needed to fit their local curriculum, and then deliver them to students online and through Kindle and iBooks apps. The content is presented at a reasonable reading level, includes vibrant graphics and embedded youtube explanations, and best of all, if there are parts that you want to be worded differently, you can change them! Finally, a textbook that can be tailored to fit the needs of your students. And it's free!

14. *Canopy In The Clouds* New and free science educational media project, (www.canopyinthecLOUDS.com). The project uses innovative and immersive media from the perspective of a tropical montane cloud forest to serve as a platform for inquiry-based, K-12 earth and life science education. We are particularly excited to offer over 25 lesson plans on themes such as water, weather, soils, ecology and the process of science focused on 6-8th grades. All materials are normed to national science education standards, peer-reviewed by a team of scientists and educators, and made available free of cost via our website. Funding is provided by the National Geographic Society, National Science Foundation and the Tropical Science Center of Costa Rica.

15. NSF's Office of Legislative and Public Affairs, in partnership with NBC Learn, the educational arm of NBC News is funding a climate change communications project.

The project, "Changing Planet," includes 13 videos with associated lesson plans, being posted online over 13 weeks. Videos: Changing Planet

<<http://www.nbclearn.com/changingplanet>> Lesson Plans: Windows to the Universe
<http://www.windows2universe.org/earth/changing_planet/changing_planet.html>

These videos are available as a resource for educators and students.

K-12: View Seasonal Changes from Space

http://www.nasa.gov/externalflash/EducationSlideshow_122010/index.html?

From space, NASA satellites record the change of seasons. Satellite images show large parts of the landscape at one time, helping scientists study regional patterns on Earth. These images also help show bigger changes that may occur over many years. When seasons change, nature reacts differently, depending on where you live. Temperatures change, rain or snow falls, rivers may flood. What kinds of changes happen where you live? Share a photo you have taken that shows how seasons change in your part of the world.