WVCTM
Draft Conference Program
March 17 - 18, 2017
Stonewall Jackson Resort, Roanoke, WV

Friday 8:30

Session - 502 Room - Ballroom 2 All Grades

Opening Session

Presented by Myrtle Holland (President WVCTM)

Friday 10:00

Session - Room - Ballroom 2 Grades K-12

Keynote Address

Presented by Kate Nowak (Illustrative Math)

Keynote

Friday 11:15

Session - 500 Room - Restaurant All Grades

FIRST LUNCH

choose only one lunch

Friday 11:15
Session - 4 Room - Bluestone Grades K-8

Instructional Math Practices That Work

Presented by Joy Marie Hunt (Burch PK-8)

As instructional coach at Burch PK-8, Joy has been working with the staff to analyze the math data from STAR 360 assessments this year. The staff is looking at the data and researching best practices to meet the needs of students. In this session, Joy will share the most effective practices.

Friday 11:15
Session - 3 Room - Tygart Grades K-2

Developing Special Strategies: Addition and Subtraction

Presented by Darek Naglak (Origo Education)

Developing Special Strategies: Addition and Subtraction (grades K – 2) This session demonstrates the importance of visual aids for developing powerful mental strategies that begin with number facts and broaden as they extend to greater numbers. This interactive workshop will be 'hands-on' as much as it is 'minds on'. Participants will leave with a range of practical activities and games to use immediately in the classroom.

Friday 11:15
Session - 5 Room - Gauley Grades 3-5

Leader in Me 7 Habits Plus 1 in Math Instruction

Presented by Debra Hackett (Poca Elementary) and Victoria Beller(Poca Elementary)

The session will show some activities that are incorporating Leader in Me habits including, your voice. The activities will be from our curriculum and supplemental resources. Participants will have a chance to participate and make some of the activities and share additional activities they might use.

Friday 11:15
Session - 6 Room - Greenbrier Grades 3-5

Number Talks, Gallery Walks...and More!

Presented by David Bailey (Glenville State College) and Kimberly King(Glenville State College Hidden Promise Consortium)

Teachers who attended a workshop last summer at Glenville State College were engaged in several hands-on activities related to base ten operations. The activities were designed to increase mathematical discourse among students through number talks, gallery walks, and math congress. This session will allow you to experience some of the strategies that have been used with collaborative groups in the workshop participants classrooms.

Friday 11:15
Session - 7 Room - Ballroom 1 Grades 6-12

Developing Problem Solvers, NOT Problem Doers!

Presented by Traci Phillips-Roach (Carnegie Learning Inc.)

Are your students depending on you to solve every problem in math class? It's time to break those bad habits and build your students' problem solving abilities. Come explore activities that promote teaching mathematics through problem solving. Participants will examine the importance of developing a problem solving mindset in students.

Friday 11:15
Session - 8 Room - Birch Grades 6-12

Strategies to Engage Learners

Presented by Kristen Oxley (KCS Boe)

Teachers will become students and participate in engaging activities that they can take back to their classrooms. We will work collaboratively and discuss strategies that make groups more successful in the classroom.

Friday 11:15
Session - 9 Room - Summersville Grades 6-12

But This Isn't Language Arts Class!

Presented by Jennifer Nail (Pocahontas County High School)

We all want to see our students succeed in all their classes. One way to improve success in other subject areas is to bring elements from another class into your own. In this session, we will explore how integrating writing and mathematical conversation into the math classroom

can help students become effective communicators. We will explore how to bring writing into math classrooms, and expand into how writing leads to conceptual understanding of mathematical ideas.

Friday 11:15
Session - 10 Room - Pecan Grades 6-12

Error Analysis and Cooperative Learning

Presented by Nebraska Scotchie (Pocahontas County Board of Education) and Teresa Rhea(Pocahontas County Board of Education)

Come hear about how to make the most of mistakes in a math classroom. The routine Pocahontas County teachers use in middle school math classes has been a factor in the significant increase in students' test scores. Learn about entrance activities at the beginning of class and ways to make the most of student responses using a rubric teachers have developed.

Friday 11:15
Session - 11 Room - Potomac Grades 6-12

Desmos Activities and Hyperdocs

Presented by Derek Oldfield (Wirt County Schools)

If you're a secondary math teacher with access to devices, you should be using Desmos FREE activities. This session will guide teachers through the pedagogy behind Hyperdocs and Desmos Activities. Let's chat about giving students more autonomy in learning.

Friday 11:15
Session - 12 Room - Ballroom 2 Grades 6-12

My Favorite Class is Math!

Presented by Laurel Dilley (Pocahontas County High School)

As math teachers, we all understand the constant struggle to make math class educational, but yet fun for students. When students want to be in class, they tend to learn more, be better problem solvers, and make higher grades. Join a Pocahontas County High School teacher as she shares her favorite part of class and invites you to do some math with her that's REALLY fun! We'll explore estimation, graphing stories, logical thinking, and pattern work warm-ups that will have your students begging

Friday 11:15
Session - 14 Room - Sutton Grades 9-K

May the Odds Be in Our Student’s Favor: Randomized Statistics Curriculum

Presented by Lisa Reilly (Bethany College)

In 2008, Rossman and Chance published an article entitled “Concepts of Statistical Inference: A Randomization-Based Curriculum” and introduced a series of applets that present the p-value at the beginning of an introductory course. A review of the literature will be presented followed by direct evidence of the integration of this curriculum into an introductory statistics course. The session will provide tips for using the technology, including the applets and the R statistical package.

Friday 11:15
Session - 13 Room - Kanawha Grades 9-12

How Does It Grow...or Does It?!

Presented by Tim Scripko (Southern York County School District)

Teachers will experience many problems and investigations around exponential explorations. The problems are interesting and lead to a better understanding of exponential growth or decay. The teachers will leave this session with lessons they can use in their classroom.

Friday 12:30

Session - 18 Room - Greenbrier Grades K-12

WVDE STEM and the WV STEM PK-12 Resource Clearinghouse

Presented by Karissa Poszywak (West Virginia Department of Education)

Join us to learn about the West Virginia Department of Education's vision, mission, goals and activities to promote STEM education. Also, learn about how to maximize your STEM collaboration through the WV PK-12 STEM Resource Clearinghouse --a directory of science, technology, engineering, and mathematics resources designed to support STEM for PK-12 grade students with separate pages for students, parents, educators, and community/industry partners.

Friday 12:30
Session - 19 Room - Bluestone Grades K-12

Teaching and Assessing Math in a Digital World—Patti Duncan

Presented by Patti Duncan (Discovery Education)

Students need a deeper understanding of math to be successful in today's world. This session will focus on practical instructional strategies and a variety of digital tools that school leaders and classroom teachers can use to help students become deeper mathematical problem solvers and thinkers.

Friday 12:30
Session - 15 Room - Tygart All Grades

Put me in coach!: Supporting teachers' instruction with coached rehearsal

Presented by Matthew Campbell (West Virginia University)

Facilitating mathematics discussions toward rich mathematical goals is difficult and complex work. This session will focus on the use of coached rehearsal of specifically designed instructional activities with preservice or practicing teachers to support instructional development. Videos of rehearsals will be shown and tools and resources to support this work will be provided. University teacher educators, PD leaders, coaches, and even teachers looking for ideas for collaboration are invited.

Friday 12:30
Session - 501 Room - Restaurant All Grades

SECOND LUNCH

choose only one lunch

Friday 12:30
Session - 16 Room - Birch Grades K-5

Mathematics Meets Literacy with Numberless Word Problems

Presented by Lynn Baker (Resa 2)

Solving mathematical word problems is more than manipulating numbers. Participants will explore numberless word problems to develop an understanding of the additive and multiplicative structures identified in the West Virginia College and Career Readiness Standards for Mathematics. Participants in this session will create a numberless word problem to correlate with their grade level standards and then transform this problem with the addition of numbers and a question.

Friday 12:30
Session - 20 Room - Kanawha Grades 3-8

AFT's Thinking Math: Multiplying and Dividing Fractions

Presented by Leah Shinaberry (Pocahontas County High School/AFT) and Amanda Shelton(Clay County Middle School/AFT)

This session will allow participants to increase quality instruction with fractions. AFT's Thinking Math workshops have been offered for several years at the state math conference, and this session will keep the focus on Thinking Math and its 10 principles, as well as the eight habits of thinking surrounding quality math instruction. Participants will walk away with good ideas for instructional practice concerning fractions, including differentiation and challenge activities.

Friday 12:30
Session - 17 Room - Gauley Grades 3-5

Puzzling Math

Presented by Susan Barrett (Nicholas County Schools)

You may be familiar with Sudoku, but what about Killer Sudoku, KenKen, and Kakuro? Come explore these and other math logic puzzles that provide computation practice, varying levels of challenge, and lots of fun!

Friday 12:30
Session - 26 Room - Ballroom 1 Grades 6-K

Tools of Talk: Tasks and Techniques for More Math Talk

Presented by Joanna Burt-Kinderman (Pocahontas County Schools)

Why talk math? How can I create conversation instead of chaos in my classroom? We've all read the evidence that talk in math classrooms is important. Yet the road to the professional student discourse is neither straight nor clear. An instructional coach shares her journey towards more discourse in math class, including role cards, talk-worthy tasks, techniques to turn the action over to the students, and tools to be your own coach and keep your own practice growing.

Friday 12:30
Session - 25 Room - Pecan Grades 6-12

Using Representations to Understand Proportional and Linear Relationships

Presented by Kate Nowak (Illustrative Math)

Trouble making sense of linear relations in grade 8 (and high school) can often be traced back to students' understanding (or lack thereof) of equivalent ratios in sixth grade. Participants will discuss instructional tasks that show how a careful sequence of representations can build understanding from equivalent ratios and constant rates to proportional relationships. This understanding can be leveraged to make sense of constant rate of change and therefore linear relations.

Friday 12:30
Session - 21 Room - Sutton Grades 6-8

Examining Middle School Students Beliefs about Testing Format in Math

Presented by Glen Smithberger (West Virginia University)

Do students' performance levels differ based on the type of assessment administered? Come hear about action research that explored the results of paper/pencil v. computer assessment. Learn about the impact on grades, classroom work, and expectations as 100+ students answered questions before and after four units of instruction.

Friday 12:30
Session - 22 Room - Ballroom 2 Grades 6-8

Math Stations for Middle Grades

Presented by Cathy Ferro (South Middle School)

Teachers will explore using stations in order to increase student engagement and group work. Examples will include fractions, word problems, and multiple levels of understanding.

Friday 12:30
Session - 24 Room - Potomac Grades 9-K

Logarithms -- Ideas to Improve Pedagogy and Retention of Concepts

Presented by Dennine LaRue (Fairmont State University)

Students have a difficult time with the topic of logarithms. Ideas and hands on activities will be shared to help students grasp the characteristics of this important function and how that behavior affects its algebraic properties. A tablet or laptop will be useful to access Desmos.

Friday 12:30
Session - 23 Room - Summersville Grades 9-12

Inquiry Based Learning

Presented by Tyler Gunnells (West Virginia University)

My research focus during my student teaching was how an Inquiry Based Learning (IBL) classroom impacts student learning and attitude. This presentation will describe an IBL classroom, provide examples of activities that I used as a student teacher, and the conclusions of my research.

Friday 1:45

Session - 32 Room - Ballroom 2 Grades K-12

How are you fostering a growth mindset in your school and classroom?

Presented by Kristine Hobaugh (Carnegie Learning Inc.)

This session will explore the research of Carol Dweck on mindset. “Students’ theories of what it means to be intelligent can affect their performance. Research shows that students who think that intelligence is a fixed entity are more likely to be performance oriented than learning oriented—they want to look good rather than risk making mistakes while learning. These students are especially likely to bail out when tasks become difficult.” (Dweck, 1989; Dweck and Legget, 1988)

Friday 1:45
Session - 28 Room - Kanawha Grades K-5

Thinking Math: Counting and Basic Facts

Presented by Gregory Merritt (Wood County Schools)

This session will allow participants to increase quality instruction through the use of counting. AFT's Thinking Math workshops have been offered for several years at the state math conference, and this session will keep the focus on Thinking Math and its 10 principles, as well as the eight habits of thinking surrounding quality math instruction. Participants will walk away with good ideas for instructional practice concerning counting and the retention of basic facts.

Friday 1:45
Session - 27 Room - Birch Grades K-2

Brain Breaks and Quick Fun Math Ideas

Presented by Kristina Painter (West Teays Elementary)

Kristina will share fun and exciting activities for young learners that take 10 minutes or less. Learn how to fill a small amount of time with educational, hands-on learning for students in grades K-2. Some activities can be done in only five minutes. These classroom-tested brain breaks are immensely enjoyable for students, but they provide multiple opportunities for learning and review as well. Participants will receive a packet full of brain breaks to take back to their classrooms.

Friday 1:45
Session - 33 Room - Sutton Grades 3-K

Cleaning Up Grading & Assessment

Presented by Derek Oldfield (Wirt County Schools)

In this session, participants will learn practical tips to more effectively measure learning in the math classroom. Ive been on the standards-based learning journey for 4 years and I believe my experience can support other teachers in the shifts to make their grades Fair-Accurate-Specific-Timely.

Friday 1:45
Session - 31 Room - Greenbrier Grades 3-12

Give problems spice with R-I-C-E!

Presented by Kyle Berry (Barboursville Middle School)

More than just a word-problem-solving strategy, the R-I-C-E method emphasizes analysis,

modeling, and communication strategies to build number sense and a deeper understanding of mathematics in general.

Friday 1:45
Session - 29 Room - Ballroom 1 Grades 3-5

Marvelous Math - Make it Fun!

Presented by Stacey McKenzie (Hampshire County Schools)

Participants will be given various games that will enhance student learning in the math classroom. Games will include ways to help students learn multiplication, word problems, and fractions.

Friday 1:45
Session - 36 Room - Gauley Grades 6-K

ABCs & 123s of Coding

Presented by Michelle Grooms (Texas Instruments)

New to coding or need more ideas to engage and excite your students? Use the new TI-Innovator™ Hub and your favorite TI graphing calculator to put the power of coding and engineering design into the hands of students. Learn the basics of coding and design, and use those skills to program and build working solutions, & connect STEM concepts using TI-84 Plus CE or TI-Nspire™ CX technology to control the TI-Innovator™ Hub.

Friday 1:45
Session - 37 Room - Maple Grades 6-K

Wheres the Math?

Presented by Karen Mitchell (Marshall University)

Increasingly students know tricks that help them produce answers. Unfortunately, many of these same students do not understand the mathematics behind their tricks. In this session participants will examine tricks like Slide-and-Divide, Keep-Change-Flip, the Good Fairy Principle and others for the mathematics that helps students make connections and generalize to other concepts.

Friday 1:45
Session - 38 Room - Bluestone Grades 6-16

Engaging Activity: Creatively Integrate Algebra, Geometry, Cryptology Grade

Presented by Tom Reardon (Fitch High School / Youngstown State University)

Get hands-on experience with this brand-new activity that incorporates writing equations of lines, solving systems of linear equations, using midpoints and perpendicular bisectors, and performing simple rotations, along with FUNdamentals of encryption and decryption of ciphers – STEM! These free activities include student worksheets and teacher notes and solutions. And they utilize either TI-84 or TI-Nspire! Solve algebraically, verify geometrically. Or solve geometrically, verify algebraically.

Friday 1:45
Session - 34 Room - Potomac Grades 6-12

Using Graphing Calculators to Model Linear and Exponential Functions

Presented by Natalie Dillinger (June Harless Center, Marshall University) and Tom Klein(Marshall University)

Exponential growth and decay functions will be investigated using skittles and dice. We will find the equation modeling the data from our investigations using the Transform APP and the TI-84 graphing calculator, then we will analyze the properties of the graph and test conjectures based on the equation. We can utilize the graphing calculator to compare exponential with linear functions using a mathematical task comparing different methods for saving money.

Friday 1:45
Session - 39 Room - Pecan Grades 6-12

Using Representations to Understand Proportional and Linear Relationships

Presented by Kate Nowak (Unknown)

Trouble making sense of linear relations in grade 8 (and high school) can often be traced back to students' understanding (or lack thereof) of equivalent ratios in sixth grade. Participants will discuss instructional tasks that show how a careful sequence of representations can build understanding from equivalent ratios and constant rates to proportional relationships. This understanding can be leveraged to make sense of constant rate of change and therefore linear relations.

Friday 1:45
Session - 30 Room - Tygart Grades 6-8

Lego and Do Da Math

Presented by Melanie Sheppard (Eastern Greenbrier Middle)

Join Melanie as she shares her 2015 Golden Holtan Project “Lego and Do Da Math.” She will share all of the activities and pictures of her students having fun while working with this unconventional manipulative. Melanie will also share a few other projects and activities that she uses in her classroom. When you leave this session, you will have several activities ready to take back to your classroom and use with your own students.

Friday 1:45
Session - 35 Room - Summersville Grades 9-12

Which Review Works Best? Using Student Choice in Unit Reviews for Math III LA

Presented by Rachel Burky (West Virginia University)

Unit reviews are common occurrences in high school math classes, but how can we easily determine what type of unit review works best? Throughout a nine-week research study conducted in Math III LA, different unit review methods were employed to determine what type of review worked the best for these students. We will discuss incorporating student choice into reviews and how that played a part in the types of reviews completed.

Friday 3:00

Session - 42 Room - Potomac Grades K-8

Number Talks in the Elementary and Middle School Classrooms

Presented by Amanda Menihan (Morgantown Learning Academy)

This will be a demonstration of what number talks are and how to implement them in both elementary and middle school classrooms. Participants will engage as if they were students followed by a discussion of the benefits of number talks to overall student number sense and depth of understanding.

Friday 3:00
Session - 43 Room - Summersville Grades K-8

Utilizing Music in the Mathematics Classroom

Presented by Carla Wilson (Concordia University Portland)

This presentation will promote the use of music within the math classroom. Educators will find activities to help students make connections to math through music.

Friday 3:00
Session - 41 Room - Kanawha Grades K-5

Thinking Math and Multiplication

Presented by Shea Ambrose (Scott Teays Elementary) and April McConihay(Conner Street Elementary)

This session will allow participants to increase quality instruction with multiplication of whole numbers. AFTs Thinking Math workshops have been offered for several years at the state math conference;this session will keep the focus on Thinking Math and its 10 principles,as well as the eight habits of thinking surrounding quality math instruction. Participants will walk away with ideas for instructional practice concerning multiplication, including differentiation and challenge activities.

Friday 3:00
Session - 40 Room - Birch Grades K-2

Loose Parts: Simple Materials to Enhance Mathematical Understanding

Presented by Elizabeth Houck (Marshall University Early Education STEAM Center) and Tarabeth Brumfield(Marshall University Early Education STEAM Center)

In this session, you will experience how you can easily integrate loose parts into every day lessons or stations. We will work together to investigate ways to utilize loose parts in every day math lessons, as well as share new ideas with each other. You will be provided with various loose parts to explore and learn how to set up loose parts experiences to go along with the West Virginia College- and Career-Readiness Standards for Mathematics. ||

Friday 3:00
Session - 47 Room - Pecan Grades 3-12

Introduction to Cooperative Learning in Math: PowerTeaching

Presented by Alex Rodriguez (Success For All Foundation)

Join regional coach Alex, who has been working with Pocahontas County middle school math teachers for the past 3 years, for an introduction to PowerTeaching Math. Participants will get an overview of a cooperative framework for teaching math that transfers the action of math learning from teacher to student. Middle school teachers who currently use PowerTeaching math will join Alex to give you a perspective of both teacher, student, and coach.

Friday 3:00
Session - 44 Room - Maple Grades 3-5

Runaway Rabbits! Reflecting on Prior Knowledge/Journals to Solve Problems

Presented by Victoria Beller (Poca Elementary School) and Debra Hackett(Poca Elementary School)

Oh, no! The rabbits have escaped! Use what you know about AREA, VOLUME, and PERIMETER to make a HOPPY HOUSE for these runaways. Reflect back on your prior knowledge (science connection about habitats and needs) and math journals that contain important formulas for finding measurements needed for a performance-task learning. Also incorporates higher level thinking skills through cooperative group work with an ACCOUNTABILITY TOOL for checking understanding, cooperation, and completion of task.

Friday 3:00
Session - 45 Room - Greenbrier Grades 6-8

Modeling Fractions/Operations Using Fraction Circles and Cuisenaire Rods

Presented by Lucie Refsland (New River Community & Technical College)

Join Lucie in a hands-on session to develop a conceptual understanding of fractions and their operations using various manipulatives and games.

Friday 3:00
Session - 46 Room - Gauley Grades 6-8

Reflective Conversations in the Mathematics Classroom

Presented by Sheila Ruddle (Retired) and Cynthia Burke(WV Department of Education)

Using the NCTM publication of the same name, Cindy and Sheila will guide you through 5 Practices for Orchestrating Productive Mathematics Discussions (2011, Smith and Stein). The session topic is appropriate for all grades, however the mathematical tasks will be on a middle school level.

Friday 3:00
Session - 49 Room - Sutton Grades 9-K

Redesigning Developmental Math and Taking it to Scale in a College Setting

Presented by Lindsey Walck (Fairmont State University)

Attendees will be given an overview of Math Support at Fairmont State. Developmental Math courses have been replaced with co-requisite and accelerated learning models. All students can now progress through gateway courses within their first year, regardless of test scores. Gateway courses are offered with additional support to aid students in learning and understanding and fill in any gaps. Fairmont State is currently one of only a few colleges in WV offering these services at full-scale.

Friday 3:00
Session - 48 Room - Tygart Grades 9-12

Reflecting on Math 2 Probability

Presented by Kerri Swails (University High School)

This session will focus on the probability content taught in Math 2. All topics, as well as the

content associated with these topics, will be discussed. Activities and other resources will also be shared.

Saturday 8:30

Session - 50 Room - Sutton All Grades

I Thought I Taught That!

Presented by Deborah Seldomridge (Keyser High School Retired)

All of us have said this more times than we can count. We teach and we believe that our students get it, but they don't hold on to what they've learned. This session will explore ways to make our teaching stick.

Saturday 8:30
Session - 52 Room - Tygart Grades K-8

Utilizing Technology in the Math Classroom

Presented by Lee-Dorah Wokpara (Mountain Ridge Middle School) and Lindsay Michaels(Sherrard Middle School)

In this session you will learn how to use several different math websites and explore ways to utilize the material available from these sites in your math classroom. Some of the websites being explored will include Bedtime Math, StudyJams, YouTube, BrainPop, and Flocabulary. Presenters will share experiences and give tips and ideas on how to effectively use these resources in the classroom.

Saturday 8:30
Session - 51 Room - Birch Grades K-5

Question, Question Who has the Question

Presented by Roger Bennett (Carnegie Learning, Inc)

Participants will work through five stations using common objects to create ways to pose questions to help students reach deeper in their mathematics knowledge. Participants will work through four stages of good questions for each of the stations. Wait time and less Teacher Talk will be a focus.

Saturday 8:30
Session - 55 Room - Pecan Grades 3-8

Getting Creative With Math

Presented by Sheryl Hulmes (Eastern Greenbrier Middle School) and Casey Whitlow(Eastern Greenbrier Middle School)

Sheryl Hulmes and Casey Whitlow will take you on an adventure where you will discover multiple activities to make your classroom creative.

Saturday 8:30
Session - 53 Room - Ballroom 2 Grades 3-5

Math: A Family Affair

Presented by Joseph Wood (Glenville State College) and Kimberly King(Glenville State

College Hidden Promise Consortium)

Teachers who attended a workshop last summer at Glenville State College were engaged in several hands-on activities related to base ten operations. The activities demonstrated how to involve families and community members in mathematics. Teachers will share their own strategies as well as those from the workshop. Attendees can expect an engaging, practical session which will leave them with several ideas of how to engage families and the community in mathematics.

Saturday 8:30
Session - 54 Room - Gauley Grades 3-5

Building Understanding of Equivalent Fractions and Fraction Operations

Presented by Thomas Klein (Marshall University) and Natalie Dillinger(Marshall University)

Join us as we discuss strategies that you can use to build your students' understanding of equivalent fractions and fraction operations. Participants will be actively engaged in this session by completing activities using Cuisenaire rods and pattern blocks.

Saturday 8:30
Session - 61 Room - Maple Grades 6-16

Transformational Geometry - Immediate Interactive Investigations 15 Seconds

Presented by Tom Reardon (Fitch High School / Youngstown State University)

Creatively integrate discovery, reasoning, technology, and pedagogy: Play Investigate Explore Discover reflections, translations, rotations, and dilations. Your students will become engaged quickly (15 seconds or less) and deeply by interacting with the geometry. Obtain all free materials. We will do as many of these activities as possible in the time we have. Each participant will receive the software that runs these amazing activities for free. Works on handhelds, iPads, and software.

Saturday 8:30
Session - 56 Room - Kanawha Grades 6-12

Using Free Technology to Get Students Talking About Math

Presented by Michelle Weekley (Wetzel County Schools)

Facilitated by a certified Microsoft Innovative Educator, participants will learn how to use Office 365 and other free technology to encourage discourse and initiate beneficial feedback in 6-12 mathematics courses. OneNote, Office, Sway, and Plickers are among the programs that will be explored. Several strategies will be shown, including ones where all students will need devices and ones where only the teacher needs a device. Participants are asked to bring a laptop if possible.

Saturday 8:30
Session - 57 Room - Bluestone Grades 6-12

MDC: The building blocks for college and career ready students.

Presented by Randi Nichols (DuPont Middle School) and Brittany Dameron(Riverside High School)

This multi-faceted session will look at the benefits of students being involved in MDC from

middle school to high school in a rural setting and how MDC is providing these students with the tools they need to think critically in their post secondary endeavors. We will discuss how having students exposed to MDC before high school affects the implementation at the high school level. This session will also discuss why our students in particular are doing so well with MDC lessons

Saturday 8:30
Session - 58 Room - Potomac Grades 6-12

Climbing the WV TREE of Math Resources

Presented by Amy Cowgill (Frankfort High School)

Are you tired of searching the internet for resources for your classroom? Weve narrowed the entire internet to this list! Teachers will explore the weebly collection of resources put together by teachers from around West Virginia. Participants should bring laptops.

Saturday 8:30
Session - 59 Room - Summersville Grades 9-K

Extending the Number of Rounds in a Tournament

Presented by Paul Peck (Glenville State College)

Participants in the session will have an opportunity to explore, conjecture, and generalize starting from a problem of determining the maximum number of rounds possible to complete a tournament subject to some very natural scheduling rules. The content of the presentation is related to graph theory and other combinatorial topics in discrete mathematics. There may be connections to topics in computer science as well.

Saturday 8:30
Session - 60 Room - Greenbrier Grades 9-12

Reflecting on Math in a Computer Science Course

Presented by Neil Reger (Buckhannon-Upshur High School) and Cheryl Reger(Buckhannon-Upshur High School)

Participants will discuss the content standards in the new programming course designed to provide students with the opportunity to explore mathematics and coding as tools in creating effective solutions to complex problems. Participants will explore internet resources and develop computer science algorithms to refine fundamental skills within a mathematical context. If possible, participants should bring a laptop.

Saturday 9:45

Session - 66 Room - Potomac Grades K-12

We Want You for the Presidential Award!

Presented by Cathy Walker (Retired) and Cindy Burke(WVDE)

The Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) are the nation's highest honors for teachers of mathematics and science. Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of mathematics and science education. Although the 2017 awards will honor teachers working in grades 7-12, this session will examine the application process for all grades.

Saturday 9:45
Session - 62 Room - Sutton All Grades

Mathematics Animation Magic

Presented by Gary Seldomridge (Potomac State College (Retired))

In Powerpoint, it is difficult to create mathematical symbols and drawings. It is more difficult to animate those symbols and drawings. Mathematics Animation Magic is a software package developed by the presenter to develop animations of drawings, mathematical text, and graphs that can be presented with or without an internet connection. Whether you are teaching addition of fractions or multivariable calculus the software can make the topic come alive in a way limited only by your imagination.

Saturday 9:45
Session - 63 Room - Ballroom 2 Grades K-5

Math and Literature

Presented by Cheryl Ingraham (Brookview Elementary)

We will be using Greg Tangs books to show grouping numbers in different ways and encouraging students to discover different ways to problem solve. Smart sums, patterns and symmetries Oh my!

Saturday 9:45
Session - 64 Room - Kanawha Grades K-5

Pondering Problem Solving: A Look at Elementary Three-Act Math Tasks

Presented by Coleen Vannoy (Kanawha County Schools)

Venture through the looking glass with us to the world of engaging problem solving. New strategies will be introduced and we will take a closer look at Three-Act Math tasks for elementary students that are aligned to the WV College and Career-Ready Standards.

Saturday 9:45
Session - 65 Room - Maple Grades 3-5

Making Math Memorable

Presented by Holly Williams (Hugh Dingess Elementary)

Do your students love math? They can and will by implementing these hands-on activities that will make math memorable and fun! Attendees will receive lessons on fractions, decimals, division, and more that they can take back to share with their students!

Saturday 9:45
Session - 74 Room - Tygart Grades 6-16

Tell us about it! Making Student Reasoning Central to Class Discussions

Presented by Stephanie Jones (Fairmont State University) and Matthew Campbell(West Virginia University)

To gain a thorough grasp of mathematics, students must have opportunities to share their reasoning with others and to listen and respond to other students' reasoning. We will discuss research-based teaching practices that help teachers make student reasoning central in whole-class discussions. Practical applications for classroom teachers will be discussed and a

framework for an instructional activity that may be used to help facilitate students' thinking and classroom discussion will be shared.

Saturday 9:45
Session - 68 Room - Gauley Grades 6-12

Engaging Students in Active Learning

Presented by Jerry Pomeroy (Retired) and Judy Pomeroy(RESA 4)

Strategies to engage students in collaborative conversations and deeper thinking will be shared. Participants will be actively involved in session activities.

Saturday 9:45
Session - 69 Room - Bluestone Grades 6-12

Planning for a Sub in a Crunch!

Presented by Samantha Service (Mountain Ridge Middle School) and Lee_Dorah Wokpara(Mountain Ridge Middle School)

This dynamic session will help veteran and new teachers alike help with the tedious prep that comes with being out of the classroom. Presenters will offer advice and resources to make planning for a substitute as simple and clear as possible.

Saturday 9:45
Session - 70 Room - Pecan Grades 6-12

Math KNEXtions

Presented by Susan Hausrath (Frankfort High School)

I have been using K'NEX in my classroom to teach various math concepts and I have been getting great results. I have been able to differentiate for all levels of instructions. The students are engaged and able to see the math happen. Typical K'NEX lessons are used in the science classroom. I have used the science concepts to write lessons that aid in the understanding of math. I will be using a carousel construction for the presentation and sharing how I use this to teach the math.

Saturday 9:45
Session - 71 Room - Birch Grades 6-12

Lets Do Some Math!

Presented by Jeremy Knight (Spring Mills Middle School)

Ready for some stress relief? For us math teachers, that means an hour of engaging math problems and challenges. Come join me to stretch your brain doing what you love best -- math!

Saturday 9:45
Session - 67 Room - Ballroom 1 Grades 6-8

The Day Literacy Came to Math Class: Cross-Curricular Adventures in Math

Presented by Melody Wise (Glenville State College) and Joseph Wood(Glenville State College)

Middle school Math, Social Studies, and ELA teachers who attended an ITQ workshop at

Glenville State College addressed obstacles in developing cross-curricular relationships and then designing appropriate performance-based assessments. Attendees will examine literacy strategies and PBA using West Virginia material. Attendees will leave with examples of performance-based assessments and skeleton plans for developing more to meet the needs of their own students.

Saturday 9:45
Session - 73 Room - Greenbrier Grades 9-K

If at First You Dont Succeed; Trig, Trig Again.

Presented by Adam Fletcher (Bethany College)

Whatever happened to a good old fashioned trigonometry course? Join Adam for a discussion of interesting ways to use trigonometry to enhance and enrich a high school math class. We will discuss ways to use trig to improve our students college and career readiness.

Saturday 9:45
Session - 72 Room - Summersville Grades 9-12

Reflecting on the Summative Assessment

Presented by Cheryl Reger (Buckhannon-Upshur High School) and Neil Reger(Buckhannon-Upshur High School)

Participants will be engaged in sharing strategies to help students prepare for the Summative Assessment. Because the assessment is so closely aligned with the WV standards, targeting the standards is the most important strategy; however, familiarity with the test format can also help. Come prepared to share improvement ideas and learn what other schools are doing.

Saturday 11:00

Session - 77 Room - Ballroom 2 Grades K-8

Just the Facts, Please

Presented by Janice Hirst (Kingwood Elementary)

Math fact fluency is important for students in order to become proficient with the WV College and Career Readiness Standards for Mathematics. Fact fluency frees a child's working memory for higher level tasks. Some schools in our district invested in a technology-based fluency program to address this key area of mathematics. In this presentation, I will share an overview of the program, its impact, and strategies for recognizing student achievement in math fact fluency.

Saturday 11:00
Session - 75 Room - Bluestone Grades K-5

Slide Math manipulative for beginner, at risk, or special needs students.

Presented by Walt Cline (Burch Pre K-8) and Teresa Cline(Mingo Central High School)

You will be introduced to a new math concept that was developed to give students a visual and hands on concept of sets/groups for multiplication and division. This math manipulative gives student an opportunity to learn math through all five learning modalities. Slide Math can be used with Go Math content standards in math K-5 in addition, subtraction, multiplication, and division. Slide Math is a great tool for beginners, at risk, or special needs learners.

Saturday 11:00
Session - 76 Room - Ballroom 1 Grades K-5

Gamification of the Math Classroom Using Grid Games: Using Game Structures

Presented by Christine Mulgrave-King (CKingEducation)

Gamification of the math class shows teachers how they can easily (and inexpensively) use grid game structures to support the development of math skills and concepts across domains, while promoting discourse, collaboration and engagement. If you would like to learn how to move beyond the worksheet and still help your students become more proficient, while being engaged in math, then learn how to gamify your classroom.

Saturday 11:00
Session - 86 Room - Kanawha Grades 3-K

Create & Use Interactive Assessment Questions to Improve Comprehension

Presented by Barbara Zingg (Washington High School)

Edulastic is a program that allows teachers to draw from already established test banks as well as create their own questions and assessments with a wide variety of interactive question options. Participants will work with the program to create their own assessments and discuss ways to use this program effectively to enhance comprehension and improve computer-based test scores through greater understanding of question manipulation. Class/home use of this teaching tool will be discussed.

Saturday 11:00
Session - 79 Room - Greenbrier Grades 3-8

WVs Own Math Field Day - Still Going Strong

Presented by Donna Coombs (Braxton County Schools)

Math Field Day started as a Braxton County event for 1st through 8th graders 46 years ago. It has since evolved to include some local school events, as well as county, regional and state competitions for students in grades 4-9 (and 10-12 at the high school level). In this session, you can find useful information on setting up your own events - including activities you can use for your classroom/school competitions and practices.

Saturday 11:00
Session - 78 Room - Birch Grades 3-5

Spinners for Beginners

Presented by Dave Kennedy (Shippensburg University of PA)

Clear plastic spinners can be placed on top of different bases to generate data. Well use spinners to tell fortunes, create random decimals, roll dice, and stimulate thinking about probability. A game of sketch the secret spinner will be played.

Saturday 11:00
Session - 84 Room - Sutton Grades 6-K

Reflecting on Math from Days Gone By

Presented by Jeanne Finstein (Polyhedron Learning Media) and Adam Fletcher(Bethany College)

Although math basics themselves have remained the same over the years, instructional methods and some math content have seen significant changes. This presentation will include examples of math lessons from the 19th century, along with some of the history and reasoning behind them.

Saturday 11:00
Session - 80 Room - Maple Grades 6-12

Reflecting on a Year with Desmos

Presented by Mark Alvaro (University High School) and Melissa Farley(University High School)

In this session, participants will learn about the teacher.desmos.com website and what it has to offer. There are tons of pre-made and searchable activities for teachers to implement with their students. Participants will also learn how to make their own interactive math activities using the Desmos Activity Builder using lessons learned from the Desmos teaching faculty. Participants should bring laptop computers.

Saturday 11:00
Session - 81 Room - Summersville Grades 6-12

Not Just Number: Supporting student talk around representation and concept

Presented by Matthew Campbell (West Virginia University)

While “Number Talks” has become an increasingly common instructional practice for elementary classrooms, middle and high school teachers also need a broader range of routines for engaging students in a wide variety of mathematical ideas. This session will focus on activities for teachers to use that engage students in mathematical talk, with a focus on using mathematical structure and developing mathematical language and conceptual understanding. Specific examples will be modeled for and resources will be provided.

Saturday 11:00
Session - 83 Room - Pecan Grades 6-8

Teachers Reflecting Relevant, Fun Math

Presented by Beckey Hall (Lewis County Schools)

This session will focus on hands-on activities to engage and challenge learners. Teachers can motivate students with fun and relevant content through games that count! The activities align with West Virginia Math Standards and best practices.

Saturday 11:00
Session - 85 Room - Tygart Grades 9-K

WvEB Math: A Dual Enrollment Program for High School Students

Presented by Laura Pyzdrowski (West Virginia University) and Anthony Pyzdrowski(California University of PA)

This year, over 800 WV high school students are enrolled in College Algebra, 600 students in College Trigonometry and 25 students in Calculus I through a blended learning, concurrent enrollment opportunity. Join us in this session to learn about how this program was started, how the classes work, and the success of students.