First Meeting of the New Year

The next meeting for the Upper East Tennessee Council of Teachers of Mathematics will be held at Sullivan Central High School from 4:00 to 6:00 on February 9, 2009. Directions and a map are available on page 8.

The evening will open with a social time from 4:00 to 4:15. Refreshments will be available. The regular business meeting will also occur during this time slot. From 4:15 to 5:00, Dr. Craig Green, the Director of Tennessee Governor’s Academy for Mathematics and Science, will give a presentation on a new opportunity for high school juniors and seniors in Tennessee. For more information on the Governor’s School, please visit http://tga.tennessee.edu/.

From 4:50 to 6:00, the regular concurrent presentation will begin. Four presentations are scheduled for the evening and are given by Cathy Nester, Tara Carver Peters, Rachel Norris, and Dr Jeff Knisley. Abstracts for their presentations can be found on page 2.

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Programs for February 9th

K-4th Presentation: Problem Solving in the Elementary Classroom
Cathy Nester, Sullivan County K-5th Mathematics Specialist.

Problem solving...young children enjoy it, yet as we get older we tend to develop a fear of it. What exactly does developmentally appropriate problem solving look like in the elementary classroom and how can we, as teachers, set up our classroom in a manner that students will develop and maintain a love for mathematical thinking and problem solving? Come hear and share ideas related to this topic that is so critical to the success of our students.

5th-6th Presentation: Teaching the Properties of the Platonic Solids
Tara Carver Peters, Sullivan County 6th-12th Mathematics Specialist.

Hands-on activities using polydrons designed to teach students how to construct the five platonic solids and their nets. Activities include strategies for allowing students to develop Euler’s famous formula that relates the number of faces, edges, and vertices for convex solids. All activities are aligned with the new state math standards for geometry.

7th-9th Presentation: Teaching Algebraic Concepts Using Algebra Tiles
Rachel Norris, Mathematics Teacher at Sullivan North High School

Ever wonder how to use algebra tiles to teach algebraic concepts in a new and exciting way for students? Come and learn how to use these manipulatives in your classroom to enhance student understanding.

10th-12th Presentation: New Math Opportunity Designed to Benefit High School Math Teachers and Their Students
Dr. Jeff Knisley, Interim Chairman of the Department of Mathematics, ETSU

Learn about a new development in math and a possible funding opportunity related to this development that will be beneficial to many students and teachers in upper East Tennessee.
I’m Not a Manipulator, Just a Manipulative Lover

By Susan J. Saam

On September 20, 2008, I was blessed with the most exciting news of my short teaching career. At the business meeting at the end of the TMTA conference at Austin Peay University in Clarksville, it was announced that I had won their first ever $1000.00 mini grant. The money was used to buy a plethora of math “toys” to help teach my 6th, 7th and 8th graders about fractions, decimal and percent conversions, geometric shapes, property identification, the Pythagorean theorem, solving linear and nonlinear equations, irregular shape area, and perimeter computations, among other things.

I had applied for the grant after looking for funds to help pay the tuition for the classes I needed for my Alternative Type II license. While on the ETSU campus, I stumbled into the Math Department and met Ryan Nivens. I told him my predicament about needing funds, and he told me about the mini grant. There was a catch, however: the proposal had to be postmarked by tomorrow! I raced home and began typing. I came up with a one page proposal which explained my background (I am only a second year teacher) and my dream to teach math with manipulatives, which I could not possibly buy on my own. I told them what concepts I would be able to cover with these math toys and how many Tennessee State standards could be met if I had them. After sending the proposal in, I honestly forgot about it. School started, and I was concentrating on learning the names of my 125 new students!

Then, on the Thursday evening before the conference (which was on a Saturday), I received a phone call from Jackie Vogel of TMTA. She asked me if I was planning on attending the conference in Clarksville. I told her that I wasn’t sure. When she told me that I really needed to be there, I realized what she may have been saying, and I then committed to being there even if it meant taking the long drive there and back. So at 2:30 Saturday morning, I drove the four and a half hours to Clarksville, attended several wonderful workshops, and then attended the business meeting where I heard my name announced as the winner of the grant. I drove the four and a half hours home on what seemed like a cloud, thinking of the ways I was going to use the deluxe color tiles, pattern blocks, tangrams, base ten blocks, geoboards, rods, cubes, (cont. on p. 5)
Have you ever been told by your principal to attend a professional development workshop that you didn’t want to attend? Have you ever signed up for a professional development workshop just to have a day away from your students? Do you take sick days when you are required to attend professional development workshops? At workshops, do you send text messages to your friends? Do you talk to the person next to you in a voice that disturbs others? Do you write notes or draw during the presentation?

Professional development involves ongoing learning opportunities for educators provided by the district or schools. If you keep doing the same thing year after year, you will get the same results year after year. The problem with that philosophy is things constantly change. Most of us enjoy the benefits of an up-to-date cell phone which we can use to receive and send texts, make notes, or update our calendar. The first cell phones could not do those tasks. We had to make a change to something that was effective and efficient for our needs. E-mail is one such valuable tool. It is so easy to e-mail someone with documents and they receive them in seconds. In the past, those documents would have to been mailed, and it would take days to receive them. Technology has helped us move into the future with confidence and competence. A lot of us want the newest technology on the market. The following statement was made at a recent meeting I attended. "If you're using the same instructional strategies, year to year....who's the unmotivated learner?"

Why do so many of us not want the newest strategies for helping our students?

Professional development builds the specific knowledge and competencies for best practice and is vital to school success and teacher satisfaction. We face many challenges as teachers. We have the new more rigorous state standards, we teach a more diverse population, and there are so many other challenges coming our way. We need the extra “edge.” Stephen Covey describes it as “sharpening the saw.” He refers to a person sawing a tree for hours using a dull saw. That person refuses to stop and sharpen the saw because he is too busy sawing. Some of the tools we use in our daily life may grow “dull.” We need to take time to renew our skills and make them “cutting-edge.” Professional development provides opportunities for networking and collaboration among teachers. The networking aspect is a tremendous asset to your (cont. on p. 6)
fraction circles, attribute blocks, geosolids, coordinate grid double-sided write “n” wipe board classroom basics kit and accompanying 30 9” x 12” Dry Erase Grid Boards, 32 dry erase markers, 30 student erasers, and more!

Since that day, I have been busy designing lessons around these math tangibles. My classes have used the dry erase coordinate grid boards to calculate and graph functions, to plot points, and to translate, reflect and rotate figures. We have used the geosolids to name triangular pyramids, to name rectangular prisms, and to figure out how many faces, edges, and vertices each one has. It has really been a lot of fun using these toys, and I look forward to our upcoming unit on probability because the kids will have dice and spinners to work with.

I look forward to presenting at an upcoming TMTA conference where I will explain how I used the manipulatives in my classroom and what a difference it made for me and my students. I thank TMTA for their generosity. Their gift has enriched all of us and will enrich the math experience of my classes for many years to come!

Susan Saam is a teacher at Grandview Elementary School in Washington County, TN.

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I’m Not a Manipulator… (cont.)
Professional Development? What’s the Purpose?  
(cont.)

school, your district, your students, and yourself. Teachers from other schools may be having the same problem as you have now, or at one time they had the same problem. Some smaller middle schools only have one math teacher. It is such a help to contact another teacher and see what they are doing.

When you walk into the professional development workshop ask yourself three questions. Are you ready? Are you able to learn? Are you willing to learn? You are ready because you are there. You are able to learn because you are a professional. You have a college degree. You can do it. Are you willing? That depends on you.

What are you willing to take back? What do you need to take back and implement? Are you honest with your skills? You cannot implement everything. Professional development is like a cafeteria. You can pick and choose what works. In picking and choosing, we need to be honest with ourselves. In every workshop, there is at least something that can be of help to us.

Are you ready to “sharpen your saw?” We must! Our students depend on it.

Jerry Whitaker is currently the Math Coordinator for Washington County Schools

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UETCTM Membership Application

Complete & return to Floyd Brown with a check for $10 made payable to UETCTM. Completed Application and check may be mailed to Floyd Brown, Science Hill High School, Mathematics Dept., 1509 John Exum Parkway, Johnson City, TN 37604

Name: ______________________________ Home Phone: (_____) ____________________

Home Address: _______________________________________________________________

School: ______________________________ School Phone: (_____) ___________________

School Address: ______________________________________________________________

Email Address: ______________________________

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Franklin Math Bowl Needs Test Writers

The Franklin Math Bowl is a middle school math contest held on a Saturday in the early part of November on the ETSU campus. It is co-sponsored by the ETSU math department and UETCTM. Each year we have a test for 6th, 7th, and 8th grade math plus Algebra I. The test consists of 25 multiple-choice questions. Sample tests can be found on the Franklin Math Bowl web page at http://www.etsu.edu/math/fmb/. We need some volunteers to write tests. (Or if you don't think you could write a test, at least contribute some questions.) Obviously we can't use middle school teachers who prepare their students for the test, but anyone else is eligible. Typically we ask writers to have their tests written by early September.

If you would be willing to help, have further questions, or want to see test writer guidelines, please contact Daryl Stephens, director, at 423-439-6973 or by email at stephen@etsu.edu. Thanks in advance for your help!
Request for Article Submissions

We are always looking for people to contribute articles to our ongoing “Math Perspectives” series. Every month, we would like four people to write for the series: a preservice undergraduate student, a preservice graduate student, a current classroom teacher, and one of our local math coordinators. Each person will voice their opinions, concerns, or observations upon a particular aspect of teaching mathematics. There are no set topics for this series yet, so the topic of each contribution is up to its author.

If you or someone you know would like to contribute to this column, please contact the newsletter editor, Ryan Nivens.

Directions to Sullivan Central Campus

Sullivan Central High School is located on Shipley Ferry Road, just off exit 66 on I-81 between Bristol and the intersection of I-81 and I-26.
### Officers of UETCTM for 2008/2009

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If you are reading this newsletter on paper, you’re missing out on all the color! Visit our web site ([www.uenctm.org](http://www.uenctm.org)) to see the newsletter as a full-color PDF file with clickable links.

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