

## OREGON MATHEMATICS TEACHER UPDATE #21 April 2010

1. COMMON CORE STATE STANDARDS INITIATIVE (CCSSI)
2. REGISTER NOW FOR SCIENCE STANDARDS PROFESSIONAL DEVELOPMENT!
3. THE BUILDING MATH INSTRUCTIONAL LEADERSHIP ACROSS OREGON (BMILAO) MATERIALS AVAILABLE ONLINE
4. A MESSAGE FROM SUPERINTENDENT SUSAN CASTILLO: ONLINE, ADAPTIVE, AND INTERACTIVE – THE FUTURE OF ASSESSMENT
5. OREGON MATHEMATICS AND SCIENCE PARTNERSHIP GRANT REQUEST FOR PROPOSALS
6. NCTM 2010 ANNUAL MEETING & EXPOSITION
7. OREGON MATH LEADERS CONFERENCE (OML)
8. 49TH NORTHWEST MATHEMATICS CONFERENCE
9. MATH CONTESTS: THE OREGON INVITATIONAL MATHEMATICS TOURNAMENT
10. MATH CONTESTS: COURTESY OF THE OCTM WEB SITE
11. ASPIRATIONS AWARD FOR YOUNG WOMEN IN COMPUTING
12. PRESIDENTIAL AWARDS FOR EXCELLENCE IN MATHEMATICS AND SCIENCE TEACHING
13. RESOURCES: TECHSTART
14. RESOURCES: SCRATCH
15. RESOURCES: MATHVIDS
16. RESOURCES: WIKIVERSITY
17. RESOURCES: MATH247
18. RESOURCES: GEOGEBRA
19. RESOURCES: COMPUTING TECHNOLOGY FOR MATH EXCELLENCE
20. RESOURCES: THE NATIONAL LIBRARY OF VIRTUAL MANIPULATIVES
21. RESOURCES: CENTER ON INSTRUCTION
22. ARTICLE: OBAMA BUDGET CALLS FOR MAJOR SHIFTS ON ESEA
23. ARTICLE: DEVELOPERS SEEK TO LINK IPAD WITH EDUCATION
24. ARTICLE: 14 TECHNOLOGIES EDUCATORS SHOULD WATCH IN 2010
25. ARTICLE: CLICKER SYSTEM ENGAGES STUDENTS, HELPS EDUCATORS TWEAK LESSONS
26. WEBSITE: OREGON VIRTUAL SCHOOL DISTRICT—EXCELLENT, FREE RESOURCES FOR EDUCATORS
27. FURLoughS - STATE OFFICE CLOSURE DATES
28. ODE RESOURCES (IN EVERY ISSUE)
29. REQUEST FOR ARTICLES

Welcome to the 21<sup>st</sup> edition of the Mathematics Teacher Update! This electronic newsletter is designed to provide up-to-date Oregon mathematics information directly to classroom teachers. Please remind your colleagues that they can subscribe to this newsletter at:  
[http://listsmart.osl.state.or.us/mailman/listinfo/or\\_math\\_teachers](http://listsmart.osl.state.or.us/mailman/listinfo/or_math_teachers).

### **1. Common Core State Standards Initiative (CCSSI)**

The public draft of the CCSSI math and ELA standards was released on March 10, 2010. Feedback on the math standards came from teachers and administrators that participated in groups that met at 6 ESDs, 2 school districts, and several individuals that sent their review to the common core. In addition I was able to meet with teachers and TOSAs in Salem, Bend, and Medford. Information from these groups was synthesized and sent to CCSSO this past week. Thank you for everyone who participated in providing feedback on the March draft of the standards

At this time, CCSSO plans to finalize the standards by late May. At that point the State Board of Education will consider the Common Core for adoption. A process that will take at least six months before the board would vote on the standards. More details on this project will be made available on the ODE website and in this newsletter as they become available. <http://www.ode.state.or.us/go/commoncore>

*The Common Core State Standards Initiative is a joint effort by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) in partnership with Achieve, ACT and the College Board. Governors and state commissioners of education from 48 states, including Oregon, have committed to this state-led process to develop a common core of state standards in English language arts and mathematics. Information about the initiative can be found on the CCSSO/NGA website at <http://www.corestandards.org/>*

## **2. Register Now for Science Standards Professional Development!**

The Oregon Department of Education (ODE) is pleased to announce professional development opportunities for Oregon science educators, curriculum directors, and administrators to assist in implementing the 2009 Science Academic Content Standards. There is NO REGISTRATION FEE for the professional development.

The regional Moving Science Education Forward professional development will be offered this summer (2010) and is similar to the Moving Math Education Forward workshops offered in the summer of 2009. Each regional opportunity will offer two days of working with the 2009 science standards and provide hands-on inquiry and engineering design sessions for science educators. There is an optional half day session in the morning on the third day for continued work with lesson and action planning, and an additional half day session in the afternoon of the third day for work with staff development standards and a grant opportunity. For more information including dates and locations, to access the agenda, registration packet, and the online registration system, visit [www.ode.state.or.us/search/page/?id=2906](http://www.ode.state.or.us/search/page/?id=2906). The number of participants per session will be limited, so register early. Registration will close as soon as capacity is reached or on April 15.

## **3. The Building Math Instructional Leadership across Oregon (BMILAO) materials available online**

Materials from the BMILAO workshops are now available web on the Oregon Department of Education's web site. There is a variety of resources, PowerPoint presentations, activity materials, and assessment information available. BMILAO Resource page: <http://www.ode.state.or.us/search/page/?id=1556>

## **4. A message from Superintendent Susan Castillo: Online, Adaptive, and Interactive – the Future of Assessment**

Those of your familiar with the Oregon Department of Education's weekly [Assessment and Accountability Update](#) or the monthly [Superintendent's Pipeline](#), are probably already familiar with an exciting new type of test item that will be piloted this spring. These items, referred to as "machine scored constructed response items," will ask students to actively engage in demonstrating their knowledge through manipulating elements on the screen to solve problems and answer questions. These items more readily assess students' ability to use strategic thinking. Students are asked to apply and demonstrate their knowledge in a manner more similar to classroom or real-world situations. This type of interactive demonstration of knowledge and skills has always been a part of our classroom assessments, but now, for the first time, we will be able to assess these skills using the online state tests.

This year, there are relatively few of these items and students will likely only see 1 to 2 per test. However, we will continue to expand the number of these items over the coming years. In an effort to increase our available pool of interactive items while reducing development costs, Oregon is negotiating an item sharing agreement with Delaware and Hawaii, two states that have recently adopted online adaptive testing.

These field test items will be available in math, science, and reading starting **April 19** this year. A short [Grades 3-12 New Item Types](#) practice test including these interactive items is currently available at <https://oakspt.tds.airast.org/student/> (note: the practice test is only accessible via Mozilla Firefox and you must have Java installed for the items to display correctly). I highly encourage everyone - students, teachers, parents - to visit the practice test and play around with these new items. Get familiar with how they work and the types of questions included. Additional sample items are available on the [AIR website](#).

## **4. The Assessment of Essential Skills Toolkit Now Available**

The Assessment of Essential Skills Toolkit is now available on-line at <http://assessment.oregonk-12.net/>. An article detailing the release is included in the latest Assessment & Accountability Update newsletter at <http://www.ode.state.or.us/search/page/?=1303>. The Toolkit is designed to help districts and high schools develop a local plan for assessing the essential skills by guiding them through a series of 10 Steps. For more information, please contact: Barbara Wolfe, Essential Skills Assessment Coordinator, Oregon Department of Education, Ph. 503-947-5845, [barbara.wolfe@state.or.us](mailto:barbara.wolfe@state.or.us)

## **5. Oregon Mathematics and Science Partnership Grant Request for Proposals**

The Oregon Department of Education (ODE) has released the Request For Proposal (RFP) for the Title IIB Mathematics and Science Partnerships (MSP) grant program for the 2010 funding cycle. Applications must be received at the ODE by 12:30 p.m. on April 26, 2010.

Title II, Part B of the No Child Left Behind Act (NCLB) authorizes a Mathematics and Science Partnership competitive grant program within each state. The program is intended to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers.

ODE is responsible for the administration of this competitive grant program and will make awards to partnerships of high-need school districts and science, mathematics, and/or engineering departments within institutions of higher education. The overall goal is to give school districts, and higher education mathematics and science faculty, joint responsibility for improving mathematics and science instruction through the process of implementing partnerships that provide high-quality professional development for K-12 teachers. Please forward this email to department heads, administrators, and any interested party you think would benefit from the information. Please contact Cheryl Kleckner or Mark Freed at if you have any questions.

**6. NCTM 2010 Annual Meeting & Exposition**

San Diego, CA • April 21–24, 2010  
Connections: Linking Concepts with Context  
Registration/Information: <http://www.nctm.org/meetings/>

**7. Oregon Math Leaders Conference (OML)**

August 1-3, 2010 • Linfield College (McMinnville, Oregon)  
“Reasoning and Sense Making”  
Registration/Information: <http://octm.org/oml.html>

**8. 49th Northwest Mathematics Conference**

October 7-9, 2010 • Spokane, WA  
“Mining for Mathematical Gems”  
Registration/Information: <http://49thnwmathconference.org/index.html>

**9. Math Contests: The Oregon Invitational Mathematics Tournament**

**May 15th • Portland State University**

Registration Deadline: **May 1st**

The Oregon Invitational Mathematics Tournament (OIMT) is an annual tournament for Oregon high school mathematics students, hosted in rotation by the mathematics departments of Willamette University, Portland State University, the University of Oregon, and Oregon State University. Entry is by invitation, primarily based on students' achievement at the regional math contests offered around the state by many community colleges and other schools during the spring. **A student may also qualify based on his or her score on either the AMC-10 or AMC-12 exam. For more information go to <http://www.mth.pdx.edu/oimt/> or contact Ann Sitomer at [asitomer@pdx.edu](mailto:asitomer@pdx.edu)**

**10. Math Contests: Courtesy of the OCTM web site**

<http://www.pacifier.com/~octm/contests.html>

**11. Aspirations Award for Young Women in Computing**

Attention Tech Savvy Young Women! Are you the future of technology? As part of an effort to encourage more young women to choose careers in technology, the National Center for Women & Information Technology (NCWIT) seeks to recognize high school women with outstanding achievements and aspirations in computing and technology through the NCWIT Award for Aspirations in Computing.

NCWIT will hold its annual Summit on Women and IT May 18-20, 2010, in Portland, Oregon. NCWIT will honor approximately 10 young women from the Portland Metro area with the NCWIT Award for Aspirations in Computing on May 18, 2010, in conjunction with the Summit reception. Each qualified award recipient receives:

- An engraved award for the student and her school.
- \$100 cash award from NCWIT.
- Recognition at the NCWIT Summit on Women in Computing Community Reception May 19, 2010 at the Ecotrust National Capital Center in Portland.
- Recognition as an award recipient on the NCWIT award website.
- Access to the Winners of the NCWIT Award for Aspirations in Computing online community.
- Various prizes from NCWIT partners and sponsors.

For more info and to apply, visit [www.ncwit.org/awardportland](http://www.ncwit.org/awardportland)

**12. Presidential Awards for Excellence in Mathematics and Science Teaching**

The National Science Foundation currently is accepting nominations and applications for the 2009 Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) program. PAEMST is the highest recognition that a kindergarten through 12th-grade mathematics or science teacher may receive for outstanding teaching in the United States. This program recognizes teachers for their contributions to teaching and learning and their ability to help students make progress in mathematics and science. Awardees serve as

models for their colleagues, inspiration to their communities, and leaders in the improvement of mathematics and science education.

To apply, teachers must first be nominated for the award. Teachers may nominate themselves or may be nominated by someone else (e.g., principals, teachers, parents, or other members of the general public). Once nominated, teachers will receive an email with instructions on how to access the online application. The application deadline for secondary school teachers (Grades 7-12) is May 1, 2009. Elementary school teachers (Grades K-6) are eligible to apply in 2010. Online nomination forms are available at: [www.paemst.org](http://www.paemst.org)

### **13. Resources: TechStart**

<http://www.techstart.org/> TechStart is a nonprofit that promotes wider access to technology education for K-12 students in order to strengthen the skills they need to thrive in the global economy. TechStart aims to impact not just the technical ability, but also the teamwork, critical thinking, creativity, and problem solving skills of our future workforce.

### **14. Resources: Scratch**

<http://scratch.mit.edu/> Created at MIT Media Lab, Scratch, is primarily for ages 8 and up. This free, downloadable, programming tool makes it easy to create interactive stories, animations, games, music, and art--and share those creations on the Web. Students learn math and computation ideas, the process of design, how to work collaboratively, how to think creatively, and how to reason systematically. Educators can join ScratchEd, an online community to learn more, share stories, exchange resources, ask questions, and find other Scratch educators.

### **15. Resources: MathVIDS**

<http://www.coedu.usf.edu/main/departments/sped/mathvids/index.html> MathVIDS is an interactive website for teachers who are teaching mathematics to struggling learners made possible through funding by the Virginia Department of Education. The primary theme of MathVIDS is to help educators connect why struggling learners have difficulty learning mathematics to effective instructional practices for these students.

### **16. Resources: Wikiversity**

[http://en.wikiversity.org/wiki/Wikiversity:Main\\_Page](http://en.wikiversity.org/wiki/Wikiversity:Main_Page) Wikiversity invites teachers, students, and researchers to join their endeavors to create open education resources and collaborative learning communities. The project is devoted to learning resources, learning projects, and research for use at all levels and types of education from pre-school to university, professional development, and informal learning

### **17. Resources: Math247**

<http://math247.pbworks.com/> Math247 is valuable wiki for math educators to connect with others and parents hoping to help their children with math. It contains a library of mathcasts and pencasts by students and teachers and help for creating those

### **18. Resources: GeoGebra**

<http://www.geogebra.org/cms/> GeoGebra is free and multi-platform dynamic mathematics software for all levels of education that joins geometry, algebra, tables, graphing, statistics and calculus in one easy-to-use package. It has received several educational software awards in Europe and the USA.

### **19. Resources: Computing Technology for Math Excellence**

[http://www.ct4me.net/about\\_this\\_site.htm](http://www.ct4me.net/about_this_site.htm) Computing Technology for Math Excellence is devoted to resources for teaching and learning mathematics (K-12 and calculus), technology integration, and the standards movement in education. Math resources include links to sites for basic skills mastery, problem solving and critical thinking, using data, homework assistance, games, simulations, virtual math manipulatives, project-based learning, field trips for math, standardized testing, and more.

### **20. Resources: The National Library of Virtual Manipulatives**

<http://nlvm.usu.edu/> NLVM is an NSF supported project that began in 1999 to develop a library of uniquely interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction (K-12 emphasis).

### **21. Resources: Center on Instruction**

<http://centeroninstruction.org/index.cfm> The Center on Instruction offers materials and resources on mathematics to build educators' knowledge of instruction for students with low achievement in mathematics,

improve professional development models for math teachers, and build teachers' skills in monitoring student growth toward important math outcomes.

**22. Article: Obama Budget Calls for Major Shifts on ESEA**

[http://www.edweek.org/ew/articles/2010/02/01/21budget\\_ep.h29.html?tkn=STYFo3Lpq3b0hbjW1iHtg3HW/kxWULDI1hdrY](http://www.edweek.org/ew/articles/2010/02/01/21budget_ep.h29.html?tkn=STYFo3Lpq3b0hbjW1iHtg3HW/kxWULDI1hdrY) The administration's spending plan would change the law's accountability rules and significantly increase funding for competitive-grant programs. (EdWeek)

**23. Article: Developers seek to link iPad with education**

<http://www.eschoolnews.com/2010/04/05/ipad-app-store-has-wide-selection-of-education-options/>

Applications for Apple's new eReader include programs to help with science, math, languages, and research

**24. Article: 14 Technologies Educators Should Watch in 2010**

<http://thejournal.com/Articles/2010/01/20/14-Technologies-Educators-Should-Watch-in-2010.aspx?Page=1>

Tech vets go toe-to-toe on the latest tools that can improve instruction, boost productivity, or just help make users' lives a bit more organized.

**25. Article: Clicker system engages students, helps educators tweak lessons**

<http://www.azcentral.com/news/articles/2010/02/05/20100205tr-clicker0206.html> Teachers in an Arizona school district say the Smart Interactive Response System is helping them adjust lessons and tests more easily and keep students engaged by providing immediate feedback. The system allows students to use hand-held clicker devices to input answers to test questions, which can then be displayed on a classroom Smart Board to compare results anonymously and chart classroom progress. "It's better than the old way. You don't have to wait a few days to know how you did," one student said.

**26. Website: Oregon Virtual School District—Excellent, Free Resources for Educators**

The Oregon Virtual School District (OVSD) has numerous free resources to help Oregon teachers develop lesson plans. Below is a list of just a few of the resources you can access by visiting the OVSD website at <http://orvsd.org/> and creating a free account:

- Free access to databases like GALE Host at elementary, middle, and high school levels. This includes full-text Lexiled reading materials that can be printed for classroom use.
- Free access to entire online courses for adaptation and use in Oregon classrooms. All subject areas are included. Some of the available courses are U.S. History, AP Calculus, Oregon Writers, Earth Science, and Art Appreciation. Included are full lesson plans with student learning activities.
- Free tools for students to create their Educational Plan and Profile that is required by the Oregon Diploma.
- Free access to Moodle to create your own cyber class or house information about your in-person class that students can access via Internet at home. For example, you could post a reading assignment with a discussion question as homework, and students could discuss their reactions online.
- Free access to podcast videos on a variety of educational topics.

**27. Furloughs - state office closure dates**

The current recession has reduced state revenues, and has forced the Legislature to make deep cuts in agency budgets. Coping with these cuts requires closing most state offices and facilities on the days listed in the link below. State workers affected by the closures will take unpaid furloughs on those days. We apologize for any inconvenience these closures might cause, and we look forward to restoration of a full work schedule for all state agencies when the economy improves.

Friday, April 16, 2010

Friday, June 18, 2010

Friday, August 20, 2010

Friday, September 17, 2010

Friday, November 26, 2010

Friday, March 18, 2011

Friday, May 20, 2011

**28. ODE Resources (in every issue)**

<http://www.ode.state.or.us/search/page/?id=1555>

Mathematics Content Standards:

<http://www.ode.state.or.us/search/page/?id=1527>

Mathematics Teaching and Learning to Standards, Mathematics education resources

<http://www.ode.state.or.us/search/page/?id=1527>  
State Adopted Instructional Materials for Mathematics:  
<http://www.ode.state.or.us/search/page/?id=1565>  
State Adopted Instruction Materials publisher representative information  
<http://www.ode.state.or.us/search/page/?=803>  
State Adopted General Instructional Materials  
<http://www.ode.state.or.us/search/results/?id=92>  
ODE Mathematics Home Page  
<http://www.ode.state.or.us/search/results/?id=20>  
ODE Mathematics Curriculum:  
<http://www.ode.state.or.us/search/page/?id=1527>  
ODE Assessment:  
<http://www.ode.state.or.us/search/results/?id=239>  
Get Ready Oregon: New Oregon Diploma Information  
<http://www.getreadyoregon.org/>  
Oregon Diploma web page:  
<http://www.ode.state.or.us/search/results/?id=368>

## 29. Request for Articles

If you or your colleagues would like to submit articles to be included in this publication, please submit publication-ready short articles for the Oregon Mathematics Teacher Update. Please send your input to [mark.freed@state.or.us](mailto:mark.freed@state.or.us). The newsletter will be posted and e-mailed early each month. Please forward this e-mail to any interested educators who might also want to assist me. With your help, we can make this an outstanding resource for all.

**To submit an article to the Oregon Mathematics Teacher Update, just follow the simple steps:**

1. Write an article
2. Keep it brief
3. Make sure that it is of interest to statewide or regional readers (subscribers are part of the mathematics education network in Oregon, with a focus on k-12 mathematics or STEM education)
4. Including links is encouraged, but attachments are not allowed (please check the links before sending them)
5. Make sure that the articles are "publication ready", with no heavy editing necessary
6. Use articles in earlier Updates as models (available at <http://www.ode.state.or.us/search/page/?=1871>)
7. Send articles in the body of an e-mail message to [mark.freed@state.or.us](mailto:mark.freed@state.or.us) at least four working days before the first of the month.

For more information:

Contact Mark Freed: Mathematics Specialist, EII

[mark.freed@state.or.us](mailto:mark.freed@state.or.us) 503-947-5610

Contact Jim Leigh, Mathematics Assessment Specialist, OAIS

[james.leigh@state.or.us](mailto:james.leigh@state.or.us) 503.947.5832

\*\*\*\*Disclaimer\*\*\*\*

*The materials contained in the Department of Education's Oregon Mathematics Teacher Update are drawn from both internal and external sources and inclusion of external materials does not necessarily indicate Oregon Department of Education endorsement.*