NHSTE ~ Tech Teachers/Integrators SIG

Technology Tools Linking Math & the Common Core State Standards

SERESC, Bedford, NH

Thursday, April 10, 2014

OPENING SESSION (9:00 to 9:45) in Rooms 200/201

Have You Flipped? Fun, Interesting Ways to Make Students Active Math Learners
presented by *Randy Wormald, HS Math Teacher, Kearsarge Regional SD (randy@drworm.org)*

Student engagement is the focus! Learn how we can support the CCSS for Mathematical Practice by flipping a classroom, making cartoons, and exploring a number of free tech tools.

REMINDER: the **Exhibitor Playground Area** is open from 8:30 a.m. to 3:10 p.m., so be sure to plan a time to check this out and get some "hands-on" experience with our eight exhibitors!

AM CONCURRENT SESSIONS

Session 1: 10:00 to 10:35 ~ Please select one of the following sessions:

Room 200	Room 201	Room 210
Dip into a Flipped Classroom! *[K-5]*	***Are your students ready for math at the next level?*** *[6-12]*	***Mission Possible: Changing Course for Math Fact Fluency!*** *[4-8]*

Dip into a Flipped Classroom! *[K-5] ~ Amy Moskwa, 4th Grade Teacher & Debra Rodd, Technology Integration Teacher, Bedford SD, moskwaa@sau25.net & roddd@sau25.net*

Discover how this fourth grade teacher has dipped into "Flipped Instruction" in math and across all content areas. Come explore how to engage students using technology as a tool for math instruction.

Are your students ready for math at the next level? *[6-12] ~ Scott Prescott, Director of Instruction, VLACS, sprescott3@vlacs.org*

Come and explore two exciting new math options for students through VLACS: *College Math Readiness* and *Developmental Math*. Using a comprehensive pre-assessment, *College Math Readiness* creates an individualized learning path for each student to prepare the student for introductory math at the college(s) of their choice. A certified math instructor supports each student, tracks individual progress, and meets regularly with the each to coach them through material. *Developmental Math* is design for student in grades 6-12. For acceleration, remediation, or additional challenge, students select individual topics of study from arithmetic through trigonometry. Each topic begins with a pre-assessment so students only work on material they have not yet mastered. Each unit consists of videos, sample problems, practice problems, tutorials, puzzles and a final assessment. Come and discuss the variety of ways schools and students can use these tools.

Mission Possible: Changing Course for Math Fact Fluency! *[4-8] ~ Kathleen Kaplan, Explore Learning, Kathleen.Kaplan@explorelearning.com*

Many students have limited math fact fluency. If left unaddressed, this hinders progress with more advanced math topics. Traditional methods for developing fluency can be ineffective for most students. Students who can automatically recall math facts are more capable problem solvers, learn new math skills more quickly, and are more likely to succeed in future math courses. Finally – a successful classroom technique that is changing test scores, and attitudes, even has them asking for more!

Session 2: 11:00 to 11:35 ~ Please select one of the following sessions:

Room 200	Room 201	Room 210
Reverse instruction: the Art of Flipping Your Classroom *[9-12]*	***Probability Carnival*** *[4-5]*	***Learning Progression, Technology, & the CCSS*** *[K-12]*

Reverse instruction: the Art of Flipping Your Classroom *[9-12] ~ Brian Sullivan, Math Teacher, CATS Academy, Boston, brian@sullivanleadership.com*

Learn about "flipped teaching" from philosophy to the mechanics of implementation. Explore tools used to flip lessons including: iPad, on-line resources, Quicktime, and specialized software. Brian also devotes time to the challenges experienced of reversed instruction and concludes with Q&A and group discussion.

Probability Carnival *[4-5] ~ Rebekah Gonzalez, PE Teacher & Jasmyn Gray, Art Education Teacher, Laconia SD, rgonzalez@laconiaschools.org & jgray@laconiaschools.org*

Join Rebekah and Jasmyn as they provide an overview of the steps necessary to create an integrated school wide project that targets school deficits based upon NECAP and NWEA scores. Last year they looked at statistics and probability to determine target areas, then they created subject specific lessons using these math skills in real life applications in Physical Education, Art, and Technology. As a culminating event students participated in a school wide Probability Carnival.

Learning Progression, Technology, & the CCSS *[K-12] ~ Jerry Scacchitti, Renaissance Learning, jerry.scacchitti@renlearn.com*

Explore how teaching and learning in the classroom can be improved to increase student achievement by integrating learning progressions and the Common Core State Standards (CCSS) with technology and research-based, highly motivating software. By using learning progressions and ability-appropriate standards in the CCSS strands, teachers observed an average of over 3 years of growth in their students during a 6-month period and an 8-point gain in the math NECAP score for the fall 2012 testing. Through the incorporated use of technology with learning progressions, teachers saw instant results to how data, technology, and the CCSS can be used to improve classroom instruction and student learning.

POST LUNCHEON PRESENTATION (12:30 to 1:00) in Rooms 200/201

Apps & Tools to Engage Your Learners in Math

presented by Kathleen McClaskey, CEO, Personalize Learning, LLC (khmcclaskey@gmail.com)

Discover how apps and online interactive tools are used to support the CCSS in math and what research indicates is the most effective math instruction. Walk away with the resources that can empower your standards-based math instruction and engage your learners in math.

PM CONCURRENT SESSIONS

Session 3: 1:20 to 1:55 ~ Please select one of the following sessions:

Room 200	Room 201	Room 210
Why & How to "Flip" Your Math Classroom *[6-8]*	***Apps & Tools to Engage Your Learners in Math ~ A Deeper Dive*** *[K-12]*	***Blended Learning, CCSS, & Math Instruction- What can this look like in your classroom or district?*** *[K-8]*

Why & How to "Flip" Your Math Classroom *[6-8] ~ David Gilbert, Math Teacher, Windham HS, dgilbert@windhamhighschool.org*

Two and a half years ago I "flipped" my middle school Algebra classroom and I will never go back. Come learn about my successes, failures, and lessons learned. Leave empowered with knowledge of the strategies and tools to give it a try in your classroom.

Apps & Tools to Engage Your Learners in Math ~ A Deeper Dive *[K-12] ~ Kathleen McClaskey, CEO, Personalize Learning, LLC, khmcclaskey@gmail.com*

Dive deeper with Kathleen as she focuses on a few of the apps presented during her luncheon presentation. Explore and experience a selection of apps and online interactive tools used to support the CCSS in math. Walk away with a deeper knowledge of resources that can empower your standards-based math instruction and engage your learners in math.

Blended Learning, CCSS, & Math Instruction- What can this look like in your classroom or district? *[K-8] ~ Robert Finnegan, Houghton Mifflin Harcourt, Robert.Finnegan@hmhco.com*

Participate in a presentation built to guide you through a "Day in the Life" of a Student and Teacher in a blended learning environment. Presenters help to clarify the cloudy picture of technology terminology in education, experience the possibilities of a blended classroom, and introduce innovation for today and tomorrow. The goal is to for you to come leave this presentation with ideas you can implement today with your students and discussions you will want to have with your districts tomorrow!

Session 4: 2:20 to 2:55 ~ Please select one of the following sessions:

Room 200	Room 201	Room 210
Magnifico Math Apps ~ a Googolplex of Knowledge via iPad Apps! *[K-12]*	***Are your students ready for math at the next level?*** *[6-12]*	***Tied by Tech? Common Core Anywhere, Any Device*** *[K-12]*

Magnifico Math Apps ~ a Googolplex of Knowledge via iPad Apps! *[K-12] ~ Diana, Petschauer, Assistive Technology Professional, Assistive Technology for Education, LLC, dp.atspecialist@gmail.com*

Come learn about magnificent iPad apps that support your math instruction K-12, from foundational and elementary skills to Algebra, Geometry, and Calculus! Engage your students during lessons and instruction or provide access to Math apps to support instruction. If you have students who need a multi-sensory approach or simply need follow up practice at home or at school, while being engaged and having fun, these iPad apps will certainly help your students learn and progress with their peers. Apps for students who struggle with the math instruction/application will also be demonstrated. Learn how to make your math worksheets accessible to all learners on an iPad.

Are your students ready for math at the next level? *[6-12] ~ Scott Prescott, Director of Instruction, VLACS, sprescott3@vlacs.org*

Come and explore two exciting new math options for students through VLACS: *College Math Readiness* and *Developmental Math*. Using a comprehensive pre-assessment, *College Math Readiness* creates an individualized learning path for each student to prepare the student for introductory math at the college(s) of their choice. A certified math instructor supports each student, tracks individual progress, and meets regularly with the each to coach them through material. *Developmental Math* is design for student in grades 6-12. For acceleration, remediation, or additional challenge, students select individual topics of study from arithmetic through trigonometry. Each topic begins with a pre-assessment so students only work on material they have not yet mastered. Each unit consists of videos, sample problems, practice problems, tutorials, puzzles and a final assessment. Come and discuss the variety of ways schools and students can use these tools.

Tied by Tech? Common Core Anywhere, Any Device *[K-12] ~ Lincoln Sexton, McIntire Business Products, lincoln@mbp-inc.com*

Bring your device and participate! Engage in a live introduction to classroom instructional technology using Common Core principles for math instruction. An eBeam is an interactive classroom tool that allows student participation and interaction with lesson plans or teacher led activities whether in class or via tablets, smartphones and computers. Any Device. Any Lesson. Anywhere.

~~~~~~~~~~~~~ *NHSTE Supports "Going Green" by Posting Digital Resources* ~~~~~~~~~~~~~

- Our presenters are encouraged to "**Go Green**" and print a minimum number of handouts. Instead we encourage them to post their resources on the TT SIG #2 apr-10-14 wiki.
- The address for the workshop wiki is: **http://nhste-ttsig2-apr-10-14.wikispaces.com**
- If you have never used a wiki, do not fear, it is simple to access and easy to post. We have created this as a public wiki, so anyone with the address can go to the site, post comments, share resources, and access workshop information. You do not need to set up an account to access or post to this page.
- When you go to the wikispace, you will see a copy of this handout pasted on the page. There will be a space following each session description for the presenter to add links or upload files that you can download.
- If you want to add to the wiki, click on the Edit button in the top right-hand corner. Please proofread your comments for grammatical correctness and be professional in your postings. Remember to save when you are through!
- Join us and become part of the interactive web!

Here are a few links you might find helpful as well . . .

- Mathematics Common Core State Standards ~
  http://www.corestandards.org/Math/
- ISTE National Technology Standards for Students (NETS•S) ~
  http://www.iste.org/standards/standards-for-students
- Parents Magazine 10 Best Math Apps for Kids ~
  http://www.parents.com/kids/education/math-and-science/best-math-apps-for-kids/
- Common Sense Media Math Apps & Learning Tools for Kids ~
  https://www.commonsensemedia.org/lists/math-apps-and-learning-tools-for-kids
- App Advice Apps Gone Free ~
  http://appadvice.com/applists/show/fun-math-apps-for-kids
- MacWorld Favorite Math Apps for Kids
  http://www.macworld.com/article/2040680/favorite-math-apps-for-kids.html
- New York Times article – With Apps, Children Can Play the Game of Math
  http://www.nytimes.com/2013/11/14/technology/personaltech/with-apps-children-can-play-the-game-of-math.html?_r=0

Please note that listing of the above resources is not an endorsement of any organization or product.