

The V²CTM Reflection



THE VALLEY OF VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICS

Volume 34

March 2004

Number 2

Spring Meeting on April 1 at JMU

Two sessions to be presented by John Van de Walle



The Annual Spring V²CTM Meeting will be held at the College Center (Highlands Room) on the CISAT campus of James Madison University on Thursday, April 1, 2004. The meeting will feature two general sessions from nationally acclaimed math educator and author John Van de Walle.

How to get to the College Center: To get to the JMU College Center from Interstate 81, take exit 245, Port Republic Road. Go west on Port Republic Road for 1/4 mile then turn right on Bluestone Drive which takes you into the JMU campus. After you pass several parking areas on your right, turn right onto Carrier Drive which will take you on a bridge across I-81. Continue on Carrier Drive until you see the College Center on your right and lot R3 on your left.

Parking: Parking will be in Lot R3 which is shown on the map to the right. No parking permits will be necessary but you are asked to not park in any lot other than R3.

Dinner: Attendees may purchase their own dinner at Festival (approximate cost ~\$5.00 - \$8.00).

Registration: Registration costs \$5.00, payable at the door and will be free for all students. You are asked to pre-register on-line at <http://www.rockingham.k12.va.us/v2ctm/register.html> so a name tag will be prepared for you. During online registration you will also be asked to complete a short survey. The program is on the next page.



V²CTM Program for April 1 Meeting

- 4:30 - 5:00 **Registration**
Refreshments provided by Harrisonburg High School
- 5:00 - 6:00 **General Session I: Teaching Mathematics Through Problems: Why and How?**
John Van de Walle -- Highlands Room of the College Center
- 6:00 - 7:00 **Dinner**
On your own at Festival (part of the College Center) Prices range from \$5.00 - \$8.00.
- 7:00 - 7:15 **Business Meeting**
LouAnn Lovin, President -- Highlands Room of the College Center
- 7:15 - 8:15 **General Session II: Algebraic Reasoning from Kindergarten to High School**
John Van de Walle -- Highlands Room of the College Center

Nationally Recognized Math Educator, Author To Speak at Spring V²CTM Meeting

The speaker for both sessions at the spring V²CTM meeting will be Dr. Jon Van de Walle. Dr. Van de Walle is Professor Emeritus at Virginia Commonwealth University in Richmond, Virginia. There he taught graduate courses for both prospective teachers and in-service teachers, primarily at the elementary and middle school levels. He continues to write and work with teachers on a regular basis.

Dr. Van de Walle has long been interested in children's concept development, especially in the area of number sense. In recent years he has focused on teaching mathematics via problem solving within a student-centered approach.

He has written numerous chapters and articles for teachers in NCTM books and journals. He is the author of the best-selling mathematics methods texts, *Elementary and Middle School Mathematics: Teaching Developmentally*, now in its fifth edition. This text is also used as a resource book by many schools and teachers. He is also a co-author of Scott Foresman - Addison Wesley Mathematics, a K-6 textbook series.

In addition to his writing, Dr. Van de Walle has been very active in the National Council of Teachers of Mathematics, including chair of the Educational Materials Committee, Program Chair for a regional conference, as a frequent speaker at national and regional meetings, and as a member of the Board of Directors (1998-2001).

Dr. Van de Walle received his Ph.D. in Mathematics Education from The Ohio State University in 1972.

The sessions Dr. Van de Walle will be present at V²CTM are described below:

Teaching Mathematics Through Problems: Why and How? The single best suggestion for teaching mathematics at any level K to 12 so that students are involved and develop true understanding is this: Allow the subject to be problematic for the students. Why is this such a valuable approach? How do you find the tasks that can be used on a daily basis so that students will be engaged and still learn the mathematics that they need to pass the SOL's. We will share examples from kindergarten through high school to see why this approach is currently the best idea we have for helping children learn.

Algebraic Reasoning from Kindergarten to High School In the NCTM's Principle and Standards document, algebra is one of the five content strands for the K to 12 curriculum. Exactly what does this mean, especially for the K to 8 classroom? In this talk we will explore examples from each of the four goals under the NCTM Algebra standard so that we can begin to understand what algebra really is all about. Those who think algebra is about factoring and solving quadratic equations may be surprised.

Math News from the Virginia Department of Education

New Math Specialist Announced

Dr. Lois Williams has recently taken the position of Middle School Mathematics Specialist with the D.O.E. Her e-mail address is lwillia1@mail.vak12ed.edu. Lois was formerly with Albemarle County Schools. She joins Karen Grass, Elementary Math Specialist, and Debbie Lyman, Secondary Math Specialist.

Enhanced Scope and Sequence for K-12 Math Released

The Department has released an “Enhanced” Scope and Sequence for K-12 Mathematics. This can be found online at <http://www.pen.k12.va.us/VDOE/EnhancedSandS/mathematics.shtml>. There are many resources included such as sample lesson plans, linked released test items, etc. A companion resource that describes strategies for differentiating instruction for limited English proficient (LEP) students and students with disabilities will be available within the month to assist school divisions in adapting mathematics instruction to meet the needs of these subgroups.

Geometry Modules Revised

The Department has recently revised the Geometry Modules for Elementary School Teachers. It is available online at http://www.pen.k12.va.us/VDOE/Instruction/Elem_M/geo_elem.html. They will soon release the revised Geometry Modules for Middle School. Also coming out soon on a CD is The Development of Geometric Thought Through the Van Hiele Models.

Math Textbook Adoption Coming Up

Every six years new mathematics textbooks are adopted and the last time we did so was in 1999. State committees are being formed now and local divisions are asked to nominate teachers for these committees. Nominations must be submitted by April 1. These committees will be verifying the SOL correlations which textbook companies are submitting as part of the process. Information is available on Supts Memo #37 and can be found online at <http://www.pen.k12.va.us/VDOE/suptsmemos/2004/inf037.html>. Local divisions will be expected to adopt new texts during spring, 2005, with contracts available for purchase beginning July 1, 2005.

SOL Field Tests for Grades 4, 6, and 7 to Start This Spring

Selected school divisions will be field testing SOL tests in grades 4, 6, and 7 during Spring 2004 and 2005. During these two years, the 8th grade SOL test will remain a 6th-8th grade test. But in 2006 the 8th grade test will only cover 8th grade SOL topics as this is the year the 6th and 7th grade SOL tests will be fully implemented.

Calculators for Middle School Tests

In 2004 and 2005, 8th graders may only use a 4-function calculator on the SOL test. Beginning in 2006, they may use a scientific calculator as long as it does not have a fraction key, such as the TI-30Xa or Sharp EL-501V models. For the 6th and 7th grade field tests in 2004 and 2005, students may use either a 4-function calculator or one of the above scientific calculators. EDITOR’S QUESTIONS: Why in the world do 6th, 7th, and 8th grade students need a calculator with trig, inverse trig, logarithmic, and exponential functions on it? Why should we purchase calculators which cost much more than a four function calculator when the only advantage it has for the subject material covered is order of operations? Why should we purchase calculators like the TI-30Xa which, in effect, have a disabled fraction key on them (In order to market the TI-30 in Virginia, Texas Instruments replaced the fraction key with a dummy blank key)?

Algebra Readiness Diagnostic Tests

All of these online tests are now “adaptive” which means the questions the student gets depend on his responses to previous questions. Pretests, Posttests, and Strand Tests are now available.

Summer Content Academy

Look for information to be coming out soon about the summer content academy to be held at JMU the week of July 12.

Upcoming Meetings

Virginia Council of Teachers of Mathematics (VCTM)

NCTM Geometry Academy

March 25-27, 2004

Richmond Marriott

Richmond, Virginia

Contact: <http://www.vctm.org>

National Council of Teachers of Mathematics (NCTM)

82nd Annual Meeting: "Defining Mathematics for All "

April 21 – 21, 2004

Philadelphia, Pennsylvania

Contact: <http://www.nctm.org>

National Council of Teachers of Mathematics (NCTM)

83rd Annual Meeting: " Embracing Mathematical Diversity "

April 6 – 9, 2005

Anaheim, California

Contact: <http://www.nctm.org>

2003-2004 V²CTM Officers

President.....	LouAnn Lovin, James Madison University (lovinla@jmu.edu)
Past President.....	Pat Lintner, Harrisonburg City Schools (plintner@harrisonburg.k12.va.us)
Secretary.....	Ann Shultz, Montevideo Middle School (ashultz@rockingham.k12.va.us)
Treasurer.....	Diana Flick, Harrisonburg High School (dflick@harrisonburg.k12.va.us)
NCTM/VCTM Representative.....	Judy Kidd, James Madison University (kiddjb@jmu.edu)
Newslettter Editor.....	Joe Hill, Rockingham County Public Schools (jhill@rockingham.k12.va.us)
Board Members:	Robert Hanson, James Madison University (hanson@math.jmu.edu), Harvey Almarode, Augusta County Schools (halmarode@augusta.k12.va.us), Josh Folb, Winchester City Schools (folb.josh@wps.k12.va.us)

V²CTM Spring 2004 Meeting Registration

Return this registration form to Joe Hill, Rockingham County Public Schools,
Suite B County Office Building, Harrisonburg VA 22801. Better yet, register on the web at
<http://www.rockingham.k12.va.us/v2ctm/register.html>

You may also pay this registration fee at the door on April 1.

Name _____

Circle one: New Member Renewal

School _____ Spring Meeting Registration \$5.00 _____

School Address _____ TOTAL ENCLOSED _____

Home Address _____

E-mail Address _____

See you at JMU on April 1!

V²CTM Reflection
Joe Hill, Editor
Rockingham County Public Schools
Suite B, County Office Building
Harrisonburg VA 22801

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