

The V²CTM Reflection



THE VALLEY OF VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICS
Volume 42 November 2011 Number 1

Fall Meeting November 16 at Stewart Middle School

The Annual Fall V²CTM Meeting will be held on Wednesday, November 16, 2011, at Stewart Middle School in Fort Defiance. The meeting will feature Patrick Vennebush from the National Council



of Teachers of Mathematics who will present a humorous presentation *Math Jokes for Mathy Folks*. To get to Stewart Middle from the north, take Interstate 81 to Exit 235 (Weyers Cave). Turn right (west) to get to US 11. Take US 11 South to Fort Defiance, approximately 4 miles. Turn right at the stoplight onto Fort Defiance Road. Stewart Middle School is on the left in 500 yards. From the south, take Exit 227 (Verona) from Interstate 81 then go west on Route 612 to US 11. Follow US 11 North 4 miles to Fort Defiance. Turn left onto Fort Defiance Road. Register on-line at <http://www.rockingham.k12.va.us/register>. Registrations need to be in before November 9. Conference registration costs are only \$5 and include a fully catered dinner provided by White Hill Catering. There will be numerous appealing door prizes! The program is below:

4:30 – 5:00 **Registration**

5:00 - 6:00 **Breakout sessions:**

Elementary Session: *Using the 100's Chart to Develop Number Sense in Elementary School Children* by Ann Wallace

Middle School Session: *Using Differentiation to Engage, Support and Challenge Every Learner* by Kristina Doubet

High School Session: *Developing Algebraic Reasoning With Geometric Patterns* by Kyle Schultz

6:00 – 6:45 **Dinner** catered by White Hill Catering: Lasagna (Beef, Marinara Sauce), Caesar Salad, Garlic Bread, Dessert, Sweetened and Unsweetened Tea and Water

6:45 - 7:00 **Business Meeting:** Kyle Schultz, V²CTM President

7:00 – 7:45 **General Session:** *Math Jokes for Mathy Folks* by Patrick Vennebush

Math Humorist to Speak at Fall Meeting



Patrick Vennebush is a former middle grades teacher who has provided professional development for mathematics educators at the local, state, and national levels. He served as the editor for the Media Clips column of the *Mathematics Teacher* and is now the NCTM Online Projects Manager in charge of Illuminations and other web projects. Patrick is also the author of the book [Math Jokes 4 Mathy Folks](#).

Patrick Vennebush loves puzzles, problems, and jokes. His book, *Math Jokes 4 Mathy Folks*, contains 400+ jokes for teachers, students, and other geeks. At the 2010 Annual Meeting of the National Council of Teachers of Mathematics, it sold more copies than any other title in the 80-year history of the conference. Vennebush attended Penn State, from which he received an Alumni Achievement Award (2007). He received a master's degree from the University of Maryland. He now works as the Online Projects Manager

at NCTM, where he develops resources for preK-12 math teachers.

Three JMU Profs Provide Programs at Fall Meeting

Dr. Ann Wallace is a former elementary school teacher (5th grade) who teaches math methods to elementary education majors at JMU. She would like to bridge the gap between teaching abstract concepts to children before conceptual understanding has been developed.

Kristina Doubet is an assistant professor of Middle, Secondary, and Mathematics Education at James Madison University. With over 10 years of middle and high school teaching experience, she now prepares pre-service teachers for careers in the classroom while working with practicing teachers to imbed differentiation into their instructional practices.

A former middle and high school mathematics teacher, Kyle Schultz enjoys helping secondary mathematics teachers learn about and improve their practice. As an assistant professor of mathematics education at James Madison University, he strives to promote student-centered teaching and learning. Kyle is also the current V²CTM President.

2011-2012 V²CTM Officers

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Math News from the Virginia D.O.E.

Mathematics Standards of Learning (SOL) Institutes – Professional Development Resources

Over the past three years, the Virginia Department of Education has provided statewide professional development in a “train-the-trainer” model to support the implementation of the 2009 *Mathematics Standards of Learning*. In 2009 and 2010, the institutes focused on changes in the content (what changed) and on strategies to teach new and changed topics (2010). In 2011, the focus of the institutes is on the mathematical process goals for students, the infrastructure of good instruction. Now, all professional development resources created through the institutes have been made available on one VDOE Web site.

http://www.doe.virginia.gov/instruction/mathematics/professional_devlopment/index.shtml.

Enhanced Scope and Sequence Sample Lesson Plans

Michael Bolling, DOE Mathematics Specialist, says to expect to see the K-4 ESS sample lesson plans posted via a new searchable database on the VDOE Web site in the next couple of weeks. Grades 5-8 and EOC course sample lesson plans will be added as soon as each grade level/subject area has completed the editing process.

This resource, along with many others already posted, is to be found on the DOE Math website:

http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/index.shtml

New Assessments Coming--ePats Give Preview of Increased Rigor and Technology Enhanced Items

All mathematics assessments will be new in 2011-12 and will be based on the 2009 SOLs. You can download practice ePat assessments at: <http://www.pearsonaccess.com>, select Virginia, then click on the ePat link. The 2011-12 tests are expected to have increased rigor, but Michael Bolling warns teachers to not think of these ePats as typical of the difficulty of the tests. The ePats do contain representative problems of the increase in rigor as well as the new technology-enhanced items. Technology Enhanced Items include questions which are not multiple choice. The TEI items will constitute approximately 15% of the 2011-12 tests in grades 6 and up and there will be field test TEI items on the online Grades 3-5 tests this year. During 2012-13 all math tests will include live TEI items.

More information about testing

- Sups Memo 236-11 contains lots of information about the new tests such as a reminder that the Grade 3 test only references Grade 3 SOLs this year. It is available at http://www.doe.virginia.gov/administrators/superintendents_memos/2011/236-11.shtml
- Updated formula sheets (without the watermarks) and a Z-Table that combines both pages into one document are now available at http://www.doe.virginia.gov/testing/test_administration/ancilliary_materials/2011-12/index.shtml.
- New calculators have been added to the approved calculator listing. You can access the updated list at http://www.doe.virginia.gov/testing/sol/standards_docs/mathematics/calculators/approved_calculators_sol_tests.pdf. Note that this updated list is the same listing found in examiner’s manuals and includes instructions for resetting calculators.
- Color will be used for some test items in the online versions of the new SOL mathematics tests. Colors used with items will be suitable for students with a color vision deficiency and will appear in gray scale should the item be presented in paper format.
- Emphasis words such as *closest*, *equal*, and *best* will no longer be emphasized by italics or capital letters on any SOL mathematics tests. The only exceptions will be the words NOT and EXCEPT, which will continue to be emphasized with capital letters on all SOL mathematics tests except for grade 3. The grade 3 mathematics test will not contain test items with the words NOT and EXCEPT.

Approved Textbooks for K-12 Mathematics

On Thursday, July 28, 2011, the Virginia Board of Education approved the proposed recommended list of K-12 mathematics textbooks. The listing of approved textbooks and each approved textbook’s SOL correlation has now been posted on the VDOE Web site.

<http://www.doe.virginia.gov/instruction/textbooks/mathematics/index.shtml>

NCTM Position Statement about Measurement

A Position of the National Council of Teachers of Mathematics

What should schools teach about the metric and the customary systems of measure?

NCTM Position

Because the metric system is an effective, efficient base-ten measurement system used throughout the world, students need to develop an understanding of its units and their relationships, as well as fluency in applying it to real-world situations. At the same time, since some non-metric units of measure are still widely used in day-to-day life in the United States, American students also need to develop familiarity with these units of measure.

The International System of Units (SI) is the internationally recognized standard metric system. Worldwide, SI is the only measurement system used in science and the predominant system used in commerce. The United States is one of only three countries that have not officially adopted SI. The other two, Myanmar and Liberia, reportedly use SI as the predominant system in daily life and commerce. Among the countries that have officially adopted SI are some, such as the United Kingdom, that have retained some of their non-metric units of measure in everyday life.

Both NCTM Standards and the Common Core State Standards for Mathematics describe the need to organize curriculum to ensure that students become proficient in measurement. Students first need to develop a concept of the attribute to be measured (e.g., length, mass, volume, time, temperature) by comparing and ordering objects solely on the basis of that attribute. Then they should devise and apply nonstandard units to compare and order objects indirectly on the basis of the attribute. Finally, they should be introduced to standard units of measure (both SI units and non-metric units of measure commonly used in the United States) as a matter of (1) communication, ensuring a common understanding of the quantity of the attribute measured by all who use the same system of units, and (2) reliability, ensuring the equivalence of repeated measures of an object's attribute. The learning goals for students include—

- knowledge of and ability to use referents, or benchmarks, in estimation;
- ability to make a reasonably accurate measurements of an attribute by using standard tools;
- ability to assess and select an appropriate unit for the type and size of the attribute being measured;
- ability to convert flexibly and fluently among commonly used units within a measurement system;
- knowledge of the role and implications of accuracy and precision in measurement; and
- ability to apply and operate on units of measure flexibly and fluently in the solution to problems.

Upcoming Events

[Shoot for the Stars! VCTM Annual Conference - 2012](#)

March 9-10, 2012 • Hotel Roanoke, Roanoke, Virginia

Registration information is available at <http://www.vctm.org>

Speaker Proposals now being accepted through November 18, 2011

NCTM 2012 Annual Meeting & Exposition

Philadelphia PA • April 25 - 28, 2012

Information available at <http://www.nctm.org>

V²CTM Fall 2011 Meeting Registration

There is no paper registration for the fall conference. To register you must access the online registration at <http://www.rockingham.k12.va.us/register>. You may pay your \$5 conference fees at the door on November 16. Please complete your registration no later than November 9 so we will have an accurate dinner count.

**See you at Stewart Middle School on
Wednesday, November 16!**

V²CTM Reflection
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**PLEASE SHARE THIS NEWSLETTER WITH ALL MATHEMATICS TEACHERS,
GRADES K-12**