

# KATM BULLETIN

Kansas Association of Teachers of Mathematics

## Kansas Association of Teacher of Mathematics

*What are the Common Core Math Standards?*

*Are they very different from the current Kansas Math Standards?*

*How will they affect mathematics assessments for my students?*

These are probably some questions you have, or have heard, about the Common Core Math Standards. If you would like answers to these, and other questions about the Standards, please plan on joining one of the KATM/KSDE Summer Math Academies during the last two weeks in June in six different locations across the state. KATM and KSDE are forming a partnership to provide you with up-to-date information about the Common Core as well as specific ideas for teaching mathematics. We are excited about our joint effort in offering these one-day professional development opportunities for Kansas teachers. Specific dates and locations are being finalized, so keep looking for more information about the Summer Math Academies. We look forward to seeing you this summer!

KATM is taking a positive step in facilitating this discussion concerning the Common Core Standards and how they will effect your classroom. As a professional organization representing math educators in the state of Kansas, it is important for KATM to promote excellence in mathematics teaching. Through these times of change, we must continue to focus on teaching students meaningful mathematics. It is imperative to teach beyond the expectations of state and national assessments by teaching conceptual understanding, procedural fluency, strategic reasoning, communication, problem solving, and applications.

We will continue to give you more information as it becomes available.

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Interested in some money?\$\$\$ Check out the Scholarships on page 3 and 4



Jerry Braun  
Math Coach/Teacher  
USD 489

## President's Letter

Brought to you by Jerry Braun

Greetings Kansas educators! Like many of you I am feeling the stress of the upcoming spring assessments. Every year at this time I find myself hoping that I have taught everything I need and that my students have learned all that they need to be successful. My advice to all of you is to take a deep breath and remember that you have done your best all year long and now it's their turn to show what they know. I would also encourage you to visit the KSDE website <http://www.ksde.org> to check out the assessment manual to be sure you are up to speed on all of the guidelines and acceptable accommodations. With assessments on the brain, I'm sure you are not in the frame of mind to be thinking about this summer and next fall. But, big things are on tap related to math education in Kansas that you should be aware of.

Work is currently underway across the nation to create the Common Core Standards for both math and English/language arts. Kansas has joined this movement and is set to adopt these common standards as our own Kansas curriculum standards effective this fall. So, barring the unforeseen, you will be teaching under new math standards starting August 2010. Our Kansas assessments most likely will not change for spring 2011, but a new assessment is on the horizon as soon as one can be written to reflect the new standards. Look for more information as it becomes available or visit <http://www.corestandards.org/> for information on the Common Core Initiative.

In response to the pending changes to our state standards, KATM will be teaming with KSDE to plan, deliver and facilitate the Annual Summer Academies in June. Instead of three 2-day workshops, we will be hosting about six 1-day workshops spread across the state. Hopefully one will fit a time and location that is convenient for you. I would encourage you to attend one of these academies as the focus will be on connecting the new common core standards to our current Kansas standards through a "Kansas Big Ideas" document. Be watching for registration information and workshop locations.

Wichita will be hosting the annual KATM conference October 15, 2010 at Wichita State University. There promises to be great sessions and speakers lined up for this occasion. Mark your calendars to join us in Wichita in October!

2010 is shaping up to be an interesting year for mathematics education in Kansas. With all of the changes we will be facing, remember to stay focused on good teaching. When I start to feel stressed about not having enough time, I repeat to myself this phrase: "If I don't have time to do it right, I must have time to do it over." When I remember that, I realize that when I make short cuts in education, I more than likely will have to spend extra time doing it again because my students didn't get it. Good luck on assessments and remember why we went into teacher...to impact the lives of children. Go forth and educate!

Jerry Braun ~ KATM President & 7<sup>th</sup> grade math teacher/instructional coach, Hays

## Mathematics for the Elementary Teacher

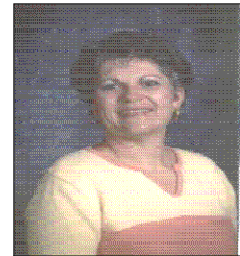
Brought to you by Angie Kisner

Valentine Math

This is a center idea I used from the Mailbox Kindergarten edition (Feb./Mar. 2010).

Students pretend to fill candy orders at this center! To prepare, make candy orders by writing on separate blank cards each number word from one to ten. Place the cards at a center along with an empty hear-shaped candy box (or large heart cutout) and a supply of large pom-poms (candy). A child reads the number word on a candy order and places the matching number of candies in the box. After checking his work, he removes the candies from the box and repeats the activity with another candy order. For an easier version, program the cards with the number words and the numeral.

I found large brown pom-poms at Hobby Lobby to use for the candy. Now would be the time to look for Valentine boxes on clearance.



Angie Kisner  
Kindergarten teacher  
Copeland Elementary

## CAPITOL FEDERAL MATHEMATICS

### TEACHING ENHANCEMENT SCHOLARSHIP

Capitol Federal Savings and KATM provides a scholarship to be awarded to a practicing Kansas (K-12) teacher for the best mathematics teaching enhancement proposal. The scholarship is \$1000 to be awarded at the fall KATM conference. The scholarship will be determined by the Executive Council of KATM.

#### PROPOSAL GUIDELINES:

The winning proposal will be the best plan submitted involving the enhancement of mathematics teaching. Proposals may include, not limited to, continuing mathematics education, conference or workshop attendance, or any other improvement of mathematics teaching opportunity. The 1-2 page typed proposal should include

- A complete description of the mathematics teaching opportunity on which you plan to embark.
- An outline of how the funds will be used.
- An explanation of how this opportunity will enhance your teaching of mathematics.

#### REQUIREMENTS:

The successful applicant will meet the following criteria:

- Have a continuing contract for the next school year in a Kansas school.
- Teach mathematics during the 2009-2010 school year.

Be present to accept the award at the 2009 KATM Conference

#### APPLICATION:

To be considered for this scholarship, the applicant needs to submit the following no later than **June 1, 2010**. A 1-2 page proposal as described above. Two letters of recommendation, one from an administrator and one from a teaching colleague.

**PLEASE SUBMIT MATERIALS TO:** Betsy Wiens, 2201 SE 53<sup>rd</sup> Street Topeka, Kansas 66609

Phone: (785) 862-9433

FAX: (785) 339-4325



Keith Dreiling  
Fort Hays State

## Best Teaching Practices at the College Level

Best teaching practices at the college level involve strategies that promote conceptual understanding, higher-level thinking, and problem solving. Being involved in the preparation of pre-service teachers for a career in teaching, it is important for me to encourage students to employ a variety of techniques in their practice teaching exercises during their teaching methods class. It is equally important for faculty in my department to model a variety of teaching methods such as exploration, guided practice, cooperative learning, and direct instruction.

One technique modeled by our math faculty allowing students to explore a concept before exposing them to theory. A common lesson is to have students explore transformation of functions on a graphing calculator prior to generalizing the effects that changes to the function have on the graph of the function. In this lesson students graph several functions of a particular family, for example, parabolas, and describe how the functions are different than the parent function. After similar changes are made to other families of functions, students generalize the changes. Finally through class discussion, the teacher ensures that class findings are accurate and common terminology is used.

Another technique modeled by faculty is the use of guided practice. It is common to see students from algebra and calculus classes working at the chalkboard, discussing problems, and receiving feedback from the teacher. A similar, more technological version of this technique is the use of DyKnow. This program allows students to work problems on their tablet computers and teacher's to view each student's work on his/her computer. The teacher can display any student's work on the screen to be shared with other students in the class.

A widely used technique at the college level is direct instruction. To effectively use direct instruction, it is important to sequence instruction logically, make connections to other branches of mathematics and/or to other subject areas, and provide multiple representations of the concept. A common lesson in calculus is the graphical representation of integration through the sum of rectangles that make up the area of a figure. This lesson combines a geometric representation of integration, the algebraic concept of limits, and the calculus process of integration, providing students understanding of what is actually taking place through integration.

The use of technology is prevalent throughout our mathematics courses. In addition to using graphing calculators, students use programs such as Maple, MatLab, Geometer's Sketchpad, online computer applets, applets included with textbooks, and Excel. Technology is not only used for efficiency of solving problems, but in a more powerful way of learning more mathematics than may be possible without the use of technology. Illustrations with Geometer's Sketchpad are dynamic instead of static, and applets allow student interaction and instant feedback. Our goal is for students to become competent in the use of technology and gain the ability to effectively use technology in their future classrooms.

A variety of teaching techniques and concepts taught through the use of technology are best practices used at the college level. Our faculty strives to expose our mathematics education majors to a variety of teaching methods and expect them to utilize these techniques in their practice teaching and eventually in their teaching careers.

## **KATM Cecile Beougher Scholarship**

### ***ONLY FOR ELEMENTARY TEACHERS!!***

A scholarship will to be awarded to a practicing Kansas elementary (K-6) teacher for professional development mathematics education. This could include attendance at a math conference/workshop or enrollment fees for course work. The value of the scholarship is \$500, plus a possible addition of \$118 in memberships to KATM and NCTM.

**Upon selection:** up to \$400.00 cash award to defray the costs of registration fees, substitute costs, etc.

Upon verification of attendance at a conference or enrollment college credits :

up to \$100.00 cash award for the purchase of materials/resources for teaching mathematics (an itemized list of the use of these funds will be required along with receipts), for those receiving college credits there are two additional incentives:

an NCTM Membership (value \$78), a three year KATM membership (value \$40)

Upon competition of conference/workshop or course work an itemized list of funds required.

### ***REQUIREMENTS:***

The successful candidate will meet the following criteria:

Have a continuing contract for the next school year as a practicing Kansas elementary (K-6) teacher.

Current member of KATM ( if you are not a member, you may join by going to [www.katm.org](http://www.katm.org))

### ***APPLICATION:***

To be considered for this scholarship, the applicant needs to submit the following by June 1, 2010.

A letter from the applicant addressing the following: a reflection on how the conference, workshop, or course will help your teaching, being specific about the when and what of the session, and how you plan to promote mathematics in the future.

Two letters of recommendation/support (one from an administrator ; one from a colleague).

A budget outline of how the scholarship money will be spent.

### ***SUBMIT MATERIALS TO:***

Betsy Wiens

2201 SE 53<sup>rd</sup> Street

Topeka, Kansas 66609



## KATM State Conference 2010 ~ Wichita

### Focus on the Future

Mark October 15, 2010 on your calendar! This is the date for the next KATM State Mathematics Conference. It will be held on the campus of Wichita State University in Wichita, Kansas. This is an opportunity for you to network with other mathematics educators across the state and to gather more ideas to use with your students.

Our organization also wants to encourage you in sharing your expertise with other mathematics educators in Kansas. The annual conference provides an excellent opportunity for this collaboration. Please email me at [d.m.thompson@sbcglobal.net](mailto:d.m.thompson@sbcglobal.net) with the information below so we can begin to build our program. We will contact you later using your email address to get more specific information.

Name:

Mailing Address:

Email Address:

Phone number:

Tentative grade level span and title of session:

**See you in Wichita on October 15<sup>th</sup>!**

Program Co-chair ~ Debbie Thompson

## KATM BALLOT

**President-Elect:** Debbie Thompson

**VP - High School:** Debbie Sylvester

**VP - Elementary:** Pat Foster

**Secretary:** Mary Krehbiel

**Zone 2:** Melisa Hancock has agreed to be the Zone 2 Coordinator

**Zone 3:** David Fernkopf has agreed to take become the Zone 3 coordinator. David is a 1<sup>st</sup> grade teacher in the Seaman district and received the Beougher Scholarship in October.

Online voting will be available in April.



**Presentation Proposal Form**

Focus on the Future ~ KATM Math Conference: October 15, 2010  
Wichita, Kansas on the WSU campus

**Lead Presenter Information:**

Name:		Work Phone:	
District Name/Number:		Cell Phone:	
E-mail Address:		Summer Phone:	
Mailing Address:			

**Co-Presenter(s) Information:**

Name:		Work Phone:	
District Name/No.:		Cell Phone:	
E-mail Address:		Summer Phone:	
Mailing Address:			

Session Title (please be creative!):

Session Description (please include a short, highly-descriptive, attention-getting description of the session content and objectives for attending):

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**Presentation Information:**

This session is applicable for the following grade levels (please mark all that apply):

K-1<sup>st</sup> Grades  2<sup>nd</sup>-3<sup>rd</sup> Grades  4<sup>th</sup>-5<sup>th</sup> Grades  6<sup>th</sup>-8<sup>th</sup> Grades  High School  College  
 ESL  SPED  Paras  Administrators  Other \_\_\_\_\_

This session addresses the following **standard/area** (please mark primary focus)

Number & Computation  Algebra  Geometry  Data/Statistics  Problem Solving/Reasoning  
 Pedagogy  Technology  Literacy Connections  Other (explain \_\_\_\_\_)

**Audio/Visual Needs** (presenters are responsible for providing their own computers ~ LCD projectors are available, if requested):

**Room arrangement needs:**

tables and chairs  auditorium  rows of chairs  extra table for presentation  other (please describe)

**General Guidelines:**

- There is a \$15 registration fee for all presenters. A separate **Registration Form** is required (available online at [www.katm.org](http://www.katm.org)).
- Proposals are due to the KATM Planning Committee no later than **May 1, 2010**.
- You will be contacted by May 15, 2010 on the status of your proposal via email.
- Lead presenters** will be responsible for notifying each co-presenter regarding the acceptance status of the proposal, times, and location; in addition to any other correspondence received from KATM.
- You are responsible for providing your own computer and applicable power cords, power strip, and extension cord. Mac users, please remember to bring your projector adapter.
- Most all correspondence from KATM to presenters in relation to the conference will be made by email. Please make sure to notify KATM if your e-mail address changes.

Date submitted to KATM Planning Committee: \_\_\_\_\_

**Complete and return this page to:**

Debbie Thompson  
KATM Program Co-Chair  
2503 Persimmon  
Derby, KS 67037

Phone: 316-788-9370

Email: [d.m.thompson@sbcglobal.net](mailto:d.m.thompson@sbcglobal.net)

## Zone News

**ZONE 1: Kathy Desaire (kdesaire.usd269@ruraltel.net)**

**ZONE 2: Deb Nauerth (DEBN@manhattan.k12.ks.us)**

On Friday, February 12<sup>th</sup>, the Infinite Math Project (Math Science Partnership) hosted its final share fair in Manhattan. Forty participants shared their action plans and the great results from their Japanese Lesson Study projects. A very special thank you is in order to the Kansas State Department of Education for their support of this grant that had significant impact on improving mathematics instruction in Kansas. This initiative helped some schools move their lowest indicators to their highest indicators in just 3 years!

Young and the Rest of Us is in its final year of funding. We have seen our early career teachers take on a leadership role in their schools in implementing standards based practices in mathematics. We are very proud of their efforts!

Melisa and David are working hard as they are planning and preparing for Project Renew's mini conference that will be held at Kansas State University in May. Differentiated instruction in math and teacher leadership in terms of the Common Core Standards are just two of the focus areas for this conference. Stay tuned for more specific information on date and time. You will not want to miss this! We hope you will be able to join us for a day of learning and fun!

As you know, the Common Core State Standards initiatives are coming soon and KATM will be hosting CCSS academies to support teachers in implementing these standards. Academies will be held throughout the state. Zone #2 will host their academy in Manhattan or Salina. June is the tentative month, be looking for more specific information as this becomes available. Again, you will not want to miss out on this great opportunity for learning! This academy will inform and prepare you for the big changes that are coming our way!

"If you think dogs can't count, try putting three dog biscuits in your pocket and then giving Fido only two of them." ~Phil Pastoret

**ZONE 3: Pat Foster (pfoster@usd341.org)**

In January, teachers in the Topeka area met to discuss the present and future of mathematics education in Kansas. The meeting was sponsored by NEKATM and was held at Carlos O'Kelly's in Topeka. Current trends and hot topics were analyzed as they relate to teachers and their daily struggles in the classroom. Teachers also shared practical ideas and asked questions as they prepare their students for the upcoming state assessments.

Look for information in the future about our next meeting to be held in April. It will focus on a discussion of the new state standards and what they mean for teachers.

NEKATM is also sponsoring SUMday for students in grades 4-8 on Saturday, March 27. The contest will be held at Washburn Rural Middle School. Students can compete in two tests, covering various mathematics areas. The top ten scores will be announced in an awards ceremony following the contest.

For more information or to share wonderful news don't hesitate to contact Zone 3 coordinator Pat Foster at [pfoster@usd341.org](mailto:pfoster@usd341.org). Good luck on your state assessments!

**ZONE 4: Karla Childs (kchilds@pittstate.edu)**

Hi from Zone 4! The MOKan NCTM affiliate had it's February Meeting on Monday, Feb. 1, 2010 at Napoli's Italian Restaurant in Pittsburg, KS. Dr. Elwyn Davis, Pittsburg State University, presented. His talk was "How to Draw a Straight Line". In business, Dr. Hazel Coltharp was voted as the group's voting delegate to the 2010 NCTM National Convention in San Diego.

The next meeting will be held in April and all are welcome!



**ZONE 5: Jennifer Weilert (jweilert@usd259.net)**

SCKATM (South Central Kansas Association of Teachers of Mathematics) will be hosting its annual Spring Fling in Wichita. The date has not been set yet, so look for a future “e-flash” invitation and be sure to invite all of your colleagues. We would especially like to invite anyone that is a mentor or has a student teacher to bring their future educator to this event for a free membership to our organization. There will be great food, fun door prizes, and time to network with others in a relaxed social setting! We hope to see you there!

**ZONE 6: Tracy Newell (tnewell@gckschools.com)**

With the Kansas Mathematics Assessment (KMA) window now open and the scrambling to complete our state assessments with a few less weeks to complete this year, don't forget to ensure students are doing their best by promoting a stress free environment for our students. Take some time to collaborate and brainstorm with your colleagues of what strategies you can implement to help students feel at ease during their assessments. The following are just a few of the tips we have implemented to help.

- ∞ Provide an assessment environment that is similar to, if not the classroom environment;
- ∞ don't move all students to a one space fits all testing environment. By dislocating students to a new location, you may cause unneeded stress to some students.

Before the assessment starts, insist students are to try their best and let them know that's all we can ask of them; also let them know they have as much time as they need to complete their work. Let students know if they need a bathroom break, it is okay to ask during the assessment. If a student (especially a younger student) needs to go to the bathroom and is under the impression they must finish, they may hurry through and fail to demonstrate their best ability.

Make sure students understand that asking for help reading when needed is not only appropriate but very beneficial to ensure reading isn't hindering a student from demonstrating their mathematical ability, just remember you can't define words. This should be practiced throughout the year to promote students' comfort level in quietly raising their hand and waiting until a testing facilitator arrives. To promote this never sit down in one location in the room, but instead circulate the room throughout the assessment. Discuss the assessments in plenty of time before hand so the students know exactly when they will be and what to expect when they begin. If possible make your formative assessments throughout the year similar to what the student will see for the KMA.

These are only a few suggestions and seem like they are nontrivial, but if they help even a small percentage of your students feel more comfortable, they will more than likely achieve more and put forth more effort for their assessment.

Best of success in completing your assessments!

## KATM EXECUTIVE BOARD MEMBERS

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Coordinator Zone 2 .....	Deb Nauerth
Coordinator Zone 3 .....	Pat Foster
Coordinator Zone 4 .....	Karla Childs
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Coordinator Zone 6 .....	Tracy Newell
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KSDE Representative.....	Sid Cooley & David Barnes
Regional NCTM Representative .....	Tom Muchlinski