Spring 2012 MTI Courses

Spring 2012 Mathematical Thinking for Instruction (MTI) courses are beginning soon. If you or someone in your district needs to take the class, use this opportunity to sign up.

Go to the SDE MTI website for schedule and registration information: www.sde.idaho.gov/site/math/mti.htm

Summer 2012 MTI Courses

Registration will open at 8:00 AM (MST) or 7:00 AM (PST) on April 2nd for Summer 2012 courses.

To contact Nichole Hall at the State Department of Education about the MTI course, email nhall@sde.idaho.gov. To contact a Regional Math Specialist through IDMT, refer to your region below for email addresses.

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</table>

In this issue:

- Spring MTI Course Registration
- The Five Big Ideas: Structure of Mathematics
- MTI Webinars and Follow-Up
- Regional MTI Workshops and Conferences

It is not what is poured into a student that counts, but what is planted.

- Linda Conway
When teachers and their students focus on the structure of mathematics, they examine the broad concepts, or structural components, that underlie and connect the entirety of mathematics. An example of a structural component emphasized in the MTI class is decomposing. The following examples provide potentially useful decompositions for whole numbers, fractions and algebraic expressions in terms of operations and solving problems.

- \[ 7 + 8 \]
  \[ \frac{1}{2} + \frac{1}{4} \]
  \[ y + y + y \]

In the classroom, focusing on the structure of mathematics is exemplified by selecting problems that address big mathematical concepts and asking students why strategies, procedures, and models work and how they are related.

For example, when students use an array to develop derived facts for multiplication, they develop an understanding of mathematical properties that will appear throughout their math careers (see figure below). The same properties will help them develop efficient models and algorithms for whole number, fraction, and decimal multiplication, write algebraic expressions, and solve equations.

The structure of mathematics is missing when lessons focus on rote memorization (e.g. chanting facts) or treat topics in isolation (e.g. approaching division with decimals and with whole numbers as two unrelated skills). If the overarching structure of mathematics is ignored, students see mathematics as a series of skills to be memorized. When students learn mathematics with a focus on its structures, they are better able to apply and extend concepts to new mathematical topics and new contexts.

- \[ 7 \times 6 = 5 \times 6 + 2 \times 6 \]
A webinar is a seminar or workshop that is presented over the internet. During the webinar, you are able to interact with the instructor and other participants. The purpose of these webinars is to provide follow-up for the MTI course and when appropriate the Common Core State Standards. The webinars will also be archived to be accessible at a later date.

Before the webinar, make sure that your computer has the capability to run the software needed to participate. The email invitation to attend will include information describing minimum computer requirements. In addition, you will be informed on how the audio portion will be conveyed, which could be on the internet (you need speakers and microphone or a computer connected headset) and/or via telephone. If by phone, it will indicate how to use the conference call service (meaning toll free for you).

Ways to Participate:
- **Group** - This is the best way to participate in the webinar. The group could be grade level teams, cross grade-level teams, and/or teams from your district. You will need to establish a group leader. They will be the contact person who will enroll in the webinar and receive all of the documents and information.
- **Individual** - You are welcome to participate on your own, but the webinars are designed to be conducted in a group setting.
- **Miss a presentation?** You may view the archived webinar and accompanying resource materials. You can watch and listen to the presentation, questions, and discussion as it happened in the live webinar. The archive of the webinar will be available within two weeks of the webinar broadcast at: [http://tinyurl.com/mtifollowup](http://tinyurl.com/mtifollowup)

The schedule for the webinars is below & on the MTI Follow Up website: [www.tinyurl.com/mtifollowup](http://www.tinyurl.com/mtifollowup)

### Spring 2012 Webinars

- **January 19th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Composing and Decomposing Numbers, K-6th  
  [Click here to Enroll](#)

- **January 30th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Progression of Addition Models and Strategies in the CCSS, K-6th  
  [Click here to Enroll](#)

- **February 16th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Ratio and Proportional Reasoning, 6th-8th  
  [Click here to Enroll](#)

- **February 22nd 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Multiplication: Strategies, Models, Context & the CCSS, 3rd-6th  
  [Click here to Enroll](#)

- **February 24th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Addition: Strategies, Models, Context & the CCSS, K-3rd  
  [Click here to Enroll](#)

- **March 13th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Expressions and Equations, 6th-8th  
  [Click here to Enroll](#)

- **March 21st 4:45-5:45 (MST); 3:45-4:45 (PST)**  
  Division: Strategies, Models, Context & the CCSS, 3rd-6th  
  [Click here to Enroll](#)

- **April 13th 5:00-6:00 (MST); 4:00-5:00 (PST)**  
  Subtraction: Strategies, Models, Context & the CCSS, K-3rd  
  [Click here to Enroll](#)

- **April 18th 4:45-5:45 (MST); 3:45-4:45 (PST)**  
  Mathematics Instructional Practices, K-8th  
  [Click here to Enroll](#)
The MTI follow up workshops are available to districts, schools and teachers who are interested in implementing the ideas and information from the MTI course. A district or school can contact Michele Carney (contact information below) to make arrangements for it to be held in their school/district. These can be done after school or during a district or school in-service time. If a school or district requests a workshop, they are asked to guarantee that a minimum of 15 people will be in attendance from their school or district. In addition, for all after school workshops, we will post the workshop information on the MTI follow up website. This will allow interested teachers and administrators from surrounding schools and districts to attend the workshop as well. Thank you for your interest in providing MTI follow up support to teachers.

Please contact Michele Carney to discuss scheduling a workshop in your school or district.

Michele Carney: michelecarney@boisestate.edu

On November 18th we hosted two workshops in Kimberly and Twin Falls on the progression for addition in grades K-6th found in the Common Core State Standards. Over 50 teachers and administrators participated in the workshops and left with materials ready for them to implement the workshop in their schools. Please read the information below about hosting a workshop and then contact us if you are interested in hosting one sometime this spring.

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