

(cont. from pg. 3) Call Dr. Anita Kitchens 828-773-1536, 828-262-2368, or 828-264-0181

Similar summer enrichment programs in science for rising third through rising ninth graders are available at the Patterson Science Center in Lenoir in June and July. Visit the Patterson Science Center website or contact Amy Bradley, [abradley@caldwellschools.com](mailto:abradley@caldwellschools.com), for details.

\*Visit us online at: [www.msec.appstate.edu](http://www.msec.appstate.edu)\*

**UPCOMING 2013 DATES TO REMEMBER** (IN ADDITION TO THOSE HIGHLIGHTED ON PAGE 1):

**July 8-11:** ASU Math Camp

**July 8-12:** Middle School Science Workshop, "Exploring STEM Inside and Out," led by Amy Bradley at the Patterson Science Center in Lenoir

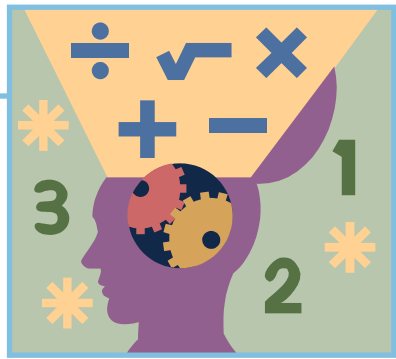
**July 15-18:** ASU Math Camp at Discovery Place in Charlotte

**October:** Summer Ventures in Science & Math applications online at [www.summerventures.org](http://www.summerventures.org) (Deadline: January 31, 2014)

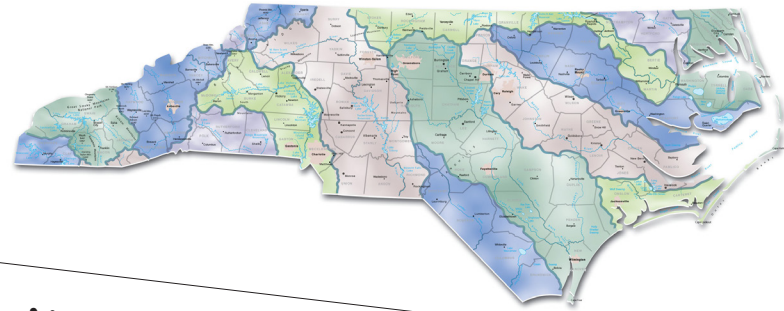
**October 30:** NCCTM Fall Leadership Seminar, Greensboro

**October 31-November 1:** NCCTM State Mathematics Conference, Greensboro

**November 7-9:** NSTA Area Conference, Charlotte



**A CHANCE TO GET CEU CREDITS IN THE CHARLOTTE AREA!**  
**BE A PART OF "GIVING BACK" AND INVESTING IN OUR DISADVANTAGED YOUTH.**  
 Space is limited to 90 participants but if you volunteer you may register 2 from your classroom. It's the ASU Science/Math Camp at Discovery Place  
**DATES: JULY 15TH-18TH 4:00-9:00, WITH WORKSHOP JULY 14TH 2-5.**  
**MORE INFORMATION, CALL ANITA KITCHENS, 828-773-1536**



**NOTES FROM THE DIRECTOR**

We have a variety of workshops/institutes being offered this summer and we hope many of you will take advantage of them. There are fees for the MELT and TI institutes, but all science programs are free. For detailed information on the workshops and institutes mentioned in the newsletter, visit [www.msec.appstate.edu](http://www.msec.appstate.edu). Boone is a pleasant place to be in the summer; come and spend some time with us!

Phil Johnson

**Contributors to the Spring 2013 newsletter:**

Mike Bossé, Amy Bradley, Debbie Crocker, Vickey Isaacs, Phil Johnson, Anita Kitchens, Betty Long, Lori Tyler

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**MSEC Staff:** Phillip Johnson, Director; Betty Long, Assistant Director; Lori Tyler, Summer Ventures in Science and Mathematics Director; Vickey Isaacs, Administrative Assistant

# Mathematics and Science Education Center

APPALACHIAN STATE UNIVERSITY

MSEC Newsletter

Spring 2013

**Melt Professional Development Institutes**

Eight weeklong professional development institutes for mathematics will be offered on the ASU campus this summer. The weeks of the institutes are June 17-21, June 24-28, July 8-12, and July 15-19. The institutes are offered in cooperation with Appalachian State University's Department of Mathematical Sciences, the Mathematics and Science Education Center and the Mathematics Education Leadership Training (MELT) Program. All of the institutes are focused on the Common Core State Standards for Mathematics (CCSSM). The fee for each institute is \$325. Participants will receive 3 CEU credits for an institute. If an institute is taken for graduate credit, the usual graduate fees will also apply. Registration for all institutes is available now. A registration form and descriptions of the institutes can be found on the MELT website at [www.melt.appstate.edu](http://www.melt.appstate.edu). The dates and institutes for this summer are:

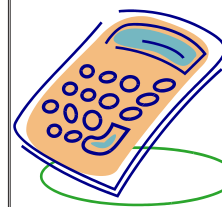
**June 17-21:** Geometry in the Common Core and Navigating Course 1 in the Mathematics Common Core

**June 24-28:** Algebra and Functions in the Common Core and Navigating Course 2 in the Mathematics Common Core

**July 8-12:** Navigating Course 3 in the Mathematics Common Core and Mathematical Modeling through Data and Statistics (6-12)

**July 15-19:** Building Mathematical Thinkers through Assessment and Inquiry (K-6) and Building Mathematical Thinkers through Assessment and Inquiry (7-12)

If you have questions about 2013 MELT institutes, please contact Dr. Mike Bossé, Director of MELT, at 828-262-2862 or [bossemj@appstate.edu](mailto:bossemj@appstate.edu).



Two **Texas Instruments (TI)** Workshops will be offered at Appalachian State University this summer. Each will be 3 days for a total of 18 hours of instruction. CEU credit (1.8 CEUs per workshop) or graduate credit (1 s.h. per workshop) will be available. The graduate credit will require an additional fee, paid to ASU. Contact Debbie Crocker at [crockerda@appstate.edu](mailto:crockerda@appstate.edu) for more information.

**Time:** (Each workshop will be from 8:30 a.m. – 3:30 p.m. each day.)

June 19-21: Getting Started with TI-Nspire High School Mathematics

June 24-26: Implementing the Common Core Mathematical Practices with TI-Nspire

**Costs:**

\$350: (includes the workshop materials, a TI-Nspire Cx or TI-Nspire CX CAS hand-held, and TI-Nspire Teacher Computer Software)

\$300: (workshop without technology)

**T3 Summer Workshop Special pricing offers\***

Register 5 attendees, get a 6th for free

\$125: Pre-service teacher price including technology

\*Special offers end May 31, 2013

**Register online at: [education.ti.com/go/t3summer](http://education.ti.com/go/t3summer)**

Look for the courses in Boone, NC! See you in Boone this summer! The Blue Ridge Mountains are beautiful in June. Led by renowned T3 instructors, the T3 Workshops are an exceptional hands-on, subject-specific, networking, sharing and learning experience.

**SUMMER 2013**

**Professional Development**

Varied professional development opportunities in mathematics and science will be available during the summer of 2013. All the science workshops and institutes are free, but there will be a fee for the mathematics programs. Details of the workshops are available on our website. Programs are at ASU unless otherwise indicated.

**June 10-14:** Elementary School Science Workshop, "Exploring STEM: Inside and Out," led by Amy Bradley at the Patterson Science Center in Lenoir.

**June 18-20:** Advanced Biology Institute, "Teaching College Biology in High School," led by Marilyn Pendley and Robbie Carraghan.

**June 19-21:** National T3 Workshop 1, "Getting Started with TI-Nspire High School Mathematics," led by Debbie Crocker.

**June 24-26:** National T3 Workshop 2, "Implementing the Common Core Mathematical Practices with TI-Nspire," led by Debbie Crocker.

**June 24-28:** Earth Science Workshop for Middle and High School Teachers, "Earth Shaking Science," led by Laura Mallard and Crystal Wilson.

**June 24-28:** K-5 Science Workshop, "Unraveling the New Science Essential Standards—Round 2," led by Judy Sink and Lou Moore

**June 24-28:** Middle School Science Workshop, "Bridging the Gap: What Do Biotechnology and Agriculture Have in Common?" led by Amy Bradley at the Patterson Science Center in Lenoir.

**July 8-12:** Middle School Science Workshop, "Exploring STEM: Inside and Out," led by Amy Bradley at the Patterson Science Center in Lenoir.



## STAY INFORMED OF MSEC ACTIVITIES

Print copies of the newsletter are distributed to math and science and some other departments on campus and are available at the MSEC for visitors and participants in center programs. You can always read both current and earlier newsletters at [www.msec.appstate.edu](http://www.msec.appstate.edu). If you are a K-12 teacher, we invite you to add your name to one or more of our elementary, middle or high school list serves by contacting Vickey Isaacs at [isaacsve@appstate.edu](mailto:isaacsve@appstate.edu); also, please let us know when you have an address change. In addition to information in the newsletter and information sent to listserv members, the MSEC website always has the most up-to-date information on center activities.



## NORTH CAROLINA SCIENCE FESTIVAL

April 5-21, 2013

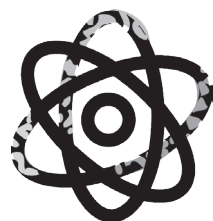
A one-day Science Expo was held on the ASU campus on Wednesday, April 10 as a part of the North Carolina Science Festival. The main Expo event was in the Holmes Convocation Center from 9:00am-2:00pm with other stand-alone events in Plemmons Student Union and other places on campus. A weekday was chosen so that schools could come to campus for a field trip and have their students experience some awesome science activities. Approximately 1700 students participated in the day's activities. When information about next year's Science Festival becomes available, it will be posted on our website.

## SPRING SCIENCE SEMINARS

The last two seminars of the 2011-2012 series were part of this year's North Carolina Science Festival. The seminars are open to everyone, are free, and offer license renewal credits (0.2 per seminar) to teachers. Seminars are held in room 124A in the new Reich College of Education Building from 6:00-8:00 p.m. with refreshments at 6:00. The dates, presenters, and planned topics were:

**April 11** - Jim Houser (Technology), Alternative Transportation, What Is the Best Route?

**April 18** - Jeff Goodman (Curriculum and Instruction), Revolutionary Paradigm Shifts in Science  
Unfortunately, a family emergency forced the cancellation of Jeff's April 18 seminar.



We will soon be working on next year's science seminar series; check our website for the next seminars starting in September of 2013.

## NORTHWEST REGIONAL SCIENCE FAIR

Despite inclement weather that forced postponement for a week, the Northwest Region of North Carolina had numerous outstanding projects on exhibit on Saturday, February 23, 2013 at the regional science fair at the Stone Center in the Wilkes County Schools Office Complex in North Wilkesboro. A large number of school personnel worked to assure the success of the fair and judges consisted of teachers, professors, and scientists and engineers from industry. Participants from our region who went on to the State Science Fair at Meredith College in Raleigh on March 15-16, 2013 did really well in representing our district. The list of State Fair winners is posted at <http://www.ncsciencefair.org>.

## ASU MATH CONTEST WINNERS

The Department of Mathematical Sciences hosted a North Carolina Math Contest for Algebra I/Common Core Math I and Comprehensive divisions on March 20, 2013. Ms. Lori Tyler, Director of the Center's Summer Ventures in Science and Mathematics program, coordinated the contest. Providence Day School from Charlotte was the top school in each contest. Two area schools came in second: Grandview Middle School in Hickory in Algebra I/Common Core Math I and Avery County High School in the Comprehensive division. Other top schools and qualifiers for the NCCTM State Mathematics Contest (at NCSSM) and for the next round of competition in Algebra I/Common Core Math I (at UNCA) are posted at <http://mathsci.appstate.edu/news-events/math-contest>.



**Avery County High School winners**



**Grandview Middle School winners**

## The 16th Annual Appalachian State University Math Camp in Boone

July 8-11, 2013

The ASU Math Camp is the place to be! For all rising 6th through 12th graders. For those who love it, hate it, can't seem to get a handle on it. ALL... come to math camp. Believe it or not...roughly half of the participants in Camp come from outside of Boone! So we have travel suggestions. The Marriott Courtyard, The Super 8, and the KOA Campground offer discounts for Math Camp, or

rent a cabin in the mountains! It is a perfect opportunity to vacation as a family in the morning & afternoon and go to Math Camp in the evening M,T,W,Th.



Information, Register, Pictures online

[www.camps.appstate.edu](http://www.camps.appstate.edu).

Download a poster for your school to advertise at [www.appstate.edu](http://www.appstate.edu).

## NCCTM NEWS



### NCCTM WESTERN REGION MATHEMATICS CONFERENCE

The Western Region Spring Mathematics Conference for pre-service and in-service teachers was held on April 20 at Charles D. Owen High School in Black Mountain. The theme was "Encore – Getting More for Common Core," and the sessions focused on teaching mathematics within the new curriculum for Grades K-12. There were 15 sessions including an information session led

by DPI and a new teacher discussion panel for pre-service teachers. Katie Mawhinney (Western Region NCCTM President) and Kimberly Clark (Western Region NCCTM President-Elect) coordinated and directed the conference. The speakers did a wonderful job, and the feedback was positive. Everyone left the conference with a lot of useful ideas and activities for their classrooms as well as a better understanding of the mathematics and the Standards for Mathematical Practice in the Common Core State Standards for Mathematics.

### NCCTM FALL LEADERSHIP SEMINAR AND ANNUAL STATE MATHEMATICS CONFERENCE

The North Carolina Council of Teachers of Mathematics Fall Leadership Seminar will be at Joseph S. Koury Convention Center in Greensboro, North Carolina on Wednesday, October 30, 2013. Linda Gojak, current President of the National Council of Teachers of Mathematics, will be a keynote speaker.

The North Carolina Council of Teachers of Mathematics (NCCTM) 43rd Annual State Mathematics Conference will be held at the Joseph S. Koury Convention Center in Greensboro, North Carolina on Thursday and Friday, October 31 and November 1, 2013. The program is under development at this time. The deadline for proposals is May 30, 2013. If you would like to speak at the conference, submit a proposal by accessing the online form from: [http://www.ncctm.org/conference\\_info.cfm](http://www.ncctm.org/conference_info.cfm).

Some of the Keynote Speakers will be:

**Linda Gojak:** Current President of the National Council of Teachers of Mathematics, author, and Director of the Center for Mathematics and Science Education, Teaching and Technology at John Carroll University

**Stuart Murphy:** Author of over 60 children's literature books including the well-known MathStarts series

**Teruni Lamberg:** Author of Whole Class Mathematics Discussions: Improving In-Depth Mathematical Thinking and Learning and faculty member at the University of Nevada Reno

**Doug Clements:** Author and researcher, University of Denver, writer and member of the Common Core State Standards committee of the National Governor's Association and the Council of Chief State School Officers

*Put the dates on your calendar! We hope to see you at the Leadership Seminar and State Mathematics Conference in October!*

### NCCTM WESTERN REGION MATH FAIR

The NCCTM Western Region Math Fair was held on April 13, 2013 at Appalachian State University for students in Grades K-12. The fair was coordinated by Sumer Inman and Holly Goforth from McDowell High School. Seventy ASU pre-service teachers and other volunteers assisted them.

There were 109 projects presented by 132 students and 29 schools. The hard work of the students who participated was evident in the outstanding projects. The students who received First, Second, Third or Honorable Mention were invited to participate in the NCCTM State Math Fair to be held on May 3, 2013 at the North Carolina School of Science and Mathematics in Durham. See the list of local winners at: <http://mathsci.appstate.edu/events/math-fair>.