

## **MDE Science Update** **May/June 2010**

This periodic update from the Minn. Dept. of Education (MDE) is being sent to a few email lists, including the Minn. Science Teachers Assn. and other contacts. Please excuse multiple copies and feel free to forward this to other teachers and science leaders.

### **Contacts:**

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### **MDE Science Page:**

[http://education.state.mn.us/MDE/Academic\\_Excellence/Academic\\_Standards/Science/index.html](http://education.state.mn.us/MDE/Academic_Excellence/Academic_Standards/Science/index.html)

### **Science Standards Become Rule!**

The 2009 Revision of the Minnesota Academic Standards in Science was put into rule effective May 24, 2010. Schools have until the school year 2011-12 to implement the standards and that is the year that the MCA science exams begin to assess the new standards. The only changes from the July 17<sup>th</sup> draft are minor wording edits. No standards or benchmarks were added or deleted. The final version of the standards, along with support documents and video presentations are available on the [MDE science page](#) given above.

### **Science MCA Test Specification Draft**

Test specifications are used to develop assessments to the academic standards. The current Science MCA-II (based on the 2003 Science Standards) and draft Science MCA-III Test Specifications (based on the 2009 Science Standards) are both posted at the [MCA Assessment Web page](#). <http://education.state.mn.us> (click through the following menus: Accountability/Assessment and Testing/Assessments/MCA/Test Specifications)

### **Common Core Standards affecting Science**

The current version of the Common Core Standards includes standards for Mathematics and English/Language Arts and Literacy in History/Social Studies and Science. These standards are being developed by as a cooperative effort supported by nearly all of the states. States that adopt these standards will be expected to include them as 85% of their state standards. The final versions should be available in June. Minnesota will make a decision about whether to adopt them. For more information: <http://www.corestandards.org/>.

### **Professional Learning Communities for Science Teaching Institute**

The National Science Teachers Assn. is presenting this institute Oct. 7-9 in Bloomington, MN. The authors of the recently published NSTA book with that title will lead this in-depth look at strategies to focus PLCs on science content and learning. Science teacher leaders, department chairs, administrators and teacher teams should secure funding now to participate in this unusual opportunity in Minnesota. Details at [www.nsta.org](http://www.nsta.org) click conferences/PLC institute.

### **Science Professional Development Program on Science and Engineering**

The Minn. Mathematics and Science Teacher Partnership program will offer year-long professional development on the Nature of Science and Engineering for teachers of grades 3-6. This program will be based at nine regional locations throughout the states. Contact your regional education service cooperative for details.

### **Engineering for Elementary Teachers**

The Works Museum in Edina is offering a teacher workshop on June 16<sup>th</sup>. It includes “Inspiration, lesson plans, resources, tips and hands-on learning from The Works’ experts in elementary engineering”. Details at [www.theworks.org](http://www.theworks.org) teachers tab.

### **Modeling Instruction (MI) Workshops for Physics and Physical Science**

MI is a method of teaching that uses hands-on learning experiences to help students make sense of evidence, comprehend and then apply science principles. With MI, students participate, investigate and then present what they observe and believe to fellow students. Both workshops are presented at Spring Lake Park High School in the northern metro area.

Physics – July 12-30, contact Micheal Crofton, [mcroft@district116.org](mailto:mcroft@district116.org).

Physical Science – July 19 – 30, contact Callie Bush at [Callie.Bush@Fridley.k12.mn.us](mailto:Callie.Bush@Fridley.k12.mn.us).

### **Minerals Workshop**

The annual Minnesota Minerals Education Workshop will be held at Macalester College August 3 – 5. The Workshop consists of a day-long series of classroom sessions followed by a day and a half-day of geology field trips and tours of mining operations. Topics covered include geology, rock and mineral identification, and mineland reclamation. Classes are taught by geologists, educators, and mining industry professionals. Details are at [www.mmew.org](http://www.mmew.org)

### **STEM Day at the State Fair**

The first day at the State Fair, August 26<sup>th</sup>, is designated as STEM (Science, Technology, Engineering and Mathematics) Day. Watch for special activities and displays in the area in front of the grandstand.

### **University of Minn. Programs**

The University has a central website for information of programs for children, youth, families and educators at <http://www.k12.umn.edu/>. One offering of interest is a two week workshop titled *Classroom Investigations of the Brain & How It Changes with Learning and Drugs* for high school biology teachers June 21-July 2. Details are at <http://brainu.org/>

### **Summer Institute for Climate Change Education**

This annual workshop sponsored by the Will Steger Foundation will occur on Wednesday August 11<sup>th</sup>, at a Twin Cities location to be announced. This year we will look back on our last five years of climate change education outreach and curriculum development and take time to “Go Back to the Basics.” [www.willstegerfoundation.org/education](http://www.willstegerfoundation.org/education).

### **Science Museum Summer Institutes**

The institutes are designed to help educators develop more effective tools for STEM teaching including an understanding of subject-matter integration, inquiry, nature of science and engineering, links to algebra readiness, culturally relevant pedagogies, better understanding of student needs and more. <http://www.smm.org/schools/profdev/k-12/>

### **MnSTEP Science Workshops**

The Minnesota Science Teachers Education Project provides grade-appropriate, standards-based summer science workshops. MnSTEP also includes no-cost programs to earn your teaching license in high school physics (PhASE Project) and high school chemistry (ChemCAL). [http://www.hamline.edu/education/cgee\\_site/GradEd/MnSTEP/](http://www.hamline.edu/education/cgee_site/GradEd/MnSTEP/)

### **More Minnesota science events and competitions**

<http://www.mnsta.org> – Minn. Science Teachers Assn.

<http://www.smm.org/boghopper> - Listings compiled by the Science Museum of Minn.