

Math Matters

A NEWSLETTER OF THE WEST VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICS

Volume 25, Number 4

December 2006

View from a First Year Mathematics Teacher: Always Learning

Interview with: Danielle Painter
Buckhannon Upshur High School

What are you teaching? *Conceptual Mathematics, Algebra Geometry Prep, Applied Math II*

What do you like best about teaching mathematics during this first full year? *Having my own group of kids, my own classroom, facing many challenges that you face in those first months let alone first year, and realizing, you have conquered some of those fears and challenges.*

What do you like the least? *Trying to figure out how to motivate students who really have no inner drive to succeed on their own.*

What was your biggest surprise? *On the negative side of it, I was surprised at the amount of students who had the "I don't care" mind-set. On a more positive note, I was surprised at how helpful several of the staff members across the board were toward the new teachers.*

What/Who has been most helpful to you as a first year teacher? *The entire math department has been a huge tool for me to utilize. I have sought advice from each member: Neil Reger, Cheryl Reger, Sherry Holley, Brenda Harlow, & Cindy Raffety, on different situations and they were all extremely helpful.*

What could you use more help with? *Having more manipulatives to help the students to make the connection between the concrete and the abstract concepts. Being able to have more of a variety of ways to explain specific concepts as well, which will come with time, I'm sure.*

What types of technology do you have? *ELMO, Overhead Projector, Graphing Calculators (just recently received), Chalkwave, and other correlating software to coincide with the subject matter being taught. ("Always Learning" continued on pg. 2)*



Lou Maynus, WV State Mathematics Coordinator, and **Judy Pomeroy**, WVCTM President, at the Mathematics Leadership Institute V. in Morgantown.

WV Mathematics Leadership Institute V Convenes in Morgantown and in Charleston

County mathematics leadership teams from all over the state attended the West Virginia Mathematics Leadership Institute V either in Morgantown on November 30 and December 1, 2006 or in Charleston on December 7 and 8, 2006. County teams were comprised of representatives from K-2, 3-5, Middle School, High School, Higher Education and Administration.

Lou Maynus, Mathematics Coordinator, and **Carla Williamson**, from the West Virginia Department of Education, began the two day seminars with "Drafting Our Future Mathematics in West Virginia" discussing the "Partnership for 21st Century Skills."

Other topics included Dynamic Classroom Assessment, Differentiating Mathematics Instruction, Improving Classroom Questions, and Lenses on Learning. Those in attendance will provide training for teachers and

administrators back in their own RESAs. Nearly every county in the state sent a team to one of the two institutes.

Presenters on DCA (Dynamic Classroom Assessment) for the Morgantown Institute were: **Laura Pyzdrowski, Cheryl Reger, Neil Reger, Mike Mays, Susan Goodwin, Patty Cowan, Joyce Evans, Janie Merendino, Susan Barrett, and Diane Lemon.**

Presenters on DCA for the Charleston Institute were: **Peggy Baldwin, Judy Pomeroy, Jerry Pomeroy, Karen Mitchell, Neil Reger, Cheryl Reger, Lansing Hill, Janie Merendino, Joyce Evans, Patty Cowan, and Susan Barrett.**

Presenters for Differentiating Instruction in Mathematics in both locations were **Sheila Ruddle, Lynn Baker, Cyndi Burke, and Marsha Bailes.**

(from page 1 "Always Learning")

How is the first year different from student teaching? You finally have your OWN students to teach, not someone else's. You assume much more responsibility for minor yet sometimes tedious paperwork that you may not have necessarily seen during student teaching. You now have complete control as to what direction you will go, what pacing you will set in a class, what expectations you desire from your students. If you came from a cooperating teacher who was strict and had their classes' attention and respect (like I had), you realize you have to WORK to get that same atmosphere in your class, it isn't just something that comes naturally to the students. You have to make sure they KNOW what you expect.

Any advice for student teachers? In addition to what I covered in the previous section, don't be afraid to ask questions STILL to other members in your department who have years more experience than you do. Find your own style that works for you, keep going even when those bad days hit, or you feel like a lesson may have not been as successful as you had hoped. Realize that you will always be learning even while you are teaching. **BEST OF LUCK!**

2007 WVCTM Conference Exhibitors Ready for Flatwoods

Company representatives on site help to provide a good opportunity for all to see actual products and to get questions answered. Thanks to the following:

- * Carnegie Learning
- * ETA/Cuisenaire
- * First in Math Online
- * Glencoe
- * Holt, Rinehart, and Winston
- * Jenny Sara Creations
- * Lakeshore Learning
- * Latta's
- * McDougal Littell
- * Options Publishing
- * Pearson Scott Foresman
- * Scholastic, Inc.
- * Texas Instruments
- * Thomson Learning
- * WV Center for Professional Development
- * William K Sheridan
- * Wright Group/McGraw-Hill



54 High School Students Delight in the Unique Mathematics Presented at the 2006 Symposium

by Dr. Michael Mays

<http://math.wvu.edu/~mays/Symposium/symposium.htm>

The 2006 Fall Student Mathematics Symposium was held on Thursday October 26 at West Virginia University, with presentations taking place in the Rhododendron Room of the Mountainlair. The Symposium gives high achieving students a chance to learn about novel areas of mathematics, focusing on interactive presentations by college faculty.

This event was cosponsored by the Department of Mathematics at WVU and the West Virginia Council of Teachers of Mathematics. It has been offered annually since it was founded in 1990. The first campus coordinator was the late Professor James Dowdy, a former WVU faculty member and WVCTM Vice-President.

There were fifty four student participants representing eight schools (Bridgeport, Buckhannon-Upshur, Elkins, Fairmont Senior, Morgantown High School, Riverside, Suncrest, and Wirt County). **Deloris Lipps** (Wirt County), John Epler (Elkins), Brenda Flanigan (Bridgeport), Grant Spencer (Bridgeport), and Tracy Shingleton (FSHS) were able to attend with their students. The WVU Department of Mathematics sponsored a lunch reception catered by Sbarro's, along with the famous Flying WV cookies.

This year the Symposium included three formal presentations.

The first talk was given by Professor Matt Pascal, who talked about "A geometric series approach to the

work problem." He analyzed the familiar work problem from algebra (Jack can paint a room in 3 hours. Jill can do it in 2. How long would they take working together?) with a guess-and-check approach that led to summing an infinite series. Solutions to the problems that Professor Pascal posed are now available at

<http://www.math.wvu.edu/~matt.pascal/solutions.html>

Professor David Miller conducted the second session, entitled "Touring a Checkerboard." He led the students to discover facts about Hamiltonian paths on checkerboards (visiting each square exactly once) and generalized to consider checkerboards wrapped on tori and allowable path directions.

After lunch Professor John Goldwasser conducted the last session, entitled "So S. Florida beats UConn who beats Rutgers who beats Cincy who beats Louisville who beats Pitt who beats Syracuse who beats WVU; it really must happen." This presentation also involved Hamiltonian paths, this time extracting a chain like the one in the title from results of round robin league play. The focus of the presentation was mathematical induction as a tool to establish this result and others.

All of the presenters engaged the students in discovering parts of their final results, with "homework" suggesting problems and projects for further study and research.

T3 Regional Conference Coming to Flatwoods in March

by **Dave Kennedy and Judy Pomeroy**

Looking for a way to increase or update your technology skills? Teachers Teaching with Technology (T3) and WVCTM are hosting a post-conference immediately following the WVCTM Annual Conference at the Days Inn in Flatwoods. The T3 Regional Conference will begin with a luncheon on Saturday, March 17, 2006, and continue through Sunday morning.

The program will include about 30 instructional sessions featuring Texas Instruments technology such as TI-84, TI-83 Plus, TI-73, and TI-15 calculators; Cabri Jr geometry, CBR/CBL data gathering equipment, TI-Navigator, TI-SmartView, TI-Connect, and TI-Interactive. There will be secondary, middle-school, and elementary sessions.

The luncheon will feature keynote speaker Dan Kennedy, an innovative user of graphing calculator technology who has co-authored several math textbooks, and was the first high-school teacher to chair the Advanced Placement Calculus Development Committee.

The registration fee of \$45 will include the luncheon as well as a continental breakfast on Sunday. Registration information will be available soon through WVCTM.

All attendees to the T³ Conference March 17-18 will be entered in a prize drawing for a TI-Navigator (\$4000 value). Must be present to win! Please contact TI-Tonya Hancock with any questions: tonya@ti.com.

Professional Development on the NCTM Website

By **Murrel Hoover**

Enhanced Articles: The website offers suggestions for using journal articles for professional development. These enhanced articles have suggestions for use in learning community meetings, with a colleague or individually... from the home page, click on "professional development" and then choose "resources" and "journals". I've worked on enhancing several of the later articles

and can highly recommend the article for its professional development quality. The suggestions for use in learning communities are consistent with the work of our math teams.

Electronic Resources: Folks may be familiar with "Illuminations", "Figure This!" and other online resources, but I'd like to point out the use of the "Reflections" resource. This resource provides material for in-depth learning community meetings and includes the task, student work samples, video clips, the lesson plan, etc... all the necessary materials for a small group of teachers to study a Standards-based lesson and the mathematics for that lesson. From the NCTM website, choose "Professional Development" and then "Resources" and then "Electronic Resources."

"E-workshops:" This time from the home page, select "Professional Development", but instead of selecting resources, choose "E-Workshops." These are 90-minute E-Workshops and are interactive with colleagues from across the country. Visual information is delivered via the Internet while audio is delivered by telephone. A learning community could sign up for the e-workshop of their choice, hook a computer to a projector, bring in a conference phone and participate as a group in one of these workshops. Or an individual could participate from their home computer. I've worked with some of the workshop presenters and they do an excellent job!

Governor Announces National Partnership

On November 14, 2006, West Virginia gained a significant ally in its mission to be a national model for 21st century education. Governor Joe Manchin and First Lady Gayle Manchin announced a joint effort with the Partnership for 21st Century Skills to provide a powerful statewide vision to ensure every child in West Virginia succeeds as a citizen, worker and leader in the 21st century.

West Virginia is the second state to implement the Partnership's 21st century model for teaching and learning. The Partnership's framework emphasizes information/communications technology literacy, critical thinking, communication skills, global awareness, and business, economic and civic literacy.

From: <http://wvde.state.wv.us>

WVCTM Membership Form	
Name:	
Home Address:	
Professional/School Address:	
Email, if available:	
Home Telephone:	
Work Telephone:	
County:	
Position:	
School:	
Grade Level:	
<i>Make checks payable to WVCTM</i> Regular Membership \$15 Student Membership \$5	
Amount Paid:	
<i>Send form and payment to:</i> Steve Dellinger, WVCTM Treasurer 220 Simply Ashley Court Hedgesville, WV 25427	

Member News

Sharon Weekly, of West Union in Doddridge County, received first place in the adult essay contest category of "My West Virginia State Parks: What They Mean to Me". Winners were recognized at the Charleston Cultural Center, with First Lady Gayle Manchin presenting the award on November 8.

Murrel Hoover, Mathematics Specialist at the June Harless Center for Rural Educational Research and Development at Marshall University has been appointed to the National Council of Teachers of Mathematics (NCTM) Professional Development Services Committee. She is one of 10 members from all over the United States and will serve through 2008. The PDSC was established to create a coherent and comprehensive set of Professional Development offerings that will meet the needs of teachers at all grade levels and at every stage of their professional careers.

WVCTM Committee

President.....Judy Pomeroy
 Past President.....Dave Kennedy
 VP College.....Dr. Susan Goodwin
 VP High School.....Cheryl Reger
 VP Middle/Jr. Hi.....Sally McCumbee
 VP Elementary.....Sheila Pell
 Secretary.....Barbara Trytko
 Treasurer.....Steve Dellinger
 Historian.....Suzie White
 NCTM Rep.....Murrel Hooveri
 Community Relations.....Dr. Jeanne Finstein
 Member-at-Large.....Diana Munza
 Member-at-Large.....Peggy Baldwin
 Math Matters Newsletter.....Dr. Donna Watson
 President Math Field Day.....Rowanne Shockey
 Student Symposium.....Dr. Michael Mays
 WV Math Coordinator.....Lou Maynus
 WV Title I Math Coordinator.....Terri Collier

Executive

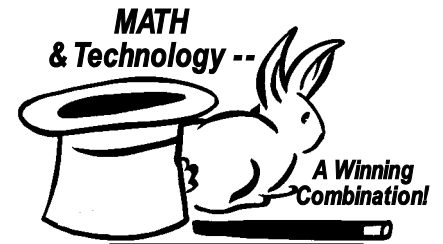
Upcoming Events

WVCTM Annual Meeting
Math & Technology:
A Winning Combination!
 Flatwoods, WV
 March 16-17, 2007
T³ Post Conference
 March 17-18, 2007

WVCTM Executive Committee
Meetings at 10:00 a.m.
Flatwoods, WV, Days Inn
Saturday, February 17, 2007

NCTM Annual Meeting
 Atlanta, Georgia
 March 21-24, 2007
 "Mathematics: Representing
 the Future"

Be thinking ahead...
NCTM Regional Conference
 Richmond, Virginia
 October 11-13, 2007



Poster Contest

Rules

2007 Theme

Math & Technology:
 A Winning Combination

Eligibility

Any student in grades K-12 or in College in West Virginia.

Awards

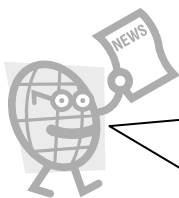
\$25 for 1st place
 \$15 for 2nd place
 \$10 for 3rd place

Given in each of the following five levels: K-2, 3-5, 6-8, 9-12, College

Regulations

- Only one entry is permitted for each individual (no group work).
- Minimum size is 8 ½ by 11 inches
Maximum size is 9 by 12 inches
- Use only hand-drawn lettering.
- A variety of media may be used including: crayon, marker, paint, colored pencils, and pen.
- Do NOT use materials that create a 3-D effect.
- Poster may be in color or in black and white.
- All designs must be original and may not incorporate any computer-generated or copyrighted materials. This includes comic and/or television characters, photographs, magazines, or newspaper illustrations.
- The entry form (shown at the left) MUST be completed and pasted or taped to the back of each poster.
- Each WVCTM Teacher Sponsor may send 5 posters (maximum) per level (K-2, 3-5, 6-8, 9-12, College).

Bring the posters to the conference. (For judging, turn in no later than Friday, March 16 at NOON.) Or mail by March 8th to **Peggy Baldwin**, Box 189, Rockview, WV 24880



Hey, Do me a favor!
 Send all news of
 interest to or about
 WVCTM members to
 the address below and
 let your light shine!

WVCTM 2007 Poster Contest Entry Form

Check ONE: K-2 3-5 6-8 9-12 College

Student: _____

School: _____

County: _____

Local Newspaper: _____

WVCTM Teacher Sponsor: _____

This form must be attached to the back of each poster submitted.
 Copy form as needed.

To be judged, posters must be turned in no later than NOON on Friday, March 16, 2007 at the Conference registration table. Posters may be collected after the banquet on Friday night. Posters left up past noon on Saturday will be discarded.

www.wvctm.org