April 2009



Message from the President

Spring is here! With spring comes warm weather and sunshine, but also the realization that the school year is almost at an end! It can often be a stressful time for mathematics educators as we try to finish the academic year strong, covering the content that still needs to be covered, make it through testing, proms, and graduations, all the while our students are distracted by thoughts of summer. KCTM hopes that you are able not only to be productive, but to enjoy these last couple of months of the school year.

In the next couple of weeks you will receive a call for speaker proposals for the 2009 KCTM Annual Conference. This year's conference will be held at Bourbon County High School in Paris, Kentucky. Please consider sharing your expertise with mathematics educators from across the state. We are very excited that the conference will be held in Bourbon County this year. Their hospitality has already been amazing.

KCTM awards deserving teachers the Mathematics Education Service and Achievement (MESA) Award each year at the annual MESA banquet the evening before the KCTM Annual Conference. In recent years, we have been honored to include the announcement of other awards at the banquet. Because of this, the name of the banquet has changed to the KCTM Conference Awards Banquet. We are excited to have so many deserving mathematics educators recognized for their contributions to mathematics education. We also want to continue honoring mathematics educators with MESA Awards. You can find MESA Award nomination forms on the KCTM website, www.kctm.org.

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Message from the President, contd.

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Another exciting opportunity for KCTM members: The KCTM Teacher Support Grant Applications for 2009 are posted on the KCTM website. The applications are due July 1, 2009. Awardees will get up to \$500! Consider submitting a grant application today!

Please watch the KCTM website for details regarding the 2009 KCTM Annual Conference. As always, we look forward to seeing you in October.

Sincerely,

Bethany Noblítt KCTM President

KCTM 2009 Annual Conference Update

The 2009 KCTM Annual Conference will be held October 10, 2009 at Bourbon County High School in Paris, Kentucky. The Paris community and schools are all VERY excited about having KCTM come to their community. There are lots of antique shops and golf courses if you want to come early or stay a little longer that weekend for some quiet get-away time. The awards banquet on Friday, October 9, will be at a very elegant restaurant- you just won't want to miss out on this opportunity. Everyone Saturday will be talking about it!!!

To learn more about the upcoming conference, please visit our website, www.kctm.org. This year, the following services will once again be offered online: Registration and pay for the conference Submit a speaker proposal form(s) to speak at the conference Submit a vendor registration form and pay to exhibit at the conference Sign up to attend the rewards banquet

While these services will be offered online, participants will also still be able to mail in registrations, fees and speaker proposals.

Go to www.kctm.org to find out much more information about the KCTM Annual Conference, such as details about the Reward Banquet, conference hotel and rates, directions to Bourbon County High School, and more.

Share your experiences! Speak at the 2009 KCTM Annual Conference. Submit your speaker proposal form at www.kctm.org. KCTM would be honored to have you share your experiences at the conference. This year all proposals will be considered. If there are too many of one kind or for other reasons the review committee does not accept your proposal, please feel free to submit another proposal. Once your proposal has been accepted, you will receive an email of instructions to register and pay the reduced rate for the conference. PLEASE note the Special Notes for speakers on the website- special to

KCTM 2009 Annual Conference Update, contd.

Bourbon County. Also, PLEASE note that if you want to submit more than one proposal, you will need to do this all at the same time to prevent having to pay the registration fee twice.

Participant Registration Deadlines:

The Early-Bird registration deadline is September 11, 2009. Late registration deadline is September 18, 2009. Any conference registrations after September 18, 2009 will need to register on-site.

Speaker Registration Deadlines: For proposals- August 28, 2009 For registrations- September 4, 2009

Vendor Registration Deadline: September 1, 2009

Karí Ostby

NCTM Update

Call for Nominations for the 2009 NCTM Board of Directors Election

Nominations for NCTM Board Director must be received by March 2, 2009. Applications are due April 1, 2009. Go to www.nctm.org for more information.

Current Grants, Scholarships, and Awards from NCTM

Established by the National Council of Teachers of Mathematics, the Mathematics Education Trust (MET) offers opportunities to expand your professional horizons! MET supports the improvement of mathematics teaching and learning at the classroom level through the funding of grants, awards, honors, and other projects by channeling the generosity of contributors into classroom-based efforts that benefit all students. See below for current grants, scholarships, and awards.

For detailed information:

- Call 703-620-9840, ext. 2112
- E-mail exec@nctm.org
- Write to: NCTM's Mathematics Education Trust 1906 Association Drive Reston, VA 20191-1502

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Grants, Scholarships, and Awards

Improving Classroom Practice			
School In-Service Training Grants 🕅 (deadline May 9,	<u>Grades K-5</u>	<u>Grades 6-8</u>	<u>Grades 9-12</u>
Emerging Teacher-Leaders in Elementary School Mathemat-	<u>Grades K-5</u>		
Improving Classroom Instruction			
Teacher Professional Development Grants 🖄	<u>Grades K-5</u>	<u>Grades 6-8</u>	<u>Grades 9-12</u>
Using Music to Teach Mathematics Grants 🕅	<u>Grades K-2</u>		
Engaging Students in Learning Mathematics Grants 🔯		<u>Grades 6-8</u>	
Equity in Mathematics Grants 🕅		<u>Grades 6-8</u>	
Mathematics Content			
Improving Students' Understanding of Geometry Grants🖾	Grade	es K-8	
Connecting Mathematics to Other Subject Areas Grants 🔯			<u>Grades</u>
Research			
K-6 Classroom-Based Action Research Grants 🖾		<u>Grades K-6</u>	
7-12 Classroom-Based Action Research Grants 🖾		Grades 7-12	
K-8 Preservice Teacher Action Research Grants 🕰 (deadline May 9, 2009)		<u>Grades K-8</u>	

Additional MET Initiatives
NCTM Lifetime Achievement Awards for Distinguished Service to Mathematics Education 🖾
MET Grants to Affiliates including the Kenneth B. Cummins Grant

Karí Ostby

Northern Kentucky Council of Teachers of Mathematics News

NKCTM and the Center for Integrative Natural Science and Mathematics (CINSAM) held a miniconference March 3 at Grant County High School with six presentations:

- Common Misconceptions about Math Open Response Questions (Charma Linville, KDE)
- Moving from Good to Great: So You're Thinking about Becoming a National Board Certified Teacher? (Dr. Sara Eisenhardt, NKU Department of Teacher Education & School Leadership)
- Linear and Quadratic Equations using the TI-84 TRANSFORM Applet (Kathy Bulmer, Grant County High School)
- Using Manipulatives in Algebra 1 When You Don't Think You Can (Sarah Mattingly, Grant County High School)
- Introductory Probability & Statistics Activities for Intermediate/Middle Grades Students (Dr. Brooke Buckley, NKU Department of Mathematics and Statistics)
- Problem Solving in the Intermediate Classroom (Katy Murray, River Ridge Elementary School)

NKCTM and CINSAM co-sponsored a regional workshop concerning the Kentucky Online Testing (KYOTE) project at Northern Kentucky University.

NKCTM and Texas Instruments will host two Teachers Teaching with Technology (T³) TI-Nspire workshops July 6-10 at the Larry A. Ryle High School in Boone County. Please contact Dr. Gina Foletta (<u>foletta@nku.edu</u>) or Dr. Beth Noblitt (<u>noblittb@nku.edu</u>) for more information.

Mike Waters, NKCTM Representative watersm1@nku.edu

KDE News

Thank you to all of the teachers that participated in the mathematics content advisory committee meetings!

<u>Senate Bill 1 (KRS 158.6451)</u> has been signed by Governor Beshear. View the complete version by clicking "SB 1" at the above web link. This statute is an act relating to education assessment and declaring an emergency. This means that upon the governor's signature, it is law.

The <u>attached pdf.doc</u> was produced by the KDE, Office of Assessment and Accountability and has been sent to districts and shared at various meetings across the state. If you have questions related to this document you may contact me. <u>Robin.hill@education.ky.gov</u>

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KDE News, contd.

High Quality Instruction (HQI) material will be available beginning this August through *Kentucky Teacher.* KDE consultants are hoping to present some of the material at the MLSN Summer Academies and KCTM this fall. You may be asked to provide video or resources for this electronic document.

Reminder: KY Presidential Award for Excellence in Mathematics Teaching nominations were due April 1st and applications are due May 1st. If you nominated someone, please encourage him/her to complete the application. Offer to read responses, videotaped, critique etc. If you have been nominated, you can work with colleagues for additional support or contact me to assist with providing a mentor! <u>Robin.hill@education.ky.gov</u>

KDE Elementary link (primary)

http://www.education.ky.gov/KDE/Instructional+Resources/Elementary+School/Primary+Program/

KDE Elementary Mathematics link (intermediate)

http://www.education.ky.gov/KDE/Instructional+Resources/Elementary+School/Intermediate/Mathema tics/

<u>KDE Middle Mathematics link</u> http://www.education.ky.gov/KDE/Instructional+Resources/Middle+School/Mathematics/

KDE High School Mathematics link http://www.education.ky.gov/KDE/Instructional+Resources/High+School/Mathematics/

Robín Híll

Update on High School End of Course Assessments

House Bill 197 mandated the development of end-of-course assessments for Algebra I, Algebra II, and Geometry to ensure that all Kentucky students complete rigorous high school mathematics courses and that mathematics courses across Kentucky High Schools are consistent. The Algebra II end-of-course assessments have been developed for 14 states (including Kentucky) by Achieve, Inc and Pearson NCS. The Algebra I and Geometry end-of-course assessments are currently under development by the Office of Assessment and Accountability at the Kentucky Department of Education and the University of Louisville Center for Research in Mathematics and Science Teacher Development.

Project I: Algebra II Multi-State Consortium

Achieve convened a multi-state consortium including state department staff, high school teachers, and university faculty members from Kentucky and 13 other states. The group has developed the American Diploma Project Algebra II end-of-course assessment. The initial field tests were conducted in

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Update on High School End of Course Assessments, contd.

October 2007 and in May 2008. Kentucky students participated in both field tests.

The Algebra II core exam has 60 questions with 50 multiple-choice, 7 short-answer, and 3 extendedresponse tasks. The test is designed to take 90 -120 minutes and is comprised of two 45 -50 minute sessions with one session allowing calculators. The test also consists of optional modules that cover the following topics: Data and Statistic, Probability, Logarithmic Functions, Trigonometric Functions, Matrices, Conic Sections, and Sequences and Series. Each module includes 8 questions with six multiple- choice, one short-answer, and one extended-response task.

For more information on the Algebra II end-of-course assessment go to <u>www.achieve.org</u>.

Project II: Algebra I and Geometry End-of-Course Assessments

KDE supported two teams each of 12 mathematicians, mathematics educators, and k-12 teachers and administrators to develop pilot Algebra I and Geometry end-of-course assessments. Thus far, the teams have developed blueprints defining appropriate Algebra I and Geometry content and percentages of items at different depth-of-knowledge levels. Initial field tests have been conducted in Kentucky schools, and additional pilot testing will occur in in May 2009.

Both assessments currently include 48 items, with 40 multiple-choice, six short-answer, and two extended-responses. The Algebra I assessments includes: one-variable equations and inequalities, graphing lines and linear inequalities, linear functions and arithmetic sequences, polynomials expressions, and systems of equations. The Geometry assessments includes: angles and triangle relationships, congruence and similarity, right triangle relationships, coordinate geometry and transformations, and surface area and volume.

Carlene Kírkpatríck

Kentucky Center for Mathematics

The **Kentucky Center for Mathematics (KCM)** is proud to be a new affiliate of the KCTM! We recently celebrated our third birthday and continue to grow as a statewide center dedicated to promoting both numeracy and community. Our mission is to improve the teaching and learning of mathematics in Kentucky by providing professional growth opportunities and support for teachers. To find out what we have to offer Kentucky teachers, read on. We also invite you to visit our website at <u>www.kymath.org</u> or <u>www.kentuckymathematics.org</u>.

Building Understanding of Numeracy

On March 5-6, the KCM sponsored a Numeracy Conference in Louisville that was attended by more than 300 mathematics educators. We were honored to have the Kentucky Education and Workforce Development Cabinet Secretary, Helen Mountjoy, speak at our closing luncheon. Video clips from her inspiring presentation and the full program of conference sessions are posted on our <u>homepage</u> for your

viewing.

The KCM has also begun to publish a series of Focus on Numeracy documents, available on our homepage. These handouts are filled with practical suggestions for teachers and parents of elementary students to use to develop numeracy in early stages. Our collection of <u>General Resources</u> contains many more resources for Students, Families, and Educators. In addition, resources and ideas are posted on a daily basis on the <u>KCM Discussion Forum</u> by K-12 teachers and regional coordinators in the KCM Community. All mathematics teachers are invited to join the Forum. To do so, simply email Bill Nostheide at <u>nostheidew1@nku.edu</u> to request a username and password.

Early Intervention and Mathematics Coaching Communities

The KCM provides training and support for teachers in our Early Intervention and Mathematics Coaching programs. These programs are funded in different ways by the state of Kentucky. The current status of these funds will make it possible for the KCM to maintain its existing cohorts of Mathematics Intervention Teachers (MITs) and to train a small cohort of new Mathematics Coaches in 2009-2010. Coaching Program requirements and application materials will be available on the Coaching Webpage by April 6th. To learn more about both programs, we invite you to browse the Intervention and Coaching pages of the KCM website.

New Professional Growth Opportunities

Many of the <u>training opportunities</u> for MITs and Coaches are now open to teachers interested in joining the KCM Community for a fee. Research has shown that in general, one-shot, sit-and-get professional development sessions are not as helpful for teachers as those with continuing support. Because of this, all of the professional development provided by the KCM takes place in the context of ongoing interactions with a learning community. We hope you will consider joining us!

Laura Plante (plantel1@nku.edu) Assistant Director of Coaching at the KCM

KCTM Executive Board Meeting

February 21, 2009, 10:00 AM Gheens Academy

Members present:

Beth Noblitt	Susan Collins	Barb Jacobs	Jamie-Marie Wilder
Maggie McGatha	Mark Helton	Kari Ostby	Mike Waters
Martha Ferguson	Emily Butler	Laura Plante	Robin Hill
Gloria Beswick	Valeria Amburgey		

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Approval of November 2008 minutes

Barb asked to add "in the amount of \$100" to the budget line entitled "affiliate leadership conference state gift". Barb made a motion to accept the minutes as changed. Mike seconded the motion. The motion passed.

Changes to Agenda

No changes were made to the agenda.

2009 Conference Report - Kari Ostby and Mark Helton

The 2009 conference will be hosted by Bourbon County High School.

Mark Helton was in attendance at the board meeting to answer questions. Kari and Mark had already met prior to the board meeting and presented the board with a detailed report (see handout). The schedule for the day will consist of an assortment of overlapping 80 minute and 35 minute sessions. Gloria is working with Jon Wray concerning a possible keynote session. He spoke to GLCTM recently on the topic of emerging technology and received excellent reviews.

The Awards Dinner will be at Migdalia's Restaurant on Main Street in Paris Kentucky. The menu will be buffet style. Cocktail hour will be from 6-7 with dinner at 7:00. The conference hotel is the Best Western Paris Inn. 30 rooms have been reserved at a rate of \$64.95, but will be released 30 days prior to the conference.

Kari researched cancellation policies for various organizations. The board discussed various options and decided upon the following: *No participant refunds will be granted*, but participant substitutions will be allowed with e-mail notification to the membership chair (including the name and contact information of the substitute.) The substitute participant will be contacted by the membership chair and will need to check in at the on-site registration table on the day of the conference. *No speaker refunds will be granted*, but speaker substitutions will be considered on a case by case basis upon notification to the program chair. *No refunds will be granted for exhibitors*.

Valeria made a motion to accept the cancellation policy as stated above. Jamie seconded the motion. Motion passed.

The conference registration fee schedule listed below was presented for consideration.

Susan Collíns

Here is the latest list of conferences, websites, publications, projects and opportunities that may be of interest to KY mathematics educators and/or their students.

Valería Amburgey KCTM Vice-President for College

WEBSITES of Interest

CREATING A MATHEMATICS DIGITAL FILING CABINET

(http://iae-pedia.org/Math_Education_Digital_Filing_Cabinet).

PBS KIDS (http://pbskids.org/go/) has interactive games to help prepare children for school.

NUMBERS MADE MEANINGFUL (http://www.numbersmademeaningful.com/Home_Page.html) - Stories and games for prekindergarten through grade 1 for zero and friends.

TIME MONSTERS (http://www.timemonsters.com/) - interactive online lessons and quizzes about time.

PRIMARY RESOURCES (http://www.primaryresources.co.uk/maths)

KID INFO (http://www.kidinfo.com/) – educational resources, videos and games for P-12 students, teachers and parents.

HOTMATH (http://www.hotmath.com/)

MATH DICTIONARY FOR KIDS (http://www.amathsdictionaryforkids.com)

AHA!MATH (http://www.learning.com/ahamath)

SHODOR INTERACTIVATE (http://www.shodor.org/interactivate)

ARCADEMIC SKILL BUILDERS (http://www.arcademicskillbuilders.com)

MATH MOTIVATION (http://www.mathmotivation.com)

EXEMPLARS (http://www.exemplars.com/materials/math)

MATH123XYZ (http://www.math123xyz.com)

ROCKIN THE STANDARDS (http://www.rockinthestandards.com)

MATHWORLD (http://mathworld.wolfram.com)

COMPUTATIONAL THINKING (http://iae-pedia.org/Computational_Thinking)

TRANSUM (MaThs, SoftwaRe, TeAchers, EducatioNal, Schools, PUpils, NuMeracy) is a site that provides daily

math problems and other resources for teachers and students. These resources can be found online at http://www.transum.org/Software/.

GLOGSTER allows students and educators free web-building tools including wikis, blogs, sites, lesson plans and student projects. For more information, visit http://www.glogster.com/edu.

ONLINE MATH LEARNING (http://www.onlinemathlearning.com/index.html). Lessons, worksheets and videos. Also provides free SAT and GMAT preparation.

THE MATHEMATICAL PREPARATION OF TEACHERS OF SCHOOL-LEVEL MATHEMATICS -- A MATHEMATICS TEACHER-EDUCATORS NETWORK (http://wg-mpet.wikidot.com/). This site includes wikis and/or discussion forums related to nationwide professional standards for what American teachers should know of, in, and about mathematics.

INDEPENDENT STUDY COURSES - Fresno Pacific University (http://www.pdcourses.com) THE WHITE HOUSE'S AGENDA FOR EDUCATION (http://www.whitehouse.gov/agenda/education/) FRONT PAGES OF NEWSPAPERS AROUND THE WORLD. Go to http://www.newseum.org/todaysfrontpages/flash/ If you place the mouse on a city, wait a few moments, and then double click, the newspaper headlines will pop up.

A LIST OF FREE MATH VIDEOS (a wiki moderated by David Moursund) (http://iae-pedia.org/Math_Education_Free_Videos)

COUNTDOWN (http://countdown.luc.edu/) - Utilizing the technology of QuickTime movies to develop math skills.

PUBLICATIONS of Interest

A free download of the report, **MATH EDUCATION IN THE UNITED STATES** 2008, published by NCTM and the United States National Commission on Mathematics Instruction can be found online at http://www.nctm.org/correspondingsociety.aspx.

THE NATIONAL SCIENCE DIGITAL LIBRARY (NSDL) - free online library for K-16 educators for all levels in the areas of science, technology, engineering and mathematics education (http://www.NSDL.org).

IAP- Information Age Publishing, Inc, is pleased to announce the following new journal issue and upcoming book in our Education Program: THE MONTANA MATHEMATICS ENTHUSIAST -- Editor-in-Chief: Bharath Sriraman, The University of Montana and Critical Issues in Mathematics Education -- Edited by: Paul Ernest, University of Exeter, UK, Brian Greer, Portland State University, and Bharath Sriraman, The University of Montana. For additional information, visit the website at http://www.infoagepub.com/products/journals/TMME/.

Publications from the International Society for Technology in Education (ISTE): **SAFE PRACTICES FOR LIFE ONLINE** - Advice, resources, and classroom-tested exercises for educators who wish to teach students to understand how to make good choices and minimize risks online. **DIGITAL CITIZENSHIP IN SCHOOLS** - An essential introduction to digital citizenship and its role in the schools. For additional information, visit the website

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at http://www.iste.org/

Four articles on the topic of **PROOF BY COMPUTER** – **HARNESSING THE POWER OF COMPUTERS TO VERIFY MATHEMATICAL** PROOFS can be found online at the American Mathematical Society (AMS) website (http://www.ams.org/ams/press/hales-nots-dec08.html)

JOURNAL OF URBAN MATHEMATICS EDUCATION - The Editorial Team of the Journal of Urban Mathematics Education (JUME) would like to announce the launching of its inaugural issue. To gain free access to the articles in this issue, just register at <u>http://education.gsu.edu/jume</u> and you can choose to become a part of the JUME community as a reader, author, or reviewer. We look forward to you joining our new family as we explore the bounds of the urban domain in mathematics education.

THE EDUCATION & INFORMATION TECHNOLOGY DIGITAL LIBRARY (EdITLib) can be found online at http://www.EdITLib.org.

The link to the latest issues of **THE JOURNAL OF MATHEMATICS AND CULTURE** (Current Issue: Volume 3, Number 1) and **NASGEm News** (Current Issue: Newsletter 3,1) can be found at http://nasgem.rpi.edu/pl/journal-mathematics-culture-s37.

CONFERENCES AND WORKSHOPS of Interest

MIDDLE AND/OR HIGH SCHOOL

The Chicago Lesson Study Group invites you to its eighth lesson study conference on Thursday, May 7 - Saturday, May 9, 2009 @ Chicago, IL. For additional information visit their website at http://www.lessonstudygroup.net/pages/2009_LessonStudyConference.html

The 25th Annual Anja S. Greer Conference on Secondary Mathematics, Science & Technology will be held during the week of Sunday, June 21 - - Friday, June 26, 2009. Participants take two week-long courses lead by top educators and they can attend short sessions from a conference-within-a-conference and evening talks given by Zalman Usiskin, Dan Kennedy and Jonathan Choate. Information about the conference can be found at http://www.exeter.edu/mst

COLLEGE

American Society for Engineering Education (ASEE) Spring 2009 Northeast Conference @ University of Bridgeport on April 3-4, 2009. The Spring 2009 Northeast ASEE Conference will be held on April 3-4, 2009 at the University of Bridgeport, Bridgeport, Connecticut, U.S.A. This year's conference theme is: Engineering in the New Global Economy. For additional information visit their website at <u>http://www.asee2009online.org</u>

The annual meeting of the American Educational Research Association AERA) will be in San Diego, CA on April 13-17, 2009. For additional information, visit the website at http://www.aera.net/meetings/.

DIMACS Workshop on Algorithmic Mathematical Art: Special Cases and Their Applications will be held May 11 - 13, 2009 at the DIMACS Center, CoRE Building, Rutgers University. For additional information visit the website at http://dimacs.rutgers.edu/Workshops/MathArt/announcement.html

The 2009 Haifa Matrix Theory Conference will take place at the Technion, on May 18-21, 2009, under the auspices of the Technion's Center for Mathematical Sciences. For additional information, please email Professor Abraham Berman (The Israel Pollak Academic Chair Head, Department of Education in Technology and Science Technion, Israel Institute of Technology, Haifa, 32000, Israel) at berman@technion.ac.il

The 3rd International Symposium on the History and Pedagogy of Mathematics in China will take place in Beijing on May 22-25, 2009. Additional information can be found online at http://www.clab.edc.uoc.gr/HPM/Meetings.htm .

The 21st Annual Ethnographic and Qualitative Research Conference (EQRC) will be held June 5th and 6th, 2009 @ Cedarville, OH. The proposal deadline is March 20 and details are found at the conference website: <u>http://www.cedarville.edu/egrc/</u>.

International Commission for the Study of Improvement of Mathematics Education (CIEAEM) – July 26-31, 2009 @ Université de MONTRÉAL, Montréal, Québec, Canada. For additional information, visit <u>http://www.cieaem.net/index.htm</u> and click on "Next Meeting" to get to the Second Announcement, that can be downloaded.

The 14th International Conference on the Teaching of Mathematical Modelling and Applications (ICTMA 14) will be held at the University of Hamburg on July 27-31, 2009. For additional information visit the website at http://www.ictma14.de/

The thirteenth consultation of the International Consortium for Research in Science and Mathematics Education (ICRSME XIII) will be held from March 9 - 12, 2010 at the BlueBay Los Angeles Locos Hotel near La Manzanilla, Mexico. Contact Art White [white.32@osu.edu] for additional information.

GLOBAL LEARN Asia Pacific 2010 -- Global Conference on Learning and Technology. CALL FOR PROPOSALS TO HOST in Spring 2010 are due March 31, 2009. For more information visit the website for the Association for the Advancement of Computing in Education (AACE) at http://www.aace.org

The 2nd PARIS INTERNATIONAL CONFERENCE ON EDUCATION, ECONOMY & SOCIETY will be held at the Hotel Concorde La Fayette in Paris (France) on July 21-24, 2010. For additional information on this conference, visit the website at http://education-conferences.org/default.aspx.

GENERAL (ALL)

The 2009 Council for Exceptional Children Convention and Expo @ Seattle, WA on April 1-4, 2009. For additional information, check the website at http://www.cec.sped.org.

National Council of Teachers of Mathematics (http://www.nctm.org/) Annual Meeting & Exposition @ Washington, DC on April 22-25, 2009 @ San Diego, CA on April 21-24, 2010 Annual Meeting Research Presession @ Washington, DC on April 20-22, 2009 Regional Conferences & Expositions @ Boston, MA on October 21-23, 2009

@ Minneapolis, MN on November 4-6, 2009

@ Nashville, TN on November 18-20, 2009

The Department of Mathematics at the University of Buea, Cameroon, is organizing its first International Conference on the Mathematical Sciences, with the aim of bringing together academicians and professionals with cross-disciplinary interests related to Mathematical Sciences, to demonstrate the vital role that mathematics plays in society, and to bridge as well as nurture understanding and collaboration between global and Cameroon regional mathematical scientists and practitioners. The conference will feature a two-day closing workshop on Mathematical Biology. Conference dates are May 12-16, 2009. For more information, visit conference site at http://www.bueaconference.com or contact org@bueaconference.com

ED-MEDIA 2009 -- World Conference on Educational Multimedia, Hypermedia & Telecommunications @ Waikiki Beach, Honolulu, Hawaii on June 22-26, 2009. Call for speaker proposals deadline is April 7, 2009. For additional information visit the website for the Association for the Advancement of Computing in Education (AACE) at <u>http://www.aace.org</u>

The Mathematics Leadership Program (MLP), a collaboration of Education Development Center (EDC) and the SummerMath for Teachers Program of Mount Holyoke College, offers institutes for teachers, coaches, and administrators based on the newest publications in the mathematics education field. The MLP schedule is strategically designed to provide maximum flexibility to school systems by offering a variety of one-week programs among which participants may choose. Fees (including room and board in Mount Holyoke College facilities) for a one-week program are \$2,200 per person. The fee for attending two one-week programs is \$3,000. The fee for PDMC-F is \$1,250.

Developing Mathematical Ideas (DMI): offered July 12 to July 17, 2009. Participants choose one of the seven content strands as a focus. This is an opportunity to engage in learning the content of one of the modules. It is appropriate for teachers, teacher-leaders, staff developers, administrators, or coaches.

Developing Mathematical Ideas Facilitation (DMI-F): offered July 19 to July 24, 2009. Participants choose one of the modules with which they are already familiar to prepare to facilitate it. It is appropriate for any educators involved in professional development for teachers.

Professional Development for Mathematics Coaching (PDMC): offered from July 19 to July 24, 2009. This institute is designed for elementary math specialists and other district leaders who have responsibilities for supporting teachers or coaches in the development of a strong mathematics education program in individual schools and/or across districts.

Professional Development for Mathematics Coaching Facilitation (PDMC-F): offered from July 26 to July 29, 2009. This three-day institute is designed for those who are charged with leading professional development for mathematics coaching at their own sites. Participation in this institute requires attendance at PDMC or consultation with the PDMC Director, Amy Morse of EDC.

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Lenses on Learning with a Focus on Systems (LOLS): offered from July 19 to July 24, 2009. This institute is designed for leaders in both administrative and instructional roles, and is appropriate for teams and individuals who work at elementary and/or secondary levels.

Lenses on Learning with a Focus on Systems Facilitation (LOLS-F): offered from July 26 to July 31, 2009. This institute is designed for teams of two or more mathematics leaders at the elementary and/or secondary levels to facilitate LOL Systems in their own sites. Prior experience in LOLS or in the field test of Secondary Lenses on Learning is a prerequisite.

For more information and application forms, check this web site: <u>http://www.edc.org/MLP</u>. If you have questions, please feel free to call (413-538-2071) or email <u>vbastabl@mtholyoke.edu</u>.

E-Learn 2009 -- World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education @ Vancouver, BC Canada on October 26-30, 2009. The deadline for submission of speaker proposals is April 29, 2009. For additional information, check the website for the Association for the Advancement of Computing in Education (AACE) at http://www.aace.org/

School Science and Mathematics Association (SSMA) -- their 108th Annual Convention will be held at the Grand Sierra Resort in Reno, Nevada on October 22-24, 2009. Additional information can be found online at http://www.ssma.org/.

National Association for Gifted Children [NAGC] - November 5-8, 2009 in St. Louis, MO. For additional information, visit the website at http://www.nagc.org/index.aspx?id=1759.

OPPORTUNITIES of Interest

VIRGINIA COMMONWEALTH UNIVERSITY/SCHOOL OF EDUCATION/DEPARTMENT OF TEACHING AND LEARNING - ASSISTANT/ASSOCIATE PROFESSOR OF MATHEMATICS EDUCATION. For Additional Information: Dr. Ena Gross, Phone: (804) 828-1305 Fax: (804) 827-0676 Web: <u>www.soe.vcu.edu</u>.

NORTHERN ARIZONA UNIVERSITY - ASSISTANT PROFESSOR of MATHEMATICS EDUCATION Send a letter of application, curriculum vita, plan of research, statement of teaching philosophy, graduate transcripts, and a summary of teaching evaluations, if available, to the address below. Also arrange for three confidential letters of reference to be sent directly to the same address.

Mathematics Education Screening Committee Department of Mathematics and Statistics Northern Arizona University Box 5717 Flagstaff, AZ 86011-5717

FACULTY OF MATHEMATICS AND NATURAL SCIENCES -- UNIVERSITY OF GRONINGEN -- TENURE-TRACK POSITION FOR ASSISTANT PROFESSOR IN MATHEMATICS OR SCIENCE EDUCATION -- Vacancy nr. AT209003 More detailed information regarding the tenure track position can be found at:

(Continued on page 16)

<u>http://www.rug.nl/fwn/vacatures/structuurrapporten/index</u>. Information on the Department of Education is available at: <u>http://www.rug.nl/fwn/faculteit/faculteitsbureau/ido/index</u>. Otherwise, for information please contact Prof.dr. M.J. Goedhart, professor in mathematics and science education. Mail: <u>m.j.goedhart@rug.nl</u>. Phone: +31 50 3638303 (Secretary: +31 50 3638308).

CONCORDIA UNIVERSITY CHICAGO -- FACULTY POSITION -- MATHEMATICS EDUCATION -- Please send a curriculum vita, a copy of post secondary academic transcripts that reflect completion of advanced degrees and/or in progress work on a terminal degree, and arrange to have three current letters of recommendation sent to:

> Dr. Gary Wenzel, Dean College of Arts and Sciences Concordia University 7400 August River Forest, IL 60305 Gary.wenzel@cuchicago.edu

A New Twist On The Old Activity... "I Have, Who Has?"

Imagine this scenario...Each student in the class has a card with a mathematical problem to solve. After a few moments of frenzied calculations, the students ready themselves as one child begins with... "I have the answer of 23, who has the answer to 3x + 3 = 9." Hopefully all the students will be paying attention. The student that has the card with a 2, should be ready to state this answer and then read off the next math problem (or so we hope).

This scene has probably been seen in a middle school math class near you, or perhaps you have used this activity with your students. I have used the "I Have, Who Has" activity on several occasions. This activity is also known as a "looping activity" because the completion of the activity is dependent upon a student supplying the answer to a previous question and then providing the next question for another student to solve. In theory, this looping exercise involves everyone in the class and is very interactive. Sometimes the activity works well with all students participating, however sometimes students have trouble following the flow of the conversation. The Teacher Partners from PIMSER's Mathematical Leadership Support Network (MLSN) have created a new twist to the old "I Have, Who Has?" activity known as "turnover cards".

Turnover cards are a quick and easy way for students to interact with various mathematical problems in a non-threatening manner. The turnover cards are double-sided cards that have answers on one side and questions on the opposite side. Questions can range from mathematical problems to vocabulary words. An individual student or a small group of students can complete any turnover activity.

Any activity that uses turnover cards starts with a student turning over the START card, which contains a question. The rest of the cards are laid on the table with answers exposed. As the student reads the first question, he or she will look at all the answer possibilities in front of him or her. When the answer is found, the student turns this card over and finds another question. Once the student finds the answer to this question in the remaining cards, he or she will turn it over to expose the next question. This dependence of

A New Twist On The Old Activity ... "I Have, Who Has?", contd.

calculating an answer to a previous problem will help to continue the activity is just another way that looping can be used in a class activity. If a student properly calculates the answers and follows this looping activity, the last answer they calculate will be found on a card that when turned over will say END.

There are a lot of positives to including the turnover card idea. First of all it is used in a small group setting. Quite often, the whole class administration of "I Have, Who Has" can become a classroom management issue because students tend to zone out during this activity. Also some students are very shy to speak out in class. A whole group looping activity that depends on all students participating can be too much for some students. Secondly, in the "I Have, Who Has" activity, a student usually computes or develops the answer to just one problem because all the problems are distributed among all students in the class. By using the turnover cards, students are being exposed to more mathematical problems and can refine their skills. Finally, the neat part of this activity is that the activity is self-checking. Teachers can quickly assess how students comprehend a concept by how the student is doing on the turnover card activity. If the card that says END comes up while there are other cards on the table, then a teacher will quickly know that a student or students have correctly computed a problem. By probing, a teacher can help students to back track their progression in the activity to see which problem was missed. The teacher can re-teach any misconceptions that students are exhibiting. These turnover cards can be a great way to have RTI probes for students.

I highly recommend trying out the turnover cards in your classroom. My students really enjoy them and I have been able to help a lot of students who have been struggling with math. When math problems are presented in a game format, students tend to want to solve them. So please try this activity and you may just... "Turn over a new leaf" in your teaching.

Attached at the end of this article are examples that I have created for my class and the templates that the Regional Teacher Partners have developed for MLSN. The examples from my classes include algebraic equations and statistics definitions. Two templates for turnover cards are also included. One template is for nine questions while the second is for twelve questions. Below you will see a listing of important points when creating and using the turnover cards:

- 1. Save the templates in Microsoft Word.
- 2. Simply type in your first question in the box that say Question 1 on the first page.
- 3. Type the answer to the first question in the box that says Answer 1.
- 4. Continue this process until you have typed in all your questions and answers.
- 5. It is best to run these cards on cardstock and laminate them.
- 6. You create these cards by running them front to back on one piece of cardstock or paper. Remember to have both your answer page and question page going the same direction with "Match this box" at the bottom of each page.

(I usually have my students work in pairs, so I only need 15 pieces of cardstock for a classroom set. This is a pretty cheap investment for a class activity!)

Jamíe Wilder KCTM Middle School Vice-President

ć = A	c = ?	v = 5
¥ + 7 = 5	4c - 9 = 3	19 + 2m = 37
ς = δ 6 = 2 = δ	2m - 5 =17 m = ?	-3j + 14 = 29 j = ?
3x = -12 x = ?	5 + r = 15 r = ?	2y - 19 = -43 y = ?
7d = 35	6g - 3 = -9	END

Match this box A

START	M ³ (Making Math Magic)—7 th Algebra EIF	4	M ³ (Making Math Magic)—7 th Algebra EIF	12	M ³ (Making Math Magic)—7 th Algebra EIF	-4	M ³ (Making Math Magic)—7 th Algebra EIF
J	M ³ (Making Math Magic)—7 th Algebra EIF	S	M ³ (Making Math Magic)—7 th Algebra EIF	11	M ³ (Making Math Magic)—7 th Algebra EIF	10	M ³ (Making Math Magic)—7 th Algebra EIF
	M ³ (Making Math Magic)—7 th Algebra EIF	9	M ³ (Making Math Magic)—7 th Algebra EIF	ςı	M ³ (Making Math Magic)—7 th Algebra EIF	-12	M ³ (Making Math Magic)—7 th Algebra EIF

Match this box A

٢	T	1
2	/	-
C	5	7

A graphical representation that uses bars to show the intervals in which most data falls

A graphical representation that uses place value in order to show each individual piece of data

quartiles, median, minimum

and maximum.

in which one can see

A graphical representation

A graphical representation

that uses coordinate

points to show the

relationship between

two sets of data

A graphical representation A piece of data that is exthat shows frequency less than most of the of data by using x's. data in a data set

A set of numbers whose values are grouped closely together are known as a data _____

The most common occurring piece of data

The difference between the highest and lowest data points

When data is listed in order from least to greatest, this is the <u>true middle number</u>.

When data is added together and then divided by the total number of data points, you have calculated its _____.

Histogram	Mean	START
M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary
Mode	Range	Median
M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary
Line Plot	Outlier	Cluster
M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary
Scatter plot	Stem-and-Leaf Plot	Box-And-Whisker Plot
M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary	M ³ (Making Math Magic) –Samples & Pop Vocabulary

END Question 7 Question 8 Question 4 Question 5 Question 6 Question 1 Question 2 Question 3

Answer 6	Answer 3	START
M ³ Mating Math Macic) Tumover Carde Set	Answer 4	M ³ Making Math Magicy Turnover Cards Set #1
Answer 8 M ³ (Making Math Magic) Turnover Cards Set :	Answer 5 M ³ (Making Math Magic) Turnover Cards Set #1	Answer 2 M ³ (Making Math Magic) Turnover Cards Set #1
M ³ (Making Math Magic) Tumover Cards Set ³	M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1

Question 9	Question 10	Question 11	END
Question 5	Question 6	Question 7	Question 8
Question 1	Question 2	Question 3	Question 4

Match this box D

Answer 8	Answer 4	START
M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1
Answer 9	Answer 5	Answer 1
M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1
Answer 10	Answer 6	Answer 2
M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1
Answer 11	Answer 7	Answer 3
M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1	M ³ (Making Math Magic) Turnover Cards Set #1

Match this box D

PIMSER P-12 Math & Science Outreach

Supporting Math and Science Education Throughout the Commonwealth

The mission of the P-12 Math and Science Outreach Unit of the Partnership Institute for Math and Science Education Reform (PIMSER) at the University of Kentucky is to support the advancement of math and science education throughout the commonwealth. The nature of that support is threefold:

- The unit provides high quality math and science professional development that is responsive to the needs of educators at local, regional, and state levels.
- The unit maintains networks throughout the state that provide support and resources for P-12 math and science educators.
- The unit works to build leadership capacity to support both local and district math and science improvement efforts.

The P-12 Mathematics & Science Outreach Unit was developed to continue the quality partnerships and outreach activities that were created through the work of two *National Science Foundation* grant programs known as the <u>Appalachian Rural Systems Initiative (ARSI)</u> and the <u>Appalachian Mathematics and Science</u> <u>Partnership (AMSP)</u>. Many of the Regional Teacher Partners that serve as facilitators in the P-12 Math and Science Outreach Unit were originally trained through the ARSI program. That program developed the model of training P-12 educators as experts in science and math education through professional learning communities called Regional Teacher Partner cadres and placing them with schools and/or districts to facilitators in the same fashion and with the same director, Kimberly Zeidler-Watters (<u>kim.zeidler@uky.edu</u>).

So far, the unit has worked with educators in over <u>100 Kentucky counties</u> to improve teacher practice and ultimately impact student achievement in mathematics and science. The P-12 Mathematics & Science Outreach Unit of PIMSER is available to provide support services throughout the Commonwealth. Information and registration for the 2009 Summer Programs is available on the unit's website: www.uky.edu/P12MathScience .

Summer 2009 Math Programs:

Everyone Passes Algebra (regular and special education teachers of math, grade 8-12)

Fair Share Fraction Fun (K-3 teachers of math)

One-to-One Math (elementary math intervention strategies)

Rational Numbers Project (regular and special education teachers of math, grades 4-9)

Math Leadership Support Network Summer Academy (math educators at all levels)