

September 2010



NEWSLETTER

# Kentucky Council of Teachers of Mathematics

## Message from the President

### Top Ten Reasons I am Proud of KCTM

10. KCTM has an attractive, online newsletter with a variety of information for Kentucky teachers. The newsletter provides mathematics activities for the classroom, spotlights of Kentucky teachers, and the latest KCTM news and events.
9. KCTM has participated in the last two NCTM Affiliate Leaders Conferences. At this conference, Affiliate leaders from all across the United States and Canada gather to exchange ideas and learn more about services that NCTM has to offer them. KCTM has benefitted from this conference by learning ways to improve its organization and member benefits.
8. KCTM awards several teachers Teacher Support Grants each year to help them purchase classroom materials that otherwise, they may not be able to purchase. These funds go toward providing Kentucky students with materials to help them learn mathematics!
7. KCTM receives nominations each year for the Mathematics Education Service and Achievement (MESA) award. This year we received more nominations than ever before! Kentucky teachers are proud of their colleagues and want to recognize them and their efforts and achievements.
6. KCTM has implemented an online membership and conference registration system over the past couple of years. As with any new system, there have been a few glitches, but overall the system has streamlined our membership registrations and renewals as well as our conference registrations.

*(Continued on page 2)*

### Inside this issue:

2010 KCTM Annual Conference Update, Kari Ostby	Page 2
NCTM Tips for The First Days of School and All Year Long, Kari Ostby	Page 3
Kentucky Leadership Networks, Jenny Ray and Renee' Yates	Page 5
Spotlight on Teaching	Page 6
Common Core State Standards, Seth Hunter	Page 7
A Lost Mathematical Art: Measuring Through Estimation, Jamie-Marie Wilder	Page 9
An Overview of NCTM's "Illuminations" Activities, Julie Dunn	Page 12
Can You "Fathom" The Uses? Lesli Poynter	Page 13
Avermedia Document Camera, Cindy Smith	Page 15
May KCTM Executive Board Meeting Minutes, Susan Collins	Page 15
August KCTM Executive Board Meeting Minutes, Susan Collins	Page 18
Kentucky Mathematics Educators - Items of Interest, Valeria Amburgey	Page 21

## Message from the President, contd.

---

5. KCTM has a well-attended conference every year where teachers gather not only to learn from the great variety of sessions, but also to share their expertise with fellow teachers. The networking and collaboration that comes out of the conference are wonderful!
4. For only the second time in recent years, the 2010 KCTM Annual Conference is a two-day conference. This year's conference will be held in Somerset, KY on October 1-2. We have many wonderful sessions scheduled with nationally known author and speaker Greg Tang giving the featured session on Friday, October 1.
3. KCTM offers members wonderful KCTM products for purchase at the annual conference as well as one of the best conference goodie bags offered at any conference!
2. KCTM has an executive board made up of professional and caring mathematics educators from across the state. The KCTM board works hard every year to offer KCTM members a great conference and other benefits.
1. KCTM members are the best! Members of KCTM are teachers, administrators, and other mathematics education professionals who care deeply about Kentucky students and their mathematics learning.

KCTM – Thanks for giving me so many reasons to be proud!

*Bethany Noblitt*, KCTM President

## 2010 KCTM Annual Conference Update

Kari Ostby

---

The 2010 KCTM Annual Conference will be held October 1 and 2, 2010 in Somerset, Kentucky at The Center for Rural Development. The deadline for registration was September 1. But you can still register on-site that day.

With 118 speakers, we are looking forward to many exciting sessions in which teachers can share their expertise with each other. Look for the conference program with details about the sessions on [www.kctm.org](http://www.kctm.org). Go to the Conference tab and select the Conference Documents tab.

PLEASE, take a look at the computer sessions. If you want to attend one, you MUST look at the technology needs link on documents tab to see if you need anything pre-loaded. There are a couple of other sessions that have requested the attendees to have certain items. So, it would be a good thing for each of you to look at this document so that you can get the maximum results out of your sessions!!!

To give you a little taste of what is being planned in Sommerset, our featured speaker on Friday will be Greg Tang. He comes to us highly recommended and his enthusiasm about children's story books is making me excited about his session! Take a look at his website at <http://gregtang.com>. And on Saturday, our featured speaker will be one of our very own- born and raised in Leitchfield, KY, Brennon Sapp will share what he has learned and experienced with the New Common Core Standards. Trust me- this will NOT be the normal kind of session on the standards. You will find him very helpful, full of knowledge, and inspirational about what is coming

*Continued on next page...*

## 2010 KCTM Annual Conference Update, contd.

---

our way. Brennon's site is at [www.bsapp.com](http://www.bsapp.com). Take a look. You will find something for you too!

Other session topics include: at least 4 sessions on the TI-Nspire, 6 sessions from the CPM textbook trainers, TI-82 sessions, several sessions about fractions, algebra tiles, KET's Scale City online resource, many games/manipulative sessions, NASA sessions, computer and technology sessions of all kinds, a Family Math Night showcase from 9 teachers sharing their experiences with a FMN, 2 KDE sessions about the new standards and 2 KDE panel Q & A sessions for those of us that need some clarification, and MANY MANY other sessions!

A little more about what you will see on the new standards- There are many sessions about the new standards. Some more geared for certain grade levels and others more general. Please note, KCTM does not endorse any of these sessions. You will learn much from them. However, you may also hear some contradictions and may even become very confused. We have a plan. Each of you will be given post-its at registration in your bag of goodies. Find the Standards Parking Lot wall near registration. On this wall, post your questions, comments, frustrations, concerns, or anything else you may wish to state or ask. During the KDE Q & A sessions, many of these will be addressed. And we are working on how to address all of them after the conference.

THANK YOU for all you do each and every day and hope to see you in October.

*Kari Ostby*, KCTM President-Elect & NCTM Representative

## NCTM Tips for The First Days of School and All Year Long

---

**Become an advocate for mathematics.** Celebrate the mathematics learning that is taking place in your school. Plan a school-wide math bulletin board, and display student work. Collaborate with other teachers so that each gets a turn. Share your experiences (math fairs or family nights, for example) with the local newspaper. Letting others know about your school may result in a tremendous boost to your school's mathematics program, and ultimately more funding as well.

**Take Notes.** Make a place for yourself where you can jot down observations quickly throughout the day. Informal observations early in the year can be helpful further down the road if you have a student who may have a special need or is displaying behavior that continues to disrupt the class. Also, document what went well and what could use improvement each time you use a lesson, and more importantly, stay organized - so that you can find and consider the notes next time around! Date each observation.

**Use email for parent contacts whenever possible.** This saves time and makes it easy to keep a "paper" trail. Parents appreciate the ease of contact. Talk to parents early on—establish a positive relationship before there are problems. Send them a positive email about something you notice about their student. Those positives are like money in the bank when you do encounter a discipline problem later in the year. And, from an organizational point of view, these upbeat notes encourage the practice of communicating by email.

**Keep seating charts handy.** This will aid you in taking attendance in a split second as students are completing the 'class starter', a task written on the board to get their minds into gear. It will be

*Continued on next page...*

## **NCTM Tips for The First Days of School and All Year Long, contd.**

---

the secret to knowing everyone's names instantly. The rosters can also be helpful for fire drills, and are invaluable for substitute teachers.

**Take a leadership role in mathematics by offering support.** Start a professional reading group to discuss mathematics teaching and learning. Schedule a time (even lunch hour) once a month to meet with other math teachers in your school to share ideas and ask each other questions. Involving beginning teachers in a mathematics-related reading group would help everyone involved grow as a teacher. Involving veteran teachers will allow them fresh ideas and an opportunity to mentor. Consider using the series [\*Empowering the Beginning Teacher of Mathematics\*](#) for topic ideas for the meetings.

**Know your discipline/classroom management strategies.** Take time to think about what is and is not acceptable in your classroom. What kinds of things are NOT okay? How are you going to handle them? Think about what kind of learning environment you would like to create for and with students. On the first day, work as a class to set expectations for behavior and work habits. Chart, model, practice, and reinforce behavior expectations. Keep it simple; having a long list of rules may be difficult to monitor and enforce.

**Ask the principal to purchase a [NCTM school membership](#).** The school membership includes a subscription to a journal, reduced registration fees for all teachers in the school at the annual meeting and regional conferences of NCTM, and 20 percent off NCTM educational materials and special products. This is a great way to strengthen the school mathematics program with access to high-quality educational materials and professional development opportunities.

**Make mathematics a priority within your classroom.** Plan to integrate mathematics with other subject areas. An easy way to get started is to collect children's literature that promotes mathematical concepts. The [April 2005 focus issue of \*Mathematics Teaching in the Middle School\*](#) has several ideas that can be modified for use in the lower or higher grades. Connections can also be made to your science and social studies curriculum by analyzing data that can be extended into a real-life problem-solving situation. See the [tips on Using Current Events and Real Data](#).

**Lastly, let go of the things that don't really matter.** Be conscious of what you are spending your time on as a teacher. Step back regularly and decide what tasks are producing the least gains for your students and eliminate them in order to make time for more worthy tasks or, equally important, time for yourself!

*Kari Ostby*, KCTM President-Elect & NCTM Representative

The vision for Kentucky Leadership Networks is: *"Every school district in the Commonwealth of Kentucky has a knowledgeable and cohesive leadership team that guides the professional learning and practice of all administrators, teachers, and staff so that every student experiences highly effective teaching, learning, and assessment practices in every classroom, every day."*

The system of Leadership Networks in Kentucky has been designed to support the quality implementation of the requirements set forth in Senate Bill 1 (2009). Specifically, the networks are intended to **build the capacity of each district** in the Commonwealth as they implement Kentucky's new Core Academic Standards, develop assessment literacy among all educators, and work toward ensuring that every classroom is a model of highly effective teaching and learning practices. Network participants will collaborate with leaders throughout their region to hone their own practice/knowledge and work collaboratively within each district to scale up highly effective practices in every classroom, as well as deepen assessment literacy understanding and deconstruct Kentucky's Core Academic Standards.

Four major components form the foundation of every Leadership Network in the state. Those components are:

- Kentucky's Core Academic Standards
- Assessment Literacy
- Characteristics of Highly Effective Teaching and Learning
- Leadership

There are five Kentucky Leadership Networks working through the same foundations. The Superintendent's Network, Curriculum Supervisor Network, Principal Leaders Network, Higher Education Network, and Teacher Leaders Network make up the five Leadership Networks. Representatives from these networks form the district level teams. The teacher leader network is divided into two groups one for English/Language Arts and the other for Mathematics.

The networks will meet 6 times throughout the year and 2 times during the summer to collaborate with other leaders in their area. The networks are organized around the Educational Cooperative geographical locations. Participants chosen by their districts will learn and practice new processes and strategies with colleagues during network meetings.

The network participants will participate in continuing growth through a statewide online professional learning community. This work will be job embedded and will span throughout the year. Support will also be available for network participants in their districts with Regional Content Specialists that will be available to work in schools and districts to provide on the job assistance with the network participants as they roll out the work from the network leadership meetings at the local level. This work is meant to build capacity in each school district throughout the Commonwealth.

The vision for the Kentucky Leadership Networks is: *"Every school district in the Commonwealth of Kentucky has a knowledgeable and cohesive leadership team that guides the professional learning and practice of all administrators, teachers, and staff so that every student experiences highly effective teaching, learning, and assessment practices in every classroom, every day."* Through the careful design of the Kentucky Leadership Network Model, together we will be working toward this one vision for every school, every student, every day as we implement Senate Bill 1.

*Jenny Ray and Renee' Yates*



## High School

Who is at the intersection of Lee County, precalculus course, hands-on lessons, and Presidential Award finalists? Jeremy Miller, high school math teacher extraordinaire at Lee County High. When I asked what past experience had influenced him the most, he immediately said working with Dr. Bill Bush in the ACCLAIM project seven or eight years ago. As a result of the ACCLAIM experience Jeremy moved from what he called a "lecture based classroom", which has really impacted his planning, teaching, and learning.

Jeremy's focus on students leads him to plan lots of lessons using manipulatives and, when applicable, outdoor experiences, particularly when studying trigonometry and indirect measurements. In fact, Jeremy thinks his "best" lesson is the indirect measurement unit when students use their inclinometers, calculators, and brains outdoors solving real-life measurement problems. Algebra 2 is, in general, Jeremy's favorite class to teach because, "it has so many interesting problems that really get my students to think".

I agree with Jeremy in that getting students thinking is really what teaching mathematics is all about. Recently, Jeremy has been developing his professional skills using Harvey Silver's Tools for Promoting Active In-Depth Learning as a way to promote further student engagement in his classroom. It's no wonder when I asked Jeremy what his students might say about him, his response was, "I learned a lot in his class and he cares for all his students. Mr. Miller also put me first."

*Seth Hunter*

## Middle School

"Don't be afraid to make mistakes." This is the advice that Teri Walker gives not only to her students but to new teachers. Teri Walker is a seventh grade mathematics teacher at Twenhofel Middle School in Independence, KY. In August, she began her fifth year of teaching. I had the pleasure of working with Teri Walker this summer in two graduate courses at Northern Kentucky University. She is one of the most positive people I have ever met. She is one of those people that you just love being around. And her students feel the same way. With a philosophy that can be summed up with sentences like, "Don't be afraid to make mistakes," and "don't sweat the small stuff," and "don't be afraid to ask questions," it's no wonder that her students and her colleagues like her so much.

Teri says that her favorite part of her job is sharing her passion about mathematics with her students. She says, "I love watching my students grow in their knowledge of math and problem solving throughout the school year." Her passion is contagious. After only a few years of teaching, she already has students whom she has encouraged thanking her for sharing her passion. Just this summer, a former student approached her at a baseball game and told her that he had enrolled in both Geometry and Algebra II his sophomore year so he could reach a goal of taking Calculus his senior year. He thanked her for inspiring him to set such high goals for himself. Teri has a way of inspiring her students to believe in themselves and their mathematical abilities. I have been to dinner with Teri when a student approached our table to say hi to her. You could just see the twinkle in his eye as he talked to her. She made him feel comfortable and important at the same time. I am sure she has this same knack in the classroom. This ability to connect so well with her students allows her to break through any barriers they may have and encourage them to set high goals for

*Continued on next page...*

## Spotlight on Teaching, contd.

themselves. It also gives them the confidence to meet those goals.

It is not just Teri's personality that helps her to be so successful in the classroom; it is also her love of mathematics. She loves anything that involves geometry. She told me that she recently taught a lesson on the triangle inequality theorem that she was really excited about. And in general, she likes to incorporate real world problems into the lessons she teaches; often using advertisements or newspaper articles. Teri and I have had many conversations centered on the topic of why students need to understand particular mathematical topics. She doesn't want to just teach the mathematics, she wants to teach the student.



When asked what advice she would give to new teachers, she said, "Don't sweat the small stuff. Don't be afraid to make mistakes. Take all the advice you are offered from fellow teachers and don't be afraid to ask questions." She added, "I think I could write a book about all the advice I have for new teachers... but I will stop here!" Well, Teri, maybe you should write that book. I think we could all learn a thing or two from you.

*Bethany Noblitt*

## Elementary School

Cortney Inklebarger is a first year member of KTCM. In her sixth year of education, Cortney teaches fourth grade at Newton Parrish Elementary in the Owensboro Public Schools. Cortney serves as a teacher representative through GRECC's K-5 Math Alliance.

**What is your favorite part of your job?** My favorite part of my job is watching students grow both socially and academically. I love seeing students realize their own independence- when they finally have the confidence to think for themselves!

**What have you gained most from your teaching experience?** I have had the great opportunity to have varied classroom experiences. For two years I taught gender-specific classrooms. I have taught solely math, solely science, and then all subjects. I've been able to gain knowledge and experience in each of those settings that have helped me become a better teacher today.



**What are your favorite math activities?** Solving problems! I love giving students high-level tasks and watching them use their own skills and knowledge to work through them. I truly believe that the level of the task predicts the level of performance.

**What advice would you give new teachers?** Don't be scared to ask for help. In fact, ask lots of questions!

*Julie Dunn*

In case you somehow missed the memo, email, Facebook post, or conversation, our state has adopted the Common Core State Standards for Mathematics. In the brief time Kentucky has been working with these standards, our state Department of Education has changed the document name to the Kentucky Core Academic Standards (KCAS) and has been rolling out regional networks through which we'll implement Senate Bill 1, of which our standards work is a component.

Like the 4.1 CCA standards, the high school KCAS standards are organized by concept, not grade level or course. The conceptual groupings are different, the content is much more rigorous and focused, and there are a few notable new twists.

1. Mathematical Practices are a part of the KCAS and describe what the NCTM would call "Process Standards", or ways of thinking about mathematics. These are not the kind of standards one "masters" in the sense of mastering a particular content standard.
2. Course suggestions for high school are included in Appendix A of the KCAS standards document, since the content standards are organized by conceptual topics. A "pathway", or sequence of standards organized by units, is suggested for "traditional courses" of algebra 1, geometry, and algebra 2. There is also a "pathway" for "integrated courses" such as math 1, math 2, and math 3 and advanced traditional and integrated courses.
3. The [+] notation marks standards for students interested in what might be called science, technology, engineering, and mathematics (STEM) topics such as:
  - a. vector and matrix operations
  - b. transforming complex number graphs into polar
  - c. using inverse properties of exponents and logarithms to solve equation involving these kinds of quantities
  - d. informally knowing Cavalieri's principle
- e. deriving the formula for a ellipses and hyperbola given their geometric components and properties

The \* symbol marks standards particularly well suited for modeling, which is unique in that it is both a conceptual content topic and practice.

You may be wondering, "What are some of the implications for high school mathematics education and, specifically, how will these changes affect my students?" While I can't definitively answer this question, I do have a few thoughts.

1. We must include the kinds of tasks in our teaching that will enable our students to develop their mathematical practices. First, I must be able to identify the kinds of tasks that can do this so that I can choose appropriate problems, or modify existing problems, in order to develop my students' mathematical practices. Second, I'll need to work with my colleagues so that I can better understand what these practices look like and how they might be developed, so that I can provide my students with useful feedback.
2. One pro of the suggested course pathways includes organizational efficiency in working with the standards. Phew. One con includes the temptation to standardize curricula across our state, and possibly nation. What educational benefits might be sacrificed if this were to occur?

*Continued on next page...*

## Common Core State Standards, contd.

---

3. Yes! A standards document that explicitly recognizes standards for my advanced mathophilic students! Although, it does seem that these suggested pathways have the perspective that advanced students should do more content than comprehensive, instead of similar content more deeply.

I love the modeling suggestions!

What are your reactions to the CCSS/ KCAS document, or at least to the noteworthy highlights included within this newsletter? Email me at [seth.hunter@jefferson.kyschools.us](mailto:seth.hunter@jefferson.kyschools.us), or post to our KCTM Facebook page.

*Seth Hunter*, KCTM High School Vice-President

## A Lost Mathematical Art: Measuring Through Estimation

**Jamie-Marie Wilder**

---

The landscape of our world has changed dramatically over the past century. Areas that were once rural are now becoming more urban. Technology has moved from computers that were housed in labyrinths on college campuses to now they are carried in your pocket. Our clothing used to be handmade by family members now it can easily be picked up on any shopping excursion to the mall. Finally, the food we eat used to be canned, cooked or preserved is now simply handed to us in a paper sack through a drive-through window. Many can argue about the possibility that our society is losing its work ethic and social values, but I argue that we have lost a mathematical art... measuring by estimation!!!

Growing up, I remember learning about inches, feet and yards by working with my dad in the garden or on the farm. I still find it amazing that he can walk off a sizeable distance and only miss the actual measurement by mere feet (and sometimes inches). My knowledge of linear measurement was further honed by learning how to sew with my mom as my guide. She could measure an exact yard by holding fabric to her nose and stretching the fabric as far as her arm could reach. Finally my education on fractions was cemented when my grandmother (Nanni as I so lovingly called her) demonstrated how to measure ingredients for homemade biscuits and dumplings both with measuring cups and also by "feel".

Unfortunately, many of our students today do not have the luxury of having parents and grandparents who have the time to teach the old art of measuring and estimating. It is a skill that is needed for students to not only measure with standard measuring tools, but it can also help in other facets of mathematics. A well known mathematical author, John Van de Walle, wrote a book entitled, *Teaching Student-Centered Mathematics: Grades 5-8*, in which he talked about the importance of measurement. He wrote, "*When teaching measurement, it is important to distinguish between students going about a measurement process and students conceptually understanding what they are doing as they measure.*" (p. 254).

Through hands-on experiences with my family, my measurement skills were sharpened because I had first learned how to estimate lengths and volumes. I conceptually knew the magnitude of length and volume. I understood how to measure quantities with tools because I had

*Continued on next page...*

## A Lost Mathematical Art: Measuring Through Estimation, contd.

---

already learned how to use my body to estimate these quantities. I knew that a step and a half for me was a yard. An inch was from the end of my finger to first bend of my finger. I also knew that from the end of my thumb to the end of my little finger was eight inches. I could place ingredients in my hand and feel how much a teaspoon was or how much liquid a cup looked like in a bowl. All of these experiences in estimation helped me to know how to measure with tools and also the appropriate units to use when measuring.

John Van de Walle continued talking about fostering estimation through measurement skills in his book. The following are mathematical benefits that can come from assisting your students in the process of teaching measurement through estimation (p. 254):

- Aids students in focusing on the attribute being measured and the unit of measurement being used.
- Provides some students with motivation in seeing if their estimation (educated guess) is close to the actual measurement.
- If a standard unit is being used, then the idea of the unit's magnitude will develop.
- Use of a benchmark in estimation can help foster multiplicative thinking.

Teachers can begin the process of teaching measurement through estimation by allowing time in the classroom for students to explore the magnitude of a standard unit of measure. Have students get an index card and write where benchmark units fall on their body. They could answer the following questions:

- Where does an inch measure on my finger?
- How long is my stride?
- How long is a yard in comparison to my wingspan?
- How much does a pound weigh?
- What does a cup, pint, quart or gallon of liquid look like in a non-standard container?

These conceptual understandings can help to build the underpinnings to accurately measure. Hopefully their own constructed ideas can help students to determine the "appropriateness" of their answers.

Finally have students interact with their classroom surroundings and the world around them through estimating and measuring. Middle school students love to compete. A scavenger hunt could be exactly what could motivate them to learn about estimating and measuring. Attached is a copy of a Measurement Scavenger Hunt that was created for the Math Leadership Support Network (MLSN) by PIMSER. Divide your students into cooperative groups. Allow the student groups time to estimate which objects have the attributes that are outlined on the scavenger hunt. Once they have written down objects that have the outlined attributes, make a list of student responses. Then, have students actually measure the objects that they have found to see how accurate their estimates were to the exact measurement.

Even though this activity may not be included on a middle school math department's curriculum map, it could be time well-spent. This activity will foster problem-solving strategies, visualization, and teamwork in your students. Maybe you can bring back the lost art of mathematics...measuring through estimation!!

*Jamie-Marie Wilder*, KCTM Middle School Vice-President



## Estimation Scavenger Hunt



With your team, find items that are close to having the measurements described below. You cannot use any measuring instruments. Justify your selection. (What strategies did you use? What benchmarks, if any, were used?)

1. A length of 3.5 m \_\_\_\_\_
2. A length of 3.5 cm \_\_\_\_\_
3. A length of 3.5 feet \_\_\_\_\_
4. Something that weighs more than 1 kg but less than 2 kg \_\_\_\_\_
5. A container that holds about 200 ml \_\_\_\_\_
6. An angle that is less than 45 degrees \_\_\_\_\_
7. An area that is between 600 and 800 square inches \_\_\_\_\_

# An Overview of NCTM's "Illuminations" Activities: Online Resources for Teaching Mathematics

Julie Dunn

As teachers, we understand the importance of keeping our students engaged and active in their learning. According to Education Arcade, "Games are important learning tools, crucial to the successful development of 21st century students of all ages." The site [illuminations.nctm.org](http://illuminations.nctm.org) allows users to choose from 104 free online activities that help to make math come alive for students in the classroom or at home for grades Pre-K through 12. As an elementary teacher, I have used several of these activities in my classroom to support my math instruction. Here is an overview of some of the activities available at [illuminations.nctm.org](http://illuminations.nctm.org).

## **Five/Ten Frame- Pre-K through Grade 2**

This applet allows students to practice counting, subitizing (seeing items in groups), and adding. Thinking about numbers using frames of 5 and 10 is a powerful foundational skill for learning basic number facts. The four games that can be played with this applet- how many, build, fill, and add- help to develop counting and addition skills to 10 and 20, using frames to think of numbers in relation to the landmarks of 5 and 10.

## **Concentration- Pre-K through Grade 5**

This matching game provides different representations of equivalent items and allows students to match quantities to their numerals, shapes to their names, or fractions to decimals and percents. My favorite option is geared towards Pre-K through grade 2 where students match written numerals to visual representations of spatial dot patterns or the 10 frame. This activity promotes students connecting two aspects of number- the symbolic and the quantitative.

## **Deep Sea Duel- Grades 3-8**

Play a strategy game that requires you to select cards with a specified sum before your opponent. You can choose how many cards, what types of numbers, and your opponent's level of strategy. This game has students create numbers from the teens, hundreds, to decimals and promotes mental math.

## **Factorize- Grades 3-8**

With this activity, you can visually explore the concept of factors by creating rectangular arrays. The length and width of the array are factors of your number. This activity provides a great visual for students to understand what factors are and how they can be found.

## **State Data Map- Grades 3-12**

This applet allows the user to represent data about the states using color-coding. The state with the highest data value is darkest; other states are shaded proportionally. Investigate any of the data provided such as population, area, electoral votes, and gasoline usage- or enter data of your own.

*Julie Dunn*, KCTM Elementary Vice-President

Are you tired of hearing the perpetual question “When am I ever going to use this?” As a statistics teacher, I have noticed that this question does not arise in my class. Because the students see examples from all fields, and have to mine the fields of data at their fingertips, they do not think to ask. They are immersed in using their statistics. If students could see mathematics in use in other classes, perhaps the perpetual question would be muted.

I received a grant from KCTM to purchase ten copies of Fathom Dynamic Data Software to spread the study of data analysis to other classes. This statistical software allows students to see data come alive with interactive graphs, statistics, comparisons, and inferences. Students, and teachers, can collect data from a variety of sources and can analyze the data in an instant. To generate interest in using data analysis in class, I offered a one hour introduction to Fathom for all faculty members during our fall in-service day. With mostly math and science teachers, we explored the classroom applications of the statistical software.

In AP Statistics, we regularly collect data; our heights, how many of each m&m color, how many can taste diet soda, and much, much more. Thus the use of Fathom in my classroom was a given. I noticed students enjoyed watching the graphs change as they input their values. It was so much more exciting than putting a dot on the blackboard. The students were engaged, and occasionally even wowed, by the analysis and displays the software would generate for their data. At the end of the year, my students had to present the final projects they had done from surveys and collected data. They used the Fathom software to make their graphs stand out and confirm the statistical analysis they calculated on paper.

Of course statistical software would be of use in a Statistics class, but what about other classes? Our anatomy teacher had students measure the resting and standing pulse rates of teachers and students around the school. Comparisons were made of the rates based on ages (old vs. young) and position (sitting vs. standing). Graphs of the distributions, summary statistics, and statistical analysis of the data were made with the Fathom software and displayed in class. Science teachers with students entering the science fair made use of the software too. Students could quickly enter their data and find out whether their experiments made any statistically significant differences.

In this era of test driven education, accurate analysis of test scores is very important. With Fathom software, an A.P. English teacher used the Fathom software to show students histograms of their practice exam scores for comparison with the national distribution of scores. This allowed students to see where they fell within their distribution. For most this gave them a boost of confidence before taking the AP Exam.

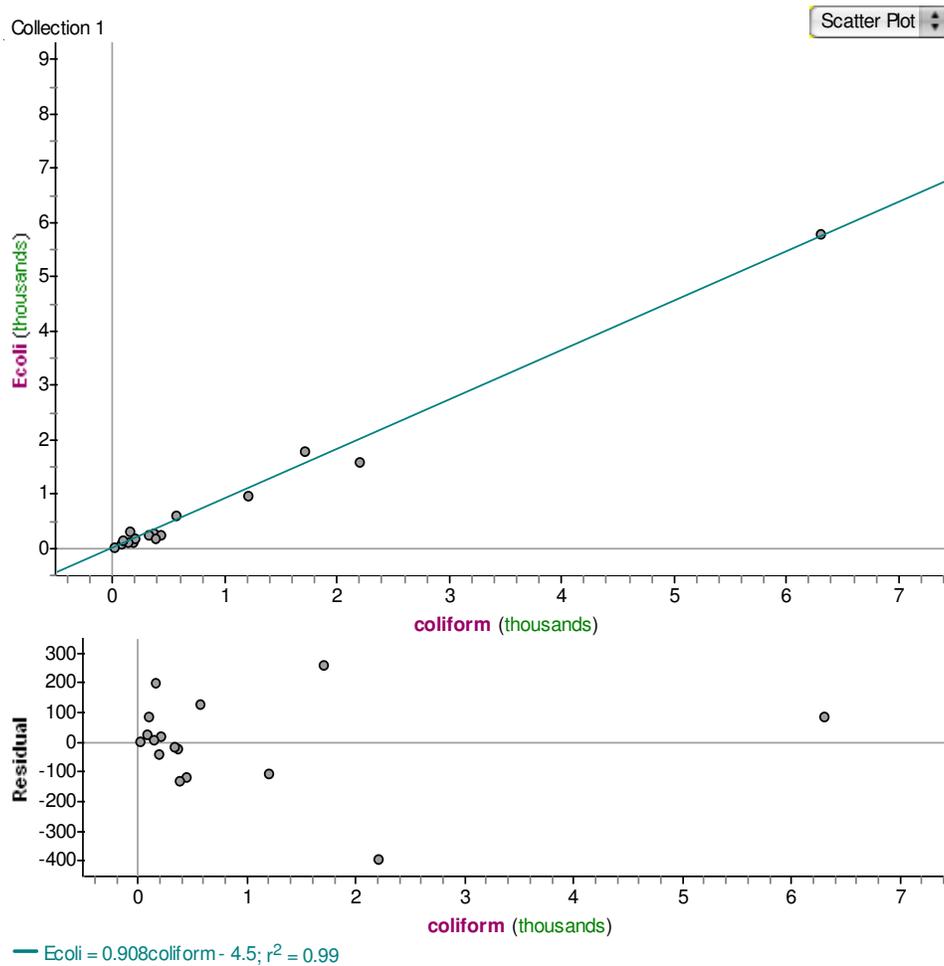
I could compare variation in school test scores from different schools or compare annual scores to see if the rise or drop in scores from year to year was statistically significantly different.

The more places we use mathematics to analyze data and show students the necessity of the use of mathematics, the less we will hear that perpetual question. (Except maybe with imaginary numbers, I don’t have those statistics yet.)

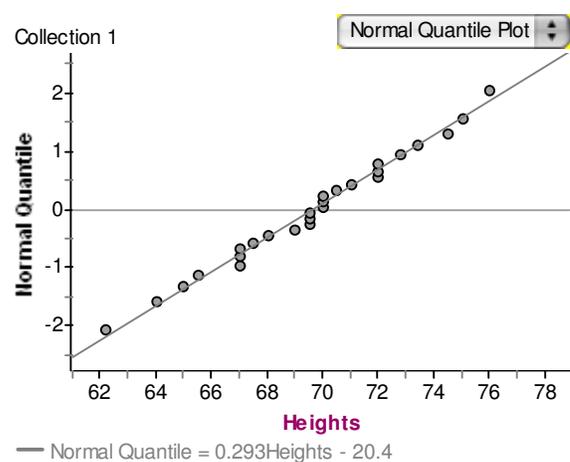
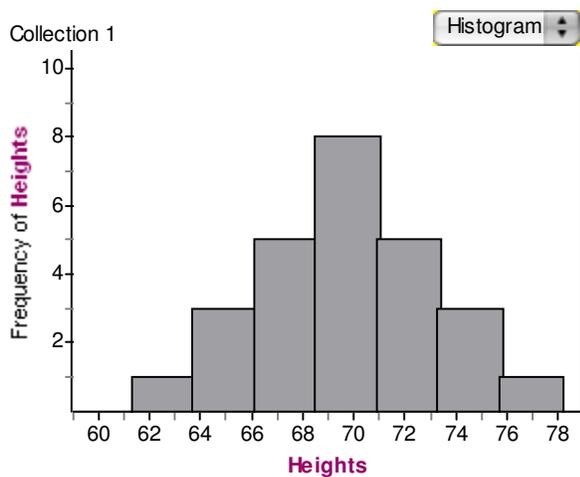
*Continued on next page...*

# Can You "Fathom" The Uses? contd.

Data from student internet research on relationship between the presence of fecal coliform and ecoli bacteria.



Graphs of student heights in one class used to investigate the normal distribution of heights in the sample.



*Lesli Poynter*

Last year I was a fortunate recipient of a grant from KCTM to purchase a document camera for my classroom. Now that I have had it, I don't know what I would do without it. This camera has allowed me to improve my teaching by leaps and bounds.

The first teaching improvement came with sharing class work. Since I only have a projector in my classroom, I had to scan a student's paper to display it to the whole class. Now, I am able to find a paper and show the whole class immediately. I can also show multiple ways to do a problem using multiple student papers. It also brings pride and joy to students when I select their paper. (And it saves time because no one has to copy it again for display purposes.)

Another improvement was the use of the calculator. I have used an overhead calculator and Smartview on my computer. Both of these were successful. However, with the document camera, I can display the calculator itself. So, when they ask, "Where is the log button?" I can just point without having to walk over to the poster. (Besides, can every kid actually see the poster?) I can also display the work in their calculator and use them as examples.

The last significant improvement is basic. I can display items without any scanning or copying. For example, now that I have a projector, Algebra Tiles can be a hassle dragging and dropping on the computer. I can use the exact tiles my kids have and model what they need to know. They can also come up and use the tiles in front of everyone. No more special tiles or programs for the computer. This is also the same for handouts. I can write on the exact paper they have. No overheads or printing required!

The camera has significantly improved my classroom. From sharing student work, calculators and the ability to display items easier, it is a lifesaver. Thank you so much KCTM for awarding me this grant. It has already impacted 140 students and many more to come.

*Cindy Smith*

## May KCTM Executive Board Meeting Minutes

Susan Collins

May 22, 2010 (10:00am)  
Gheens Academy

Beth Noblitt	Kari Ostby	Susan Collins	Jamie-Marie Wilder
Barb Jacobs	Amy Herman	Laura Bristol	Seth Hunter
Emily Butler	Robin Hill	Gloria Beswick	Julie Dunn
Mike Waters			

### I. Approval of February 2010 meeting minutes

Mike made a motion to accept the minutes without changes. Julie seconded the motion.  
Motion passed.

### II. Changes to Agenda

No changes were made to the agenda.

*Continued on next page...*

# May KCTM Executive Board Meeting Minutes, contd.

---

## III. President's Report – Beth Noblitt

- Beth recently attended her first meeting for the Committee for Mathematics Achievement (CMA) as a KCTM representative. (KCTM was invited to begin regularly attending their meetings as a non-voting participant.)
- Beth received an e-mail from Academic Edge incorporated. They are interested in donating \$500 annually to the KCTM teacher support grant. All they ask in return is recognition when the award is announced. Due to the donation, Barb made a motion to increase the number of grants from 3 to 4. Mike seconded the motion. Motion passed.
- The pre-service teacher conference did not come together this spring, but we will try again in the fall.
- Beth sent a letter to the commissioner requesting an appointment to meet with him to discuss KCTM's role in education. She is currently waiting for a reply.
- Amy Herman is registered and is planning to attend the EPSB board of examiners training in June.
- KCTM's fall election will be for Middle School Vice President, High School Vice President, Secretary and President Elect. Call for nominations will go out August 1.

## IV. Newsletter Report – Martha Ferguson

- The most recent newsletter looks great! Thanks Martha , keep up the good work!
- The format of the latest newsletter was discussed. The board decided that multiple formats was an attractive design and should be continued. The next deadline for submissions is September 1. The "spotlight on teaching" feature will be continued and an e-mail will be sent to members encouraging them to contact their appropriate VP to nominate deserving teachers. The board discussed adding a "spotlight on administrators" feature in the newsletter. More thought will be given to the subject and more discussion to follow at a future meeting.

## V. KDE Report – Robin Hill

- KDE has been very busy with lots of meetings and discussions.
- To mention just a few, The Mathematics Education Research committee had an excellent meeting recently that brought together higher education with KDE. The Transition to College and Career Committee is working on an on-line transition course for students that did not reach the benchmark scores.
- The new standards are scheduled for release to the districts on June 2<sup>nd</sup>. Each district will be allowed to send a total of 3 math people to the network meetings. The network meetings will begin this summer and continue throughout the next school year. Districts will be given the freedom to mold their own Professional Development to meet their individual district needs. Testing over the new standards is scheduled for Spring 2012.

*Continued on next page...*

# May KCTM Executive Board Meeting Minutes, *contd.*

---

## **VI. Facebook Page Update – Julie Dunn, Valeria Amburgey, Seth Hunter**

We currently have 37 members. Julie has been posting updates. Mike and Kari will be drafting an e-mail to members to introduce our Facebook page and Mike will be adding a "Find us on Facebook link" to the website.

## **VII. 2010 Conference Report – Kari Ostby, Laura Bristol**

- Two caterer's are being considered for the conference meals. (LaDonna's Catering and Schafer's Catering). The price quotes from each caterer were within our price range. The board requested a vegetarian option for each meal and a cold box lunch both days. Otherwise, Laura was given permission to make the rest of the decisions concerning the meals.
- Greg Tang is currently scheduled to speak at the conference and several names were presented for "speaker number two" to address the new standards. The board requested that Laura contact Phil Daro to be the second speaker. If Phil is not available, the board requested that Laura ask Phil for a recommendation for "speaker number two." Barb made a motion to move \$5000 in the budget to pay Phil's expenses. Julie seconded the motion. Motion passed.
- We currently have approximately 40 people already registered for the conference in some capacity. Registration is going very smoothly.
- Our electricity concerns were addressed. The Center has agreed to have electricity available for all sessions meeting in the exhibit hall and has agreed to charge a flat \$100 for the electricity. Internet will also be available.
- Tonya Hancock sent a letter to Beth asking if TI could pay the \$25 speaker fee for any speaker willing to mention TI in their session. Discussion followed and the decision was made to allow TI to pay for any speakers that contacted them directly, but KCTM will not be involved in promoting it and will not be involved in providing any names to TI.
- A speaker from KDE will be invited to speak at the MESA banquet.

## **VIII. Products – Emily Butler**

Emily is meeting with someone in June to discuss the purchase of a new banner.

## **IX. Treasurer's Report – Barbara Jacobs**

Beginning Balance	\$5,634.61
Total Income	\$2039.04
Total Expenditures	\$5826.11
Ending Balance	\$1847.54

The majority of the income was from PayPal for the 2009 conference. The majority of the expenses were travel expenses to the board meeting, teacher support grant payouts, Greg Tang conference expenses, Maggie's travel expenses to NCTM, and website expenses to Bonasource.

*Continued on next page...*

# May KCTM Executive Board Meeting Minutes, contd.

---

The current balance in savings is \$42,521.33

## X. Website Update – Mike Waters

We are currently satisfied with Bonasource and have decided to stay with them for another year.

## XI. Other

Amy made a motion to adjourn the meeting. Gloria seconded the motion. Motion passed.

*Susan Collins*, KCTM Treasurer

# August KCTM Executive Board Meeting Minutes

---

Susan Collins

August 7, 2010 (10:00am)

Gheens Academy

Beth Noblitt	Kari Ostby	Susan Collins	Jamie-Marie Wilder
Barb Jacobs	Amy Herman	Mike Waters	Seth Hunter
Martha Ferguson	Robin Hill	Valeria Amburgey	Julie Dunn

## I. Approval of the May 2010 meeting minutes

Barb made a motion to accept the minutes with the amendment that the name “Wild Apricot” be attached to BonaSource in parentheses in item X. Kari seconded the motion. Motion passed.

## II. Changes to Agenda

Item 10 (products) was incorporated into item 9 (conference report) and item 11 (Treasurer’s Report was moved in front of item 9 (conference report)

## III. President’s Report – Beth Noblitt

- Beth attended the 2-day Michigan Council of Teachers of Mathematics state conference in August. Their attendance was very low this year, possibly due to the loss of Eisenhower funds. Their conference cost was \$100 per person (member rate) while the charge for vender’s tables was comparable to ours. Beth reported that the Michigan annual budget was quite a bit larger than ours. The MICTM Executive Director was a paid position and they give away approximately \$150,000 annually in scholarships to potential math majors and future math teachers. Beth also shared that MICTM publishes summer workbooks (for approx. \$12.50) for students to refresh their skills over the summer. More information about the workbooks can be found on-line at MICTM.org. Amy and Robin both commented on how many parent calls they receive each spring requesting something exactly like this that parents can use at home.
- Maggie represented KCTM at the NCTM regional caucus and delegate assembly in April. Since she was unable to attend the board meeting, she submitted a report that Beth

*Continued on next page...*

## August KCTM Executive Board Meeting Minutes, contd.

---

shared with the group (see handout.) Two resolutions were passed. A resolution by the Eastern caucus was concerning the rebate program and a resolution by the Southern caucus was concerning the role that NCTM is playing in the development of the new common core standards. Three affiliate groups were recognized. One group was recognized for their publication. Maggie suggested that we should look into having our newsletter recognized and Mike seconded the suggestion. Martha will check into the guidelines for the award.

- Beth has been in contact with the commissioner's office concerning the letter she sent last spring, but is still waiting for a response
- The first call for nominations went out at the beginning of the month for the offices of President-elect, VP High School, VP Middle School, and Secretary. We currently have one nomination for each office except Secretary. Since many teachers across the state are just now returning to school, the call for nominations will be sent again this week.
- We currently have 10 nominations for the MESA award. Beth drafted a MESA award criteria and 3-point rubric for evaluating future nominations. The rubric was briefly discussed and Beth encouraged the board to look over the document and share any suggestions with her.
- Beth shared the new KCTM logo designed by the NKU printing department and will be having stationary, envelopes, and bookmarks printed. Mike made a motion to increase the budget item for office materials from \$100 to \$300 and to give Beth "splurge privileges" for the green stem. Kari seconded the motion. Motion passed.

### IV. Newsletter Report – Martha Ferguson

- September 1 is the deadline for submission of articles to the next newsletter.
- Martha was pleased with the new spotlight section of the newsletter. The suggestion was made to include photographs next time.

### V. KDE Report – Robin Hill

- A crosswalk between the program of studies and the new common core standards has been posted on the KDE website. Representatives from each school district have been invited to attend regional meetings to unveil the standards, however, KDE has given the individual districts the freedom to mold their own professional development to meet their individual district needs.
- SREB is working with KY on a grant to create 4 new courses that connect to the common core. Contact Robin if you have good statistics or encryption lessons that connect to the common core or if you know of excellent research-based resources for modeling high school mathematics and teaching strategies.
- Due to budget limitations and so many students taking Algebra I at the middle school level, it has been proposed to begin the high school end-of-course exams with Algebra II. No final decision has been made at this time.
- This year's Presidential awards will be announced at the KCTM banquet on Friday, October 1st.

*Continued on next page...*

## August KCTM Executive Board Meeting Minutes, contd.

---

### VI. KY Math Teacher Support Grants – Barbara, Jamie-Marie

7 applications for the support grants were received this year and 4 were chosen. The recipients are Bonnie Humphries (K-3), Cortney Inklebarger (4<sup>th</sup> grade), Kelly Lindsey (High School) and Tina Record (4<sup>th</sup> grade.)

### VII. Facebook Update – Julie Dunn, Valeria Amburgey, Seth Hunter

A “find us on facebook” link has been added to the KCTM website. We currently have 46 members. Mike will be sending an e-mail to all members inviting them to join us on facebook and an announcement concerning facebook will be made in the conference booklet.

### VIII. EPSB Board of Examiners Training Report – Amy Herman

Amy recently attended the EPSB training and found the entire process very interesting. She was glad to report that the EPSB has discussed changing some of their policies in order to address the new common core standards.

### IX. Treasurer’s Report

Beginning Balance	\$1,847.54
Total Income	\$3678.75
Total Expenditures	\$742.8
Ending Balance	\$4783.49
Total in savings	\$42,599.56

The majority of the income was from PayPal for conference registration.

The majority of the expenses were board member travel expenses for the May board meeting.

### X. 2010 Conference Report – Kari Ostby

- 16 vendors, 37 registrations, 84 speaker proposals, and 141 sessions are currently scheduled. A breakdown of the sessions are: 44 Primary, 42 Intermediate, 59 High School, 13 College, 16 General, and 82 Middle. The large number of middle school sessions was addressed. The reason for the large number is in part that many of the middle school sessions overlap into intermediate or high school. Kari will continue to monitor the situation and possibly ask some of the speakers to adjust their grade level. Speaker proposals went very smoothly and acceptance letters will be sent next week.
- Two banners have been ordered for the products booth and several new styles of shirts have been ordered. Emily received several requests last year for shirts in women’s fit polo sizes and added those to the order this year.
- The goodie bags have been selected and will contain approx. \$20 worth of goodies.
- NKU will be printing the conference booklet.
- The session times have been slightly revised (see handout) and an 8:15 session has been added for Beth to make a welcoming statement.
- Greg Tang and Brennon Sapp are the featured speakers. Brennon is willing to adapt his talk to fit the theme of the conference. The board requested that his talk address formative assessment, the common core standards, the Gates Foundation and how they relate to KY. Beth will give Laura a call concerning a question about Greg Tang’s travel arrangements and Brennon will be paid his requested fee of \$500.

*Continued on next page...*

## August KCTM Executive Board Meeting Minutes, contd.

---

- Door prizes will be in the vendor area.
- A statement will appear in the conference booklet stating that KCTM does not necessarily endorse or support the message given by any speaker presenting material on the common core standards and we will be including a parking lot in the registration area for the questions that arise during the conference about the common core standards. Robin and friends will be having a panel discussion at the end of the conference to address the questions in the parking lot.
- Session Description for the "KCTM" session at the conference – Valeria, Seth, Jamie-Marie, and Julie
- The session time was set for Friday from 4 to 4:45. The session description is still in the works.
- Other
- Mike made a motion to adjourn the meeting. Amy seconded the motion. Motion passed.
- Our next board meeting is Saturday, November 13<sup>th</sup>

*Susan Collins*, KCTM Treasurer

## Kentucky Mathematics Educators - Items of Interest

Valeria Amburgey

---

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:

### **PUBLICATIONS and/or WEBSITES OF INTEREST**

- "Topics in Mathematics for Elementary Teachers -- A Technology-Enhanced Experiential Approach" by Sergei Abramovich, State University of New York at Potsdam. For additional information, visit online at <http://infoagepub.com/products/Topics-in-Mathematics-for-Elementary-Teachers>.
- Journal of the Korean Society of Mathematical Education Series D: RESEARCH IN MATHEMATICAL EDUCATION (RME) Volume 14, Number 3 (September, 2010) --
- The WolframAlpha website is at <http://www.wolframalpha.com/>. Wolfram|Alpha's long-term goal is to make all systematic knowledge immediately computable and accessible to everyone.
- Hoyles, C., Noss, R., Kent, P., & Bakker, A. (2010). Improving mathematics at work: The need for techno-mathematical literacies. Routledge: London. See: <http://www.routledge.com/books/details/9780415480086/>.
- Dinosaur Train: Dino Tracks – Interactive -- Grade Range: PreK, K-2 -- Identify the patterns illustrated and determine which dinosaur tracks are missing in sequences of tracks.  
<http://pbskids.org/dinosaurtrain/games/dinotracks.html>
- Theories of Mathematics Education – For additional information, please visit <http://www.springer.com/education+%+language/mathematics+education/book/978-3-642-00741-5> online.

*Continued on next page...*

## Kentucky Mathematics Educators - Items of Interest, contd.

---

- Real World Math: Engaging Students through Global Issues uses real world data to teach foundational algebra and geometry. It does this in the context of current issues like climate change, youth conflict, sustainable design, financial literacy, and solar energy. Visit [http://www.facingthefuture.org/Curriculum/BuyFacingtheFutureCurriculum/RealWorldMath/tabid/452/Default.aspx?utm\\_source=relaunch\\_email&utm\\_medium=email&utm\\_campaign=RWM%2BRelaunch](http://www.facingthefuture.org/Curriculum/BuyFacingtheFutureCurriculum/RealWorldMath/tabid/452/Default.aspx?utm_source=relaunch_email&utm_medium=email&utm_campaign=RWM%2BRelaunch) for additional information.

### CONFERENCES AND WORKSHOPS

#### GENERAL (ALL)

- National Council of Teachers of Mathematics (<http://www.nctm.org/>)  
2011 Annual Meeting & Exposition @ Indianapolis, IN on April 13-16, 2011  
Regional Conferences & Expositions
  - @ Denver, CO on October 7-8, 2010
  - @ Baltimore, MD on October 14-15, 2010
  - @ New Orleans, LA on October 28-29, 2010
- T3 International Conference @ San Antonio, TX on February 25-27, 2011. Additional information on this conference and other T3 events can be found online at [http://education.ti.com/educationportal/sites/US/nonProductSingle/pd\\_internationalconferences.html](http://education.ti.com/educationportal/sites/US/nonProductSingle/pd_internationalconferences.html).
- ED-MEDIA -- World Conference on Educational Multimedia, Hypermedia & Telecommunications @ Lisbon, Portugal on June 27 – July 1, 2011. Deadline for speaker proposals is December 17, 2010. For additional information, check the website for the Association for the Advancement of Computing in Education (AACE) at <http://www.aace.org/conf/edmedia/call.htm>.
- American Mathematical Society upcoming meetings (additional information can be found online at <http://ams.org/meetings/ams-at-mtgs>)
  - September 30-October 3, 2010: SACNAS National Conference, Anaheim, CA
  - October 2-3, 2010: AMS Eastern Sectional Meeting, Syracuse University, Syracuse, NY
  - October 6-10, Frankfurt Book Fair, Frankfurt, Germany
  - October 9-10, 2010: AMS Western Sectional Meeting, University of California Los Angeles
  - November 5-7, 2010: AMS Central Sectional Meeting, Notre Dame University, Notre Dame, IN
  - November 6-7, 2010: AMS Southeastern Sectional Meeting, University of Richmond, VA
- E-Learn 2009 -- World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education @ Orlando, FL on October 18-20, 2010. For additional information, check the website for the Association for the Advancement of Computing in Education (AACE) at <http://www.aace.org/conf/elearn/>.
- School Science and Mathematics Association (SSMA) -- their 109th Annual Convention will be held at the Holiday Inn Airport @ Town Center in Ft. Myers, FL on November 4-6, 2010. Additional information can be found online at <http://www.ssma.org/>.
- National Association for Gifted Children [NAGC] - November 11-14, 2010 in Atlanta, GA. For additional information, visit the website at <http://www.nagc.org/2010convention.aspx>.
- The 15th Asian Technology Conference in Mathematics (ATCM 2010) will be at the University of

*Continued on next page...*

## **Kentucky Mathematics Educators - Items of Interest, contd.**

---

Malaya in Kuala Lumpur, Malaysia on December 17-21. The theme of ATCM 2010 is "Linking Applications with Mathematics and Technology". Additional information can be found online at <http://atcm.mathandtech.org/>.

- 9th Annual Hawaii International Conference on Education will be held on January 4-11, 2011 at the Hilton Hawaiian Village® Beach Resort & Spa in Honolulu, Hawaii, USA. For additional information visit the website at <http://www.hiceducation.org>.

### **SECONDARY**

- The third edition of the University of Kentucky High School Mathematics Day will take place on Saturday, 9 October 2010. This is a day of activities to introduce high school students to new and interesting mathematics. Registration information will be circulated in August shortly after the beginning of the 2010-11 school year and will also be available from <http://www.math.uky.edu/outreach/mathday/> or you may write Russell Brown, [russell.brown@uky.edu](mailto:russell.brown@uky.edu).

### **COLLEGE**

- The 45th Korean Nat'l Meeting of Mathematics Education will be held at Dongguk Univ.-Gyeongju Campus, Gyeongju, Korea on October 8-10, 2010. For additional information, contact Prof. Young H. Choe at: [ksme\\_ser\\_d@yahoo.co.kr](mailto:ksme_ser_d@yahoo.co.kr).
- Educational Interfaces between Mathematics and Industry (EIMI) - General information on the Study, organized by the International Commission on Mathematical Instruction (ICMI) and the International Council for Industrial and Applied Mathematics (ICIAM), can be found on the study website: <http://eimi.mathdir.org/>. The Study Conference has been rescheduled for October 11-15, 2010 in Lisbon, Portugal.
- GLOBAL LEARN Asia Pacific 2011 -- Global Conference on Learning and Technology will be held from March 28 – April 1, 2011 in Melbourne, Australia. Hosted by the Association for the Advancement of Computing in Education (AACE), the Education & Information Technology Digital Library (<http://EdITLib.org>), Monach University, RMIT University and Deakin University Australia. The deadline for speaker proposals is October 25, 2010. For more information visit the website for the Association for the Advancement of Computing in Education (AACE) at <http://www.aace.org/conf/glearn/>.
- The Seventh Congress of European Research in Mathematics Education, CERME7, to be held February 9-13, 2011 in Rzeszów, Poland. Further details about how to attend and contribute to the congress are now available at the congress website: <http://www.cerme7.univ.rzeszow.pl/>. This includes a Call for research papers, which must be submitted by 15th September 2010.
- The SIGMAA on Research in Undergraduate Mathematics Education presents its fourteenth Conference on Research in Undergraduate Mathematics Education -- February 24, 7:00 PM - February 27, 2011 in Portland, Oregon. This conference is a forum for researchers in collegiate mathematics education and includes the following themes: results of current research, contemporary theoretical perspectives and research paradigms, and general issues in the psychology of mathematics education as it pertains to the study of undergraduate mathematics. The program will include plenary addresses, contributed paper sessions, and preliminary paper

*Continued on next page...*

## Kentucky Mathematics Educators - Items of Interest, contd.

sessions. Researchers may organize working group sessions before the opening session. For further information and the call for proposals please visit the conference website at <http://sigmaa.maa.org/rume/crume2011/Home.html> or follow the conference link at the SIGMAA on RUME homepage at <http://sigmaa.maa.org/rume/>. This conference is sponsored by the Mathematical Association of America and Portland State University.

- Society for Information Technology and Teacher Education International Conference (SITE 2011) will be held on March 7-11, 2011 in Nashville, TN. This conference is organized by the Society for Information Technology and Teacher Education (SITE) and the Association for the Advancement of Computing in Education (AACE). For more information, visit the website at <http://site.aace.org/>.
- The Interamerican Committee on Mathematics Education (IACME) invites mathematics education teachers, researchers, specialists and students to the XIIIth Interamerican Conference on Math Education (IACME XIII) that will be held in Recife, Brazil, June 26-30, 2011, at which time IACME will be celebrating its 50th anniversary. Additional information can be found online at <http://xiii.ciaem-iacme.org>.
- 3<sup>rd</sup> Paris International Conference on Education, Economy and -- Paris (France), Hotel Concorde La Fayette, July 20-23, 2011. The Conference will be a forum, discussion and networking place for academics, researchers, professionals, administrators, educational leaders, policy makers, industry representatives and advanced students interested in Education. All areas of Education are invited. Proposals are in the form of abstracts. Presentation formats include individual paper sessions, symposia, workshops, roundtables and poster sessions. Languages of the conference: English and French. The Conference will be held at Hotel Concorde La Fayette, in central Paris. Deadline for abstract submission: October 30, 2010. Closing date for early bird registration: 28 February 2011. For further information, submission and registration: <http://www.education-conferences.org>.

*Valeria Amburgey*, KCTM Vice-President for College

## KCTM Governing Board

**President:** Bethany A. Noblitt

**President-Elect/NCTM Rep:** Kari Ostby

**Past President:** Maggie McGatha

**Secretary:** Susan Collins

**Treasurer:** Barbara Jacobs

**College Vice-President:** Valeria Amburgey

**High School Vice-President:** Seth Hunter

**Middle School Vice-President:** Jamie-Marie Wilder

**Elementary Vice-President:** Julie Dunn

**KDE Representatives:** Robin Hill and Chyleigh Rose

### KCTM Committee Chairs

**Conference Registration Chair:** Mike Waters

**Membership Chair:** Mike Waters

**Awards Dinner Chair:** Gina Foletta

**Newsletter Editor/Chair:** Martha Ferguson

### KCTM Affiliate Representatives

**BBCTM:** Margaret Mohr

**CCTM:** Judy Pennington Price

**EKCTM:** Joyce O. Watson

**GLCTM:** Amy Herman

**KCM:** Laura Plante

**LCTM:** Natalee Feese

**NKCTM:** Mike Waters

**WKCTM:** Susan Collins

**KCTM Products:** Emily Butler

**KCTM Vendor Registration:** Gloria Beswick

