

Central Coast STEM Education Collaborative

CCSTEM News Blast, May 5, 2013
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Strengthening Community STEM Education

Please forward this CCSTEM News Blast to family, friends, neighbors, educators, students, governmental leaders and business owners and managers, as they may wish to participate in some way or attend some of the upcoming meetings and community events. Help spread the word of energizing and fascinating STEM education outreach activities on the Central Coast. Become involved! Become a promoter and cheerleader of our children's education!

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CCSTEM General Membership Meeting Monday, May 20th

May 20, 2013, 5:00-7:00 PM

Central Coast New Tech High School

Everyone is welcome and encouraged to attend. Come One, Come All!

CCSTEM's May 20th General Membership Meeting will be held at <u>Central Coast New Tech High</u> <u>School</u> located at Nipomo's High School at 525 Thompson Road, Building 900. Come learn how LMUSD is teaching 21st Century skills.

Current tentative schedule:

5:00-5:30 PM Tour of New Tech High by Principal Dan Neff and his students.

5:30-7:00 PM General meeting n the multipurpose room.

Dan Neff will be the featured speaker talking about New Tech High's program, history and what they see as support mechanisms for the growth of the program from outside resources. Michael Garrett will also make a brief presentation on "Do the Math".

For additional information about New Tech High, see <u>Lucia Mar Foundation for Innovation news web</u> <u>page</u>.

San Luis Obispo Mini Maker Faire Saturday, May 11th

May 11th, 11 AM - 3 PM
San Luis Obispo's Mission Plaza
Host: San Luis Obispo Museum of Art

See the first-ever <u>San Luis Obispo Mini Maker Faire</u> hosted by the <u>SLO Museum of Art</u>. Everyone is invited to this <u>FREE</u> event, especially families! This is an outstanding opportunity for the public to see fascinating projects by students of all ages, and products and inventions by local inventors and businesses. Learn what STEM looks like in action on the Central Coast. Additional information is also available from the new CCSTEM Public Resources "<u>STEM Events</u>" web page.

Pub Science Night Wednesday, May 22nd Limbless Reptiles "Reach Out" Through Research

May 22nd, 6 PM Mother's Tavern, San Luis Obispo

Join Cal Poly Biological Sciences reptile researcher and lecturer **Julius "Tony" Frazier** as he discusses working with reptiles and what we are learning from them. Discussion begins at 6 PM, but arrive early to get a good seat and order drinks and food. \$5 entrance fee, includes \$3 off your food order that evening only. Additional information is also available from the new CCSTEM Public Resources "<u>STEM Events</u>" web page.

Central Coast Science Fair Friday, May 31st - Saturday, June 1st

May 31 - June 31

Vandenberg Middle School Multi-Purpose Room
Primary Sponsor: American Institute of Aeronautics and Astronautics (AIAA)

Witness educational STEM in energizing action at the 28th annual Central Coast Science Fair at Vandenberg Middle School on May 31st and June 1st, as junior high students from around the Lompoc area compete for awards and prizes, displaying their science and engineering projects for judges who are highly experienced technical military personnel. There is no better way to excite students than having their projects studied in detail by professional scientists and engineers asking probing questions while providing insightful comments and uplifting reviews.

Judging for the Science Fair will take place from 5-8 PM on Friday and 8:00 AM until noon on Saturday. The public is eagerly invited to attend the showcase of exciting STEM outreach of Air Force scientists and engineers along with local students, parents and teachers. There will be an Estes rocket launch competition. Students will be able to build their own rocket, launch and recover it. The **rocket competition will occur at 10 AM on Saturday**. Hobby Award Prizes will be awarded at the Award Reception Saturday evening.

In addition, on Saturday, the Orcutt Academy High School Spartatroniks Robotics team will hold a robotics demonstration. The Department of Justice Bureau of Forensic Services will also provide a glance into the world of real-life CSI by demonstrating fingerprinting and DNA collection

The Central Coast Science Fair culminates with the Saturday Awards Reception where over \$400 in cash and plaque awards will be presented. The keynote speaker will be Vandenberg Air Force Base 30th Launch Group Commander Col. Shahnaz Punjani. The 30th Launch Group's mission is processing, testing and launching boosters and satellites; providing mission assurance; protecting critical launch resources; performing launch operations; providing mission integration; and preparing future launch leaders. She will discuss Vandenberg's launch mission and provide an interesting presentation at the Awards Reception.

The event's primary sponsor, the American Institute of Aeronautics and Astronautics (AIAA), is the world's largest technical society dedicated to the global aerospace profession. In addition, other major contributors include the Endeavour Institute, General Dynamics Systems Development & Integration Services, Indyne, Inc. and the System Safety Society's Center California Chapter and the NASA Kennedy Space Center.

CCSTEM Membership and Web Operations

Becoming a CCSTEM Member (which is FREE)

The CCSTEM organization is always looking for new members, folks who are concerned about improving

STEM education for our nation's children. Membership is free. Members may join to only receive CCSTEM email bulletins, if so desired, or are welcome and encouraged to become more involved in operations, supporting working groups and helping guide CCSTEM's future direction. Signing up for membership is easy ... look at the **JOIN** information box in the upper, right corner of the **CCSTEM** website, which directs you to the on-line membership form.

CCSTEM Website Operations

Please check out the following new **Public Resources** web pages:

<u>STEM Events</u> - Information on selected local STEM education events, supplementing event information posted on the <u>CCSTEM Event Calendar</u>. If you would like to have a STEM event included on our Event Calendar, you may do so by using the <u>CCSTEM Calendar Event Submittal</u> page.

After-School STEM Programs and Camps

We are always looking for new information to add to our website, especially STEM education support services and websites that can provide direct support to educators, students and families. If you are aware of information that may be a good addition to our website, please contact <u>Walt Reil</u>.

Teacher Professional Development

CUE Rock Star Teacher Camps 2013

Check out the Computer-Using-Educators (CUE) Rock Star Teacher Camps offered during summer 2013. CCSTEM governing board member, Pam Rickard, will be teaching at the STEM camp in the Bay Area on the USS Hornett.

Google in Education California Summit July 13-14

Google in Education invites teachers to participate in the second annual Google in Education California Summit to be held at Sequoia High School in Redwood City on July 13 and 14, 2013. This high intensity two-day event focuses on deploying, integrating, and using Google Apps for Education and other Google tools to promote student learning in K-12 and higher education. The California Summit program features Google certified teachers, Google Apps for Education certified trainers, practicing administrators, solution providers, Google engineers, and representatives from the Google Education teams. California Summit Registration

Cal Poly's 2013 EPIC Summer Camp is Full

Cal Poly is offering the **2013 EPIC** (Engineering Possibilities in College) Summer Camp. EPIC is a fun-filled summer camp that teaches middle and high school students what engineering is and what the

various types of engineering are. Students will learn that engineering is all about helping people and making our world better. EPIC is open to those going into 7th - 12th grade in the Fall. **Applications for summer 2013 are full.** Watch the <u>Cal Poly EPIC</u> website for announcements of openings for 2014 summer sessions.

Cuesta College's New Sustainability Resource Center

Derrick Lavoie, Ph.D., Associate Director of <u>Cuesta College's</u> new <u>Sustainability Resource Center</u>, located on the North County Campus, presented information about the new center at the April 15th CCSTEM governing board meeting. Its mission is to integrate sustainability concepts and processes, with a strong STEM foundation, throughout SLO County schools. He invited CCSTEM to participate in an Energy Event on October 5th, 2013, at Cuesta College's main campus. The morning will include demonstrations, speakers, and hands-on activities for all ages. Energy-related vendors and non-profits will be invited to set up displays. For further information, contact <u>Derrick Lavoie</u>.

STEM Education News & Reports

Successful Endeavour Institute Balloon Fest Championship

The Endeavour Institute's 2013 Balloon Fest Championship event at Tobin James Cellars east of Paso Robles on Saturday, April 20th, was a success, seeing many tethered weather balloons floating skyward up to 1,000 feet carrying small condola's full of high-tech scientific and engineering project payloads. Junior high, high school and college students, mentors and judges spent from 7 AM to 3 PM flying balloons, analyzing data, having a delicious buffet lunch and viewing student presentations and awards. One special untethered ballon, carrying a cell phone and scientific instrumentation equipment, disappeared to the southwest and is probably somewhere near Hawaii or Japan by now! Excellent photos by professional photographer Dennis Eamon Young are posted on the Endeavour 2013 Ballon Fest website and the Cal Coast News website.

New "Next Generation Science Standards" Released

Marking the culmination of a three-year, multiphase process, a 26-state consortium has <u>released</u> the <u>Next Generation Science Standards (NGSS)</u>, a detailed description of the key scientific ideas and practices that all students should learn by the time they graduate from high school. The standards are based largely on the 2011 National Research Council report <u>A Framework for K-12 Science Education:</u> <u>Practices, Crosscutting Concepts, and Core Ideas</u>. The new NGSS standards can be studied <u>HERE</u>. Printed versions of the NGSS standards can be ordered from <u>National Academies Press</u>. You can also view the report <u>A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas</u>.

Los Osos Middle School's New STEAM Program

<u>Los Osos Middle School</u> celebrated a ribbon cutting for the <u>6th Grade STEAM program</u> on April 26th. CCSTEM board member, Pam Rickard, will be teaching in the STEAM program this fall.

Common Core Standards for Mathematics

On April 18th the California Department of Education announced California is moving one step closer to implementing the Common Core State Standards for Mathematics with the release of the draft Mathematics Framework for California Public Schools, Kindergarten through Grade Twelve for public comment, said State Superintendent of Public Instruction Tom Torlakson. "This draft Math Framework is an important step on California's path toward the Common Core State Standards, which provide a practical way to prepare children for the challenges of a constantly changing world by learning step-by-step the practical skills they need for career and college," Torlakson said. "I'm looking forward to feedback from the public as we put these standards to work remodeling our education system." The public will have until June 17, 2013, to review the draft Math Framework located at the California Department of Education's Public Review and Comment on the Math Framework web page. To leave comments, people may use the online 2013 Mathematics Frameworks Online Survey, or visit one of the 23 Learning Resource Display Centers statewide, where a hard copy of the draft will be available. The public comments will then be presented to the Instructional Quality Commission this summer for review and possible inclusion into the final Math Framework. The State Board of Education may take action on the final Math Framework this fall.

Other STEM Education News & Reports

For additional STEM education news see the following CCSTEM websites:

- -- STEM Education News
- -- STEM Education Studies, Reports, Videos, Conferences, Congressional Testimony

