

California Online Mathematics Education Times (COMET)

Vol. 16, No. 6 - 21 July 2015

Editor: Carol Fry Bohlin - carolb@csufresno.edu

COMET Archives (2000-2015): <http://comet.cmpso.org>

California Mathematics Project: <http://www.cmpso.org>

California Online Mathematics Education Times (COMET) is an electronic news bulletin providing STEM-related news from California and across the nation, as well as information about professional events and opportunities, current educational issues, and online resources.

.....

Note: Tomorrow is **Pi Approximation Day** (22/7, when the date is written in day/month order)

Issue Overview (7.21.15):

California Focus:

- (1) Astronaut Leland Melvin to Provide Keynote Address for California Teachers Summit
- (2) California Subject Exams for Teachers (CSET): Mathematics and Science Examination Dates for 2015-16 – Registration Period Opens This Week
- (3) Facilitator Training for Mathematics Professional Development Modules to be Held in October
- (4) Recipients of the Presidential Award for Excellence in Mathematics and Science Teaching Announced
- (5) Meeting Highlights: California Commission on Teacher Credentialing
- (6) Teacher Supply in California, 2013-14
- (6a) California's Dwindling Teacher Supply Rattling Districts' Nerves

National Focus

- (1) U.S. Team Takes First Place at International Mathematical Olympiad
- (1a) They're No. 1: U.S. Wins Math Olympiad For First Time In 21 Years
- (2) Senate and House Versions of the ESEA Reauthorization Bill Head to Conference for Negotiation
- (2a) Senate Passes ESEA Rewrite With Big Bipartisan Backing, 81-17
- (2b) ESEA Rewrite: What to Expect From House-Senate Conference
- (2c) Senate ESEA Rewrite Fits Brown's Ed Agenda

.....

ARTICLES & ANNOUNCEMENTS (CALIFORNIA FOCUS)

- (1) Astronaut Leland Melvin to Provide Keynote Address for California Teachers Summit**

URL: www.cateacherssummit.com

Tickets are going quickly for the inaugural **Better Together: California Teachers Summit**, and a number of the 33 conference sites around the state have already reached capacity. Teachers may register for and attend the event at any of the locations around the state that still have space. The Summit's organizers (the New Teacher Center, the California State University, and the Association of Independent California Colleges and Universities) expect to attract 20,000 educators to this statewide event.

The Summit, which will be held on **July 31 from 8:30 a.m.-2:30 p.m.**, will provide a unique opportunity for PreK-12 teachers, preservice teachers, and school administrators to convene and build a powerful network of peers, share best practices, celebrate their work, and access effective and useful resources to help implement the California Standards.

Astronaut Leland D. Melvin, who has a master's degree in materials science engineering, was just announced as a **keynote speaker** for the event. He participated in two shuttle missions and made numerous contributions to NASA's STEM education program. He is well known as an inspirational speaker and supporter of STEM. Visit his LinkedIn page to learn more: www.linkedin.com/pub/leland-melvin/38/9b5/704

The Summit website, www.cateacherssummit.com, contains information about the **sponsors, the agenda, university credit, and Summit registration**. The **Summit flyer** is available at <http://tinyurl.com/BetterTogetherFlyer2015> Follow #CATeachersSummit (Twitter feed) for up-to-date information.

(2) California Subject Exams for Teachers (CSET): Mathematics and Science Examination Dates for 2015-16 – Registration Period Opens This Week

URL:

www.ctcexams.nesinc.com//index.asp?m=Home&sm=CA%20Examinations%20Home

July 11 was the last day that the CSET (California Subject Examinations for Teachers) Science subtests were administered in a paper-based format. **During the 2015-16 testing year, all CSET subtests for Single Subject credentials will be computer-based** and administered year-round by appointment Monday-Saturday (excluding some holidays) at regional testing centers. Test results will be released monthly during the 2015-16 program year on a schedule available on the California Educator Credentialing Examinations website: www.ctcexams.nesinc.com

Exam registration (available online only) for 2015-16 opened yesterday. Spaces often fill quickly, so early registration is encouraged. The registration website, however, is currently experiencing technical difficulties. Recorded updates and testing information can be heard by calling the CSET Information Line: (800) 989-8532. Representatives are available from 9 a.m.-5 p.m. Monday-Friday.

July 11 was also the last administration date for the CSET for Specialized Science content areas. The final date for initial issuance of a **Single Subject Preliminary**

credential in a Specialized Science (or clear for initial application) is 1 August 2020. Teacher candidates may still earn a Foundational-Level General Science Authorization or a full authorization in one or more of the four science disciplines: Biological Sciences, Chemistry, Geosciences, and Physics. For more details, please visit www.ctc.ca.gov/notices/coded/2014/1409.pdf

(3) Facilitator Training for Mathematics Professional Development Modules to be Held in October

Contact: Ann Park: apark@gseis.ucla.edu (California Mathematics Project)

The California Department of Education collaborated with education professionals through the state to develop a series of professional learning modules to help in the transition to the California Standards. To view the **current modules**, please visit <http://tinyurl.com/proflrngmodules>

Classroom teachers and mathematics teacher educators in the California Mathematics Council (CMC), the California Association of Mathematics Teacher Educators (CAMTE), and the California Mathematics Project (CMP) developed K-12 modules based on the California Mathematics Standards.

The CMP is offering **facilitator training in October 2015** for two of these **K-12 Professional Learning Modules**:

(a) Standards for Mathematical Practice (SMP)

Dates: October 12-13, 2015

Location: Hayward Student Information and Assessment Center (27211 Tyrrell Ave., Hayward, CA 94544)

Registration: <https://commerce.cashnet.com/CENTEREVENTS?itemcode=40070XE-OST>

Flyer: https://drive.google.com/file/d/0B0Lfn5L2b_fcRWFjMm9DLVdhckU/view

Modules:

<https://www.mydigitalchalkboard.org/portal/default/Content/Viewer/Content?action=2&scId=306591>

(b) Statistics and Probability

Dates: October 27-28, 2015

Location: Embassy Suites Hotel near Los Angeles International Airport (LAX)

Registration: <https://commerce.cashnet.com/CENTEREVENTS?itemcode=40070XE-OSS>

Flyer:

www.dropbox.com/s/5odv2txcsgarice/Statistics%26ProbabilityModuleTraining2015.png?dl=0

For more information, please contact Ann Park at apark@gseis.ucla.edu

(4) Recipients of the Presidential Award for Excellence in Mathematics and Science Teaching Announced

URL: <http://recognition.paemst.org/awardees> and <https://paemst.org/home/view>

URL (CDE): www.cde.ca.gov/nr/ne/yr15/yr15rel57.asp

On July 1, President Obama announced the recipients of the **2013 Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST)**. The recipients of this annual award (typically one mathematics and one science teacher per state) are selected by a panel of distinguished scientists, mathematicians, and educators following an initial selection process conducted at the state level. During even years, the award recognizes outstanding K-6 teachers, and during odd years, teachers in grades 7-12 are honored.

Winners of this Presidential honor receive a \$10,000 award from the National Science Foundation to be used at their discretion. They also are invited to Washington, DC, for an awards ceremony, educational and celebratory events, and visits with members of the Administration.

"These teachers are shaping America's success through their passion for math and science," President Obama said. "Their leadership and commitment empower our children to think critically and creatively about science, technology, engineering, and math. The work these teachers are doing in our classrooms today will help ensure that America stays on the cutting edge tomorrow."

California's PAEMST-Science award recipient was **Scott Holloway**, who teaches College Prep and AP Physics at Westlake High School in the Conejo Valley Unified School District. **Marianne Chowning-Dray**, an Algebra II/Trig and AP Calculus BC teacher at Eastside College Preparatory School in East Palo Alto, was the state's PAEMST-Mathematics award recipient.

For more information about Marianne, please visit https://recognition.paemst.org/finalist_profile/34842 For information about Scott, visit https://recognition.paemst.org/finalist_profile/32328

(5) Meeting Highlights: California Commission on Teacher Credentialing

Source: Credential Counselors and Analysts of California

URL: www.ccacteam.com/wp-content/uploads/2015/07/JUNE-2015-Highlights.pdf

Educators interested in keeping apprised of the work of the California Commission on Teacher Credentialing (CTC) are encouraged to view the live or archived broadcasts of Commission meetings. Links to archived meeting agendas, minutes, and videos are available under the "Commission Meetings" header at www.ctc.ca.gov/commission/meetings.html Links to the minutes (and webcast) for the August 2015 meeting will be available under "Current Meetings."

Credential Counselors and Analysts of California (CCAC) "is a nonprofit professional organization of credentialing personnel from universities, school districts and county

offices of education.” The organization provides “**highlights**” of each meeting of the **Commission**. An archive of these highlights is located at www.ccacteam.com/news/highlights/

For the June 2015 CTC meeting, Tina Torres provided an 11-page summary of agenda discussions and actions: www.ccacteam.com/wp-content/uploads/2015/07/JUNE-2015-Highlights.pdf Of particular interest may be the update on the work to strengthen and streamline the Commission’s accreditation system (pp. 2-4), as well as Agenda Item 7B (www.ctc.ca.gov/commission/agendas/2015-06/2015-06-7B.pdf): “Proposed Amendments to Title 5 of the California Code of Regulations Pertaining to the Supplementary Authorization in Computer Concepts and Applications...”

“The proposed amendments to regulations reflect a change in focus for the Supplementary Authorization in Computer Concepts and Applications from content preparation for teaching basic computer use, keyboarding, and software applications to more relevant 21st century content preparation inclusive of the range of Computer Science courses taught in California public schools. The proposed amendments include revised Content Areas of Study for the supplementary authorizations in order to serve as a basis for increasing the capacity of teachers prepared to provide instruction in the range of K-12 Computer Science courses in California public schools. **The proposed regulations also include changing the name of this Supplementary Authorization from Computer Concepts and Applications to Computer Science** as well as general clean-up of outdated language within the same sections of these regulations...” (pp. 10-11, CTC June 2015 Meeting Highlights, CCAC). The Commission approved the proposed amendments. Individuals interested in this or other agenda items are encouraged to view the archived video of the meeting.

(6) “**Teacher Supply in California, 2013-14**”

Source: California Commission on Teacher Credentialing

URL: www.ctc.ca.gov/reports/TS-2013-2014-AnnualRpt.pdf

At its April 2015 meeting, the Commission on Teacher Credentialing approved a motion to approve transmitting the new report, “**Teacher Supply in California, 2013-14,**” to Governor Brown and the Legislature (Agenda Item 4D). Two of the key findings included in this informative report are the following:

“During fiscal year (FY) 2013-14:

- There was a **decrease of 3 percent in the number of newly issued credentials** across all three types of preliminary teaching credentials (i.e., Multiple Subject, Single Subject, and Education Specialist).
- **2013-14 is the tenth consecutive year in which the total number of initial teaching credentials issued has decreased.** There was a decrease of 26 percent over the past five years in the number of new teaching credentials initially issued...”

.....

Related article:

“California’s Dwindling Teacher Supply Rattling Districts’ Nerves” by Katherine Ellison and John Fensterwald

Source: *EdSource* – 14 July 2015

URL: <http://tinyurl.com/tchr-shortage>

“...In a recent series of interviews, human resource officials in six school districts and a statewide charter school system reported a variety of ways and degrees to which schools are being affected by a shortage that many predict will worsen. EdSource Today is tracking the six unified districts -- **Elk Grove, Garden Grove, Fresno, San Jose, Santa Ana and Visalia** -- and the Aspire Public Schools charter system as a regular feature of our coverage of the Common Core State Standards...”

~~~~~

## ARTICLES & ANNOUNCEMENTS (NATIONAL FOCUS)

### **(1) U.S. Team Takes First Place at International Mathematical Olympiad**

Source: Mathematical Association of America

URL: [www.maa.org/news/us-team-takes-first-place-at-international-mathematical-olympiad](http://www.maa.org/news/us-team-takes-first-place-at-international-mathematical-olympiad)

The six-person team representing the United States took first place at the 56th International Mathematical Olympiad (IMO). The 2015 IMO was held in Chiang Mai, Thailand, from July 4 to 13.

IMO scores are based on the number of points scored by individual team members on six problems. The problems are taken in sets of three in 4.5 hour sessions over two days. **The U.S. team’s combined score of 185 edged out the Chinese team’s score of 181 and the Republic of Korea’s third-place score of 161.**

Members of the U.S. team included Ryan Alweiss, Allen Liu, Yang Liu, Shyam Narayanan, and David Stoner, all of whom were awarded gold medals, and Michael Kural, who earned a silver medal, just one point away from the gold. The last time the U.S. team took first place was in 1994.

Participants on the U.S. team were selected through a series of competitions organized by the Mathematical Association of America (MAA), culminating with the USA Mathematical Olympiad. The six team members joined 48 of their peers at Carnegie Mellon University (CMU) in June for three weeks of immersion in problem solving at MAA’s Mathematical Olympiad Summer Program (MOSP). Established in 1974 to train the first U.S. team to the IMO, MOSP has expanded over the years and broadened its goals... [See photos and read more at the website above.]

**From the IMO homepage ([www.imo2015.org](http://www.imo2015.org)):** “The International Mathematical Olympiad (IMO) is the World Championship Mathematics Competition for High School students and is held annually in a different country. The first IMO was held in 1959 in Romania, with 7 countries participating. Nowadays, there are over 100 countries participating from 5 continents.”

.....

### **Related Articles:**

**"They're No. 1: U.S. Wins Math Olympiad For First Time In 21 Years"**

**Source:** National Public Radio

**URL:** [www.npr.org/2015/07/18/424122249/theyre-no-1-u-s-wins-math-olympiad-for-first-time-in-21-years](http://www.npr.org/2015/07/18/424122249/theyre-no-1-u-s-wins-math-olympiad-for-first-time-in-21-years)

[Last] week, the top-ranked math students from high schools around the country went head-to-head with competitors from more than 100 countries at the International Mathematical Olympiad in Chiang Mai, Thailand. And, for the first time in more than two decades, they won.

Po-Shen Loh, a professor at Carnegie Mellon University and head coach for Team USA, says the competition is held over the course of two days...

"If you can even solve one question," Loh tells NPR's Arun Rath, "you're a bit of a genius"...

The U.S. team last won the Olympiad in 1994. Reports in recent years have raised concerns that American math students are falling behind those in the rest of the world. But, Loh says, "At least in this case with the Olympiads, we've been able to prove that our top Americans are certainly at the level of the top people from the other countries."

Concerns have also been raised over the years about a persistent gender gap in U.S. math achievement. All six members of this year's winning team are boys.

"That is actually something that one hopes will change," Loh says. "The top 12 people in the country on the United States Math Olympiad happen to have two girls in it. One might say, 'Only 2 out of 12, that's terrible.' But I should say in many years, it was, unfortunately, zero."

Loh says it's important to teach math as more than mere memorization and formulas. He says this is one reason, perhaps, that the subject hasn't attracted as many American students as it could.

"Ultimately, I think that as the mathematical culture starts to reach out to more people in the United States, we could quite possibly start to see more diversity. And I think that would be a fantastic outcome," he says.

"It could be that maybe the way math is sold, in some sense, is one in which it's just a bunch of formulas to memorize. I think if we are able to communicate to the greater American public that mathematics is not just about memorizing a bunch of formulas, but in fact is as creative as the humanities and arts, quite possibly you might be able to upend the culture difference."

For Loh, there's beauty--and, yes, art--in the rigor of mathematics.

"Math is a cross between art and law. Law is about the reasoning and proving. And the art is because what we're trying to prove are statements that are somehow elegant," he says. "That's where the artist decides what is art."

---

## **(2) Senate and House Versions of the ESEA Reauthorization Bill Head to Conference for Negotiation**

David DeSchryver of WhiteBoard Advisors writes that "on Thursday, July 16, the Senate passed its ESEA (Elementary and Secondary Education Act) reauthorization bill, the Every Child Achieves Act of 2015 (ECAA). The House passed its version on July 8.

"The next step is to reconcile the two bills in conference and to present a bill to the President that he will sign into law. The negotiation will revolve, in large part, around the Senate bill because it has Democratic support. The President reiterated his veto threat against the House bill as soon as it was passed..."

Visit [www.whiteboardadvisors.com/news/update-senate-esea-analysis](http://www.whiteboardadvisors.com/news/update-senate-esea-analysis) for a link to a "flash analysis" of the Senate version of the bill that includes the following information:

"States are to provide assurances that they have adopted challenging academic standards in reading/ELA, math, and science. The states must also demonstrate that there is an alignment to entrance requirements without need for remediation, that there are relevant CTE standards and that there are relevant early learning standards. [However,] the Secretary [of Education] is prohibited from establishing any criterion that specifies, defines, or prescribes the standards or measures that State or local educational agencies use to establish, implement, or improve standards, assessments, or accountability systems..."

"After much initial debate the ECAA would require annual testing in mathematics, reading or language arts in grades 3-8, and at least once in 9-12. Science must be assessed at least once in the grade spans 3-5, 6-9, & 10-12. The assessments may be summative or given throughout the year. The data must be disaggregated for subgroups..."

Note: For the text of the Every Child Achieves Act, see [www.help.senate.gov/imo/media/The\\_Every\\_Child\\_Achieves\\_Act\\_of\\_2015--summary.pdf](http://www.help.senate.gov/imo/media/The_Every_Child_Achieves_Act_of_2015--summary.pdf)

.....

### Related articles:

**(a) "Senate Passes ESEA Rewrite With Big Bipartisan Backing, 81-17"** by Lauren Camera

**Source:** *Education Week* – 16 July 2015

URL: [http://blogs.edweek.org/edweek/campaign-k-12/2015/07/senate\\_passes\\_esea\\_rewrite\\_wit.html](http://blogs.edweek.org/edweek/campaign-k-12/2015/07/senate_passes_esea_rewrite_wit.html)

“For the first time since 2001, the U.S. Senate Thursday passed a sweeping overhaul of the Elementary and Secondary Education Act, the country's federal K-12 law, which if enacted would significantly roll back the role of the federal government in public education and give states more flexibility in the process...”

(b) “ESEA Rewrite: What to Expect From House-Senate Conference” by Lauren Camera

Source: *Education Week* – 20 July 2015

URL: [http://blogs.edweek.org/edweek/campaign-k-12/2015/07/esea\\_rewrite\\_what\\_to\\_expect\\_du.html](http://blogs.edweek.org/edweek/campaign-k-12/2015/07/esea_rewrite_what_to_expect_du.html)

(c) “Senate ESEA Rewrite Fits Brown’s Ed Agenda” by Tom Chorneau

Source: *Cabinet Report* - 20 July 2015

URL: [www.cabinetreport.com/politics-education/senate-esea-rewrite-fits-browns-ed-agenda](http://www.cabinetreport.com/politics-education/senate-esea-rewrite-fits-browns-ed-agenda)

.....

COMET is supported by a grant from the California Mathematics Project.

.....

~ To **unsubscribe** from COMET, send the following message to [listserv@listserv.csufresno.edu](mailto:listserv@listserv.csufresno.edu): Unsubscribe COMET

~ To **subscribe** to COMET, send the following message to [listserv@listserv.csufresno.edu](mailto:listserv@listserv.csufresno.edu): Subscribe COMET [followed by your name]  
*Example:* Subscribe COMET Albert Einstein

.....

**Carol Fry Bohlin, Ph.D.**

Professor and Graduate Program Coordinator (M.A. in Education-C&I)

Director, Mathematics and Science Teacher Initiative (MSTI)

Editor, *California Online Mathematics Education Times (COMET)*

California State University, Fresno

5005 N. Maple Ave. M/S ED 2

Fresno, CA 93740-8025

E-mail: [carolb@csufresno.edu](mailto:carolb@csufresno.edu)

COMET: <http://comet.cmpso.org/>