MISSION:

Students Thinking and Engaging in Mathematics

Mathematics Specialists Conference
September 24 - 25, 2015
NASA Langley - Hampton, VA

4th Annual Conference Sponsored by
The Virginia Council of Mathematics Specialists
www.vacms.org
Virginia’s Mathematics Specialist Initiative

Definition of a Mathematics Specialist

Mathematics Specialists are teacher leaders with strong preparation and background in mathematics content, instructional strategies, and school leadership. Based in elementary and middle schools, mathematics specialists are former classroom teachers who are responsible for supporting the professional growth of their colleagues and promoting enhanced mathematics instruction and student learning throughout their schools. They are responsible for strengthening classroom teachers’ understanding of mathematics content, and helping teachers develop more effective mathematics teaching practices that allow all students to reach high standards as well as sharing research addressing how students learn mathematics. The overarching purpose for Mathematics Specialists is to increase the mathematics achievement of all the students in their schools. To do so, they

- Collaborate with individual teachers through co-planning, co-teaching, and coaching;
- Assist administrative and instructional staff in interpreting data and designing approaches to improve student achievement and instruction;
- Ensure that the school curriculum is aligned with state and national standards and their school division’s mathematics curriculum;
- Promote teachers’ delivery and understanding of the school curriculum through collaborative long-range and short-range planning;
- Facilitate teachers’ use of successful, research-based instructional strategies, including differentiated instruction for diverse learners such as those with limited English proficiency or disabilities;
- Work with parent/guardians and community leaders to foster continuing home/school/community partnerships focused on students’ learning of mathematics; and
- Collaborate with administrators to provide leadership and vision for a school-wide mathematics program.

On December 3, 2004 School Divisions participating in NSF-MSP Grant and University Partners agreed upon this working definition of Mathematics Specialists.
2015 Virginia Council of Mathematics Specialists Conference

Students Thinking and Engaging in Mathematics

VACMS Goals

The purpose of the Virginia Council of Mathematics Specialists shall be:

- To support mathematics specialists as professional school-based mathematics leaders.
- To advocate for effective, rigorous, equitable, mathematics instruction.
- To promote collegial collaboration among the organization members.
- To collaborate with mathematics organizations at the local, state, and national levels to provide professional learning opportunities for mathematics specialists.

Conference Goals

The purpose of this conference is to provide an opportunity for school-based mathematics specialists and mathematics teacher leaders to network and to gain new ideas that can enhance their work with elementary and middle school teachers through coaching, professional learning communities, and other school-based professional development.

2015 Conference Strands

- Refining Coaching Skills: Becoming a Strategic Mathematics Leader
- Facilitating Professional Learning: Meeting the Needs of All Teachers
- Supporting STEM education: Making cross-curricular connections
- Developing Mathematics Habits of Mind: Supporting instruction that builds student self-confidence and disposition to do mathematics

2015 Conference Partners

The NASA Langley Research Center, Hampton has generously welcomed the Mathematics Specialist Conference; making their conference space available and also providing the conference with logistical support. A special thanks go to the Office of Education for their collaboration. NASA makes many and various exemplary free resources available for teachers and students to support education in the STEM cluster areas. Participants will learn more about these resources during several conference presentations, A2 and E1, by NASA educators as well as by visiting the NASA website at http://www.nasa.gov/audience/foreducators/index.html.

The Virginia Mathematics and Science Coalition (VMSC) is an alliance of education, corporate, and public policy leaders who provided the original thrust and continue to offer continuous support for Virginia’s Mathematics Specialists Initiative. Various documents, journals, and research reports about the Virginia’s Mathematics Specialists Initiative can be located at their website, http://www.vamsc.org/.
The Virginia Council of Mathematics Specialists
2015 VACMS Board Members

Officers

President: Tonya Fields-Hines, Portsmouth Public Schools
Past-President: Contina Martin, Portsmouth Public Schools
President-Elect: Corinne Magee, Arlington Public Schools
Secretary: Sabrina Davis, Richmond Public Schools
Treasurer: Contina Martin, Portsmouth Public Schools
Membership: Candy Standley, Culpeper Public Schools

2015 Conference Committee Chairs

Conference Logistics Chair: Contina Martin, Portsmouth Public Schools
Program Chair: Corinne Magee, Arlington Public Schools
Conference Registration: Jane Grove, Fauquier Public Schools
Conference Evaluation: Vickie Inge, Retired Mathematics Educator
Webmaster: Jamey Lovin, Virginia Beach Public Schools

Making the Most of Your Conference

The Virginia Council of Mathematics Specialist welcomes you to an exciting conference with outstanding speakers to assist in your work as a mathematics specialist or a school based mathematics leader providing professional learning support for classroom teachers.

The 2015 Conference begins with lunch and networking in Reid Room 3 at 11:00. The Conference Kick-Off Session welcome and then keynote presenter, Robert Berry, UVA, in the Pearl I. Young Theatre at 12:00.

In your program book you will find a daily Conference at a Glance that identifies the title and location of each session. Following the daily Conference at a Glance are complete descriptions of each session for that day. There are three sets of 75-minute sessions each day and within each set there are 3 or 4 different presentations to choose from.

The seating in the presentations rooms should not be an issue. However, for your safety and because of fire regulations, only those with seats will be allowed in the session presentation rooms. We appreciate your cooperation in helping us comply with this regulation.
Some tips to make the VACMS conferences safe and enjoyable for everyone.

- All seats are available on a first-come basis.
- In compliance with fire codes, sitting on the floor or standing is not permitted.
- As a courtesy to the speakers and to your colleagues, please put your cell phone on vibrate during all presentations.
- Per conference center regulations, no materials can be placed on the walls.
- **VACMS Needs You! GET INVOLVED:** We appreciate your taking some time at the conclusion of the conference to complete the online conference survey and evaluation form that will be emailed to you to help the Board plan for next year. Please indicate on your survey form if you would like to take an active role in supporting the organization or helping with next year’s conference.

![Image](image.png)

**Conference Special Events**

**Thursday**
- Registration in the Foyer beginning at 11:00 A.M.
- Lunch in Reid Room 3, 11:00 - 11:59 A.M.
- Conference Kick-Off and Keynote in Pearl I. Young Theater beginning at 12:00 P.M.
- Networking and Cash bar in the After Burner Social Lounge, 5:15 - 5:40 P.M.
- Dinner banquet in Reid Room 3, 5:45 - 6:50 P.M. (We must clear the building by 7:00)

**Friday**
- Continental Breakfast in Foyer, 7:30 - 8:30 A.M.
- Lunch and Conference closing remarks in Reid Room 3, 1:00 - 2:30 P.M.

**Before you leave Friday please recycle your name badge.**

In a few days you will receive an electronic evaluation and survey to provide VACMS with feedback for planning the 2016 conference. Please take a few minutes and complete the form online. *Thank you in advance!*

**Your Mission: Have a great conference!**
Welcome and Keynote Address

Noon

Welcome to NASA
Janet Sellars
NASA Director of Education

Introduction of Keynote Speaker
Corinne Magee
VACMS Program Chair

Keynote Address
Robert Q. Berry, III, Ph.D.
Associate Professor in the Curry School of Education, University of Virginia

Equitable Pedagogy: Using Principles to Actions to frame Access & Equity

Participants will consider productive and unproductive beliefs with an emphasis on facilitating all students’ development of mathematical processes and practices. Participants will be challenged to consider beliefs that hinder students’ mathematical growth. The mathematics teaching practices from Principles to Actions will be discussed as a strategy for promoting high quality teaching and learning.
<table>
<thead>
<tr>
<th>Room Numbers</th>
<th>A Sessions 1:00-2:15 P.M.</th>
<th>B Sessions 2:30-3:45 P.M.</th>
<th>C Sessions 4:00 - 5:15 P.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reid 1 (100 seats)</td>
<td>Learning from Student Work Laurel Lynch and Tracy Gaither Kindergarten through Grade 5</td>
<td>NASA Science for the Math Classroom Kristyn Damadeo and Preston Lewis Kindergarten through Algebra I</td>
<td>Using Model Drawing in Solving Word Problems Ernestine Saville-Brock Grade 3 through Algebra I</td>
</tr>
<tr>
<td>Reid 2 (100 seats)</td>
<td>Project and Problem-Based Instruction: Taking the &quot;Why Do We Need to Know This?&quot; Out of Math April Lanotte Kindergarten through Algebra I</td>
<td>Problem Solving: &quot;Don't Leave School Without It&quot; Carolyn Holmes Alfreda Jernigan Grade 6 through 8</td>
<td>Learning from Student Work Laurel Lynch and Tracy Gaither Kindergarten through Grade 5</td>
</tr>
<tr>
<td>Reid 3 (100 seats)</td>
<td>Geometry Fun with Two Guys Tres Wells and Justin Hose Grade 3 through 8</td>
<td>ILO-CRA-SC – What does it all mean? Connie Shepard and Terri Roettinger Grade 3 through Algebra I</td>
<td>From Cell Phone Plans to Purposeful Questioning Vickie Inge Grade 6-Algebra I This will be in the Pearl Theater</td>
</tr>
<tr>
<td>Room 112/113 (75 seats)</td>
<td>Motivation Strategies for Mathematics Leaders Dr. Jean Mistele and Dr. Betti Kreye Kindergarten through Algebra I</td>
<td>Facilitating Math Talks for Middle and High School Students Carol Walsh and Jamey Lovin Grade 6 through Algebra I</td>
<td>How Do You Do Data? Monica Grillo Kindergarten through Grade 5</td>
</tr>
</tbody>
</table>

Cash bar and Networking in the
*Main Cafeteria Terrace 5:15-5:45*

Dinner in Reid Room 3 beginning at 5:45 includes a NASA Resource Presentation
Thursday, 1:00-2:15
Session A

Session A1

**LEARNING FROM STUDENT WORK**

Laurel Lynch, Mathematics Coach, Arlington Public Schools
Tracy Gaither, Mathematics Coach, Arlington Public Schools

Common formative assessments allow coaches and teachers to reflect collaboratively on current and future instruction. By analyzing student work, participants will discuss different responses and discover patterns of thinking across students and classrooms while delving into the mathematical foundations and misconceptions individual students have. Using research-based protocols, participants will analyze student work while learning strategies for incorporating reflecting on student learning and development into their coaching practice, working with grade-level teams and the school community. (*Kindergarten through Grade 5*)

Session A2

**PROJECT AND PROBLEM-BASED INSTRUCTION: TAKING THE “WHY DO WE NEED TO KNOW THIS?” OUT OF MATH**

April Lanotte, Educational Consultant, NASA Aeronautics Mission Directorate

Project and Problem-Based Instruction (PBI) reach out to a variety of students, no matter their interest. This hands-on workshop highlights NASA PBI lessons that combine different subjects, without requiring you to be a math teacher AND a social studies teacher AND a science teacher, yet connect these fields. Try out activities, take home guidance about building your own PBI, and share ideas with others. Whatever your comfort level, there is something in this workshop for everyone. (*Kindergarten through Algebra I*)
Session A3

**GEOMETRY FUN WITH TWO GUYS**

Tres Wells, Mathematics Teacher, Albemarle County  
Justin Hose, Mathematics Specialist, Frederick County Public Schools

Come explore several hands-on geometry activities designed for students to explore concepts such as Pick's Theorem, Euler's Theorem for Polyhedron, and Soma Cubes. *(Grade 3 through 8)*

Session A4

**MOTIVATION STRATEGIES FOR MATHEMATICS LEADERS**

Dr. Jean Mistele, Assistant Professor, Radford University  
Dr. Betti Kreye, Associate Clinical Professor, Virginia Polytechnic Institute and State University

From our research with a mathematics specialist cohort, we identified the importance of motivational skills needed for effective leadership within a school. The MUSIC model (Jones, 2009) of academic motivation was designed to support the teacher-student relationship. In this session participants will examine the application of this model to another type of relationship that is the math leader-teacher relationship. Participants will examine the five components of the MUSIC model from reading articles and analyzing videos. *(Kindergarten through Algebra I)*
Thursday, 2:30-3:45
Session B

Session B1

**NASA SCIENCE FOR THE MATH CLASSROOM**

Kristyn Damadeo, Education/Public Outreach Specialist, NASA Langley Research Center
Preston Lewis, Education/Public Outreach Specialist, NASA Langley Research Center

This session will share the math resources that have been developed to engage students in NASA’s Earth Science missions. Session participants will learn all that NASA Langley Research Center’s Science Directorate has to offer when it comes to using real NASA science and data in the math classroom through a variety of activities and lessons and math problems. *(Kindergarten through Algebra I)*

Session B2

**PROBLEM SOLVING, "DON’T LEAVE SCHOOL WITHOUT IT"**

Carolyn Holmes, K-12 Curriculum Leader, Hampton City Schools
Alfreda Jernigan, Senior Mathematics Specialist, Norfolk Public Schools

Students’ success depend on their ability to think critically. In this session we will investigate problem situations that naturally lead to connections to real-world problems. An integral component of successful problem solving is when all students are communicating, representing, and reflecting on their learning. *(Grade 6 through 8)*
Session B3

**ILO-CRA-SC: WHAT DOES IT ALL MEAN?**

Connie Shepard, Mathematics Specialist, Williamsburg-James City County Public Schools
Dr. Terri Roettinger, Mathematics Coordinator, Williamsburg-James City County Public Schools

Student success – What does it look like? How do you measure and provide feedback? This presentation will lead you through a collaborative process that will help you to reflect, define, and develop student understanding through the use of the Concrete-Representation-Abstract structure. Incorporated in this session will be a focus on the inclusion of the VDOE approved Math-Aides in curriculum planning and instruction. (*Grade 3 through Algebra I*)

Session B4

**FACILITATING MATH TALKS FOR MIDDLE AND HIGH SCHOOL STUDENTS**

Carol Walsh, Division Mathematics Specialist, Middlesex County Public Schools
Jamey Lovin, Mathematics Specialist, Virginia Beach Public Schools

Discover how Math Talks used in Elementary Schools can be facilitated at the Middle and High School levels. Using a variety of sources, the presenters will demonstrate how to adapt math talks for upper Grade strengthening student number sense and assisting in making connections to prior knowledge. Through participating in a Math Talk, learn the power of these 5 to 10 minute classroom sessions. (*Grade 6 through Algebra I*)
Thursday, 4:00-5:15
Session C

Session C1

**Using Model Drawing in Solving Word Problems**
Ernestine Saville-Brock, Mathematics Specialist, Montgomery County Public Schools

A model drawing approach is a concrete method in comprehending and solving word problems. By students drawing out what they are reading, the students can create a visual model of the problem and increase their chances of successfully solving the problem. Participants will be actively engaged in solving word problems using this strategy. (*Grade 3 through Algebra I*)

Session C2

**Learning from Student Work**
Laurel Lynch, Mathematics Coach, Arlington Public Schools
Tracy Gaither, Mathematics Coach, Arlington Public Schools

Common formative assessments allow coaches and teachers to reflect collaboratively on current and future instruction. By analyzing student work, participants will discuss different responses and discover patterns of thinking across students and classrooms while delving into the mathematical foundations and misconceptions individual students have. Using research-based protocols, participants will analyze student work while learning strategies for incorporating reflecting on student learning and development into their coaching practice, working with grade-level teams and the school community. (*Kindergarten through Grade 5*)

Session C3

**Integrating Probability and Data into Other Content Areas**
Justin Hose, Mathematics Specialist, Frederick County Public Schools
Tres Wells, Mathematics Teacher, Albemarle Public Schools

Probability and Data can easily be integrated into cross-curricular activities. Join the Two Guys for fun and interesting activities that can be used in Science, Social Studies, and Language Arts. (*Grades 3 through Grade 8*)
How Do You Do Data?
Monica Grillo, Mathematics Specialist, Williamsburg-James City County Public Schools

An assessment is given and graded. Now you need to do the data. How do you do data? How do you want your teachers to do the data? Whether you do data quarterly, weekly, or daily our craft calls for it to inform our practice with increasing precision. Take a deeper look at the assessment cycle and come discover what data can do for you. Participants can bring laptops.
(Kindergarten through Grade 5)
# Friday at a Glance
September 25, 2015

<table>
<thead>
<tr>
<th></th>
<th>D Sessions 8:30 - 9:45 A.M.</th>
<th>E Sessions 10:00-11:15 A.M.</th>
<th>F Sessions 11:30 A.M. - 1:00 P.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reid 1</strong></td>
<td>From Donuts to Purposeful Questioning</td>
<td>Multiplicative Thinking in K-3</td>
<td>Match the Graph</td>
</tr>
<tr>
<td><strong>(100 seats)</strong></td>
<td>Vickie Inge</td>
<td>Candy Standley and Kristen Brink</td>
<td>Lisa Lo Conte-Allen</td>
</tr>
<tr>
<td></td>
<td>Kindergarten through Grade 5</td>
<td>K-3</td>
<td>Grade 6 through Algebra I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reid 2</strong></td>
<td>Problem Solving + Rigor + (Reading Proficiency?) = Mathematical Thinker</td>
<td>Pizza Pi Night: A Family Math Game Night</td>
<td>Building Capacity for Instructional Excellence</td>
</tr>
<tr>
<td><strong>(100 seats)</strong></td>
<td>Kathleen Ann McKenna, Susan Swift, Kelley Evans</td>
<td>Jacqueline Blair, Anna Surratt, Erin Vickrey</td>
<td>Pamela Aerni</td>
</tr>
<tr>
<td></td>
<td>Kindergarten through Grade 8</td>
<td>Grade 6 through Algebra I</td>
<td>Grade 6 through Algebra I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reid 3</strong></td>
<td>Coaching Using the Mathematical Teaching Practices: Building Number Sense</td>
<td>Integrating Probability and Data into other Content Areas</td>
<td>Multiplicative Thinking in K-3</td>
</tr>
<tr>
<td><strong>(100 seats)</strong></td>
<td>Rhonda White</td>
<td>Justin Hose and Tres Wells</td>
<td>Kristen Brink, Candy Standley</td>
</tr>
<tr>
<td></td>
<td>Kindergarten through Grade 5</td>
<td>Kindergarten through Grade 8</td>
<td>K-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>This will be in the Pearl Theater</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Room 112/113</strong></td>
<td>Flipped Classroom: What is it? Why should I do it? How do I get started?</td>
<td>Teaching Mathematics to the iGeneration</td>
<td>Looking at Rigor Through the Lens of Writing</td>
</tr>
<tr>
<td><strong>(75 seats)</strong></td>
<td>Adam Semo and Chip McNamara</td>
<td>Dr. Eric Milou</td>
<td>Denise M. Walston</td>
</tr>
<tr>
<td></td>
<td>Grade 3 through Algebra I</td>
<td>Grade 6-8</td>
<td>Kindergarten through Grade 5</td>
</tr>
</tbody>
</table>

**Lunch and Conference Closing begin at 1:00 in Reid Room 3**
Friday, 8:30-9:45
Session D

Session D1
Reid 1

FROM DONUTS TO PURPOSEFUL QUESTIONING
Vickie Inge, Retired Mathematics Educator, Virginia Mathematics and Science Coalition

Participants will be introduced to the new NCTM publication, *Principles to Practice: Ensuring Mathematics Success for All* and the supporting website. Then participants will solve and discuss a mathematics task and watch video clips of a class working on the task. We will relate the teacher and student actions, in particular questioning, to proven effective mathematics teaching practices and consider how the specific mathematics teaching practices apply to improving student achievement. *(Kindergarten through Grade 5)*

Session D2
Reid 2

PROBLEM SOLVING + RIGOR + (READING PROFICIENCY?) = MATHEMATICAL THINKER
Kathleen Ann McKenna, Mathematics Specialist, Westmoreland County Public Schools
Susan Swift, Classroom Teacher, Westmoreland County Public Schools
Kelley Evans, Reading Specialist, Westmoreland County Public Schools

It’s an age old problem. Are we testing students’ math skills or reading skills? Now add “rigor” to our math problems. Can our weaker readers still become math problem solvers? Let a math specialist, reading specialist, and third grade teacher show you how math problems become math stories and reading proficiency is taken out of the equation.

*(Kindergarten through Grade 8)*
Session D3

**COACHING USING THE MATHEMATICAL TEACHING PRACTICES: BUILDING NUMBER SENSE**

Rhonda White, Mathematics Teacher Specialist, Norfolk Public Schools

How can we encourage teachers to utilize the eight research-based Mathematics Teaching Practices outlined in the NCTM publication Principles to Standards? This session will outline techniques to utilize this resource as a professional learning tool with engaging coaching that will deepen mathematics instruction to build Number Sense. Come ready to engage in simulations and get a chance to plan how to incorporate this resource into your own work. *(Kindergarten through Grade 5)*

Session D4

**FLIPPED CLASSROOM: WHAT IS IT? WHY SHOULD I DO IT? HOW DO I GET STARTED?**

Adam Semo, Mathematics Teacher, Henrico Public Schools
Chip McNamara, Mathematics Teacher, Henrico Public Schools

If only my students would do their homework. If only my students had more practice time. If only I could give my students more individual attention. If only I could take a fresh approach without starting over completely. If only I could walk away from a presentation, and immediately, implement what I learned. This is that presentation. *(Grade 3 through Algebra I)*

**Friday, 10:00-11:15**

Session E

Session E1

**MULTIPlicative THINKING IN K-2**

Kristen Brink, Mathematics Specialist, Culpeper Public Schools
Candy Standley, Mathematics Specialist, Culpeper Public Schools

Participants will explore the importance of providing opportunities for children to develop multiplicative thinking in the early grades. Participants will investigate the effectiveness of various activities can be shared with teachers in their schools. *(Kindergarten through Grade 3)*
Session E2

**Pizza Pi Night: A Family Math Game Night**

Erin Vickrey, Mathematics Specialist, City of Virginia Beach Public Schools
Jacqueline Blair, Mathematics Specialist, City of Virginia Beach Public Schools
Anna Surratt, Mathematics Specialist, City of Virginia Beach Public Schools

In this session, participants will hear how *three secondary schools* joined together to co-host a family math night. This session will provide participants with information on how to plan and implement an effective student-led math night. Specific attention will be given to how math nights can be used as a vehicle for developing mathematical confidence in students and families and assist in making connections between concepts as they articulate across the grade levels. *(Grade 6 through Algebra I)*

Session E3

**Integrating Probability and Data into Other Content Areas**

Justin Hose, Mathematics Specialist, Frederick County Public Schools
Tres Wells, Mathematics Teacher, Albemarle Public Schools

Probability and Data can easily be integrated into cross-curricular activities. Join the Two Guys for fun and interesting activities that can be used in Science, Social Studies, and Language Arts. *(Kindergarten through Grade 8)*

Session E4

**Teaching Mathematics to the iGeneration**

Dr. Eric Milou, Professor, Rowan University

This session will examine how to engage, motivate, and teach the iGeneration (the Internet Generation). Participants will be provided with mathematical modeling 3 act videos, websites, and motivational strategies for students in grades 6-10 that can lead to building better number sense and deeper conceptual understanding. *(Grades 6 through 8)*
Friday, 11:30-1:00
Session F

Session F1

BUILDING CAPACITY FOR INSTRUCTIONAL EXCELLENCE
Pamela Aerni, K-12 Math Instructional Specialist, Dinwiddie County Public Schools

As instructional leaders in mathematics, coaches and supervisors are key players in building the capacity of teachers for instructional excellence. When teachers have confidence in their ability to design, plan, and deliver effective instruction, they provide students with optimal learning environments, including opportunities to learning through tasks. Teachers, just like students, benefit from critical feedback from coaches and peers to continue to refine their practice. Collegial conversations is the conduit to changing practice. (Grade 6 through Algebra I)

Session F2

MATCH THE GRAPH
Lisa Lo Conte-Allen, Mathematics Teacher, Chesapeake Public Schools

Student performance results, based on the 2014 student analysis, was low or inconsistent in the area of real world data. Understanding and interpreting graphs can be a real challenge for many math students. Participants will explore how the CBR's (calculator based rangers) picks up the movement and represents the movement in a graph. This supports students in learning to read a graph and interpret the movements on the graph by matching their "walk" the simulated graph shown on the calculator. This activity addresses SOL's 8.13 and 8.14 as well as A.6 and A.7. (Grade 6 through Algebra I)

Session F4

LOOKING AT RIGOR THROUGH THE LENS OF WRITING
Denise M. Walston, Director of Mathematics, Council of the Great City Schools

Participants will experience instructional approaches that build student knowledge and develop strong habits of mind. This includes deepening students’ familiarity with grade level vocabulary, language and content that enables them to achieve proficiency in writing and justifying answers to rigorous questions and tasks in mathematics. (Kindergarten through Grade 5)
Upcoming Professional Learning Opportunities

VACMS 2016 Annual Conference
September 29-30, 2016 at the Culpeper Campus of Germanna Community College.

VCTM 2016 Annual Conference
March 4-5, 2016 at the Stafford Campus of University of Mary Washington.

NCTM 2015
Regional Conferences
Mathematics Education Meets Excellence
Atlantic City, New Jersey | October 21-23
Minneapolis, Minnesota | November 11-13
Nashville, Tennessee | November 18-20

TEAMWORK
coming together is a beginning
keeping together is progress
working together is success
- Henry Ford
Thank you for Participating in the 2015 Mathematics Specialists Conference!

MISSION:

Students
Thinking
and
Engaging
in
Mathematics

A special thanks to all the speakers and presenters who generously shared their time and expertise to inspire us to reflect and to grow as leaders.

Stay informed and inspired by visiting the VACMS website at www.vacms.org.

Join us September 29 – 30, 2016 in Culpeper for the 5th Annual VACMS Conference

Did you turn your name badge holder?