



## Science, Mathematics, and Instructional Technology Conference for Grades 4-12 Educators

**Thursday, March 20, 2008 Location: Clarkson University, Potsdam, NY 13676**

7:30 – 8:30 a.m.	Registration – New Snell Hall (Hill Campus) (Morning Refreshments Served and Vendor and Poster Displays)																			
8:30 – 9:30 a.m.	<p><b>Keynote with Dr. Gary Stager – “Constructing Modern Knowledge: A Computational Approach to Science, Math and Technology”</b>- The 1990 NCTM Standards said that 50% of all mathematics has been invented since World War II, yet nearly twenty years later little of that new mathematical content has found its way into the curriculum. The same is true for science education. Whole new computational domains motivate children to explore the frontiers of math, science and engineering while developing traditional skills in a meaningful context. Engineering activities, including robotics and computer science, concretize abstract concepts and provide the tools students need to solve problems across the grades, subject areas and as citizens. Examples will be shared.</p> <p style="text-align: center;"><b>OR</b></p> <p>Keynote with Roger Essley - “A Picture is Worth a Thousand Words...or More” Roger Essley is an author, artist, educator, and teacher educator. In this inspirational session, Roger will share how he turned his own difficult experiences as a student with dyslexia into new classroom strategies for all teachers to use. He will share his story and give an introduction to using visual tools in your very own classroom to reach all students, even those most difficult to engage in any classroom activity or assignment. Roger Essley is an author, artist, educator, and teacher educator. In this inspirational session, Roger will share how he turned his own difficult experiences as a student with dyslexia into new classroom strategies for all teachers to use. He will share his story and give an introduction to using visual tools in your very own classroom to reach all students, even those most difficult to engage in any classroom activity or assignment.</p>																			
9:30 – 9:45 a.m.	BREAK																			
	STEM Sessions for Teachers Gr. 4-12					Math Sessions for Teachers Gr. 4-12					Science Sessions for Gr. 7-12			MST Sessions Gr. 4-12			General Interest Grades 4-12			
9:45 – 10:45 a.m.	VEX Robotics Gr. 7-9	Finding NANO Gr. 4-12	Roller Coaster Camps (Math and Physics Teachers) Gr. 4-12	St. Lawrence County STEM Initiatives Gr. 4-12	Math & Magic = Enrichment Gr. 4-6	Engaging Problems with Unexpected Answers Gr. 7-12	Back to the Future with Geometry: Transitioning from Math A/B to Geometry Gr. 9-11	Connecting Algebra and Geometry in HS math Gr. 8-11	Integrating Literature and Math Gr. 4-6	NASA- Electro magnetic Spectrum Gr. 4-9	Using Google Earth & Sky Effectively Gr. 4-12	Cancer and the Cell Cycle Gr. 7-12	Using Probes to Connect Pre-Calc and Physics Gr. 11-12	Question & Answer Session w/Stager Gr. 4-12	Collins Writing in the Middle School Math and Science Classroom Gr. 4-8	Making Writing Easier in Grades 4-6 Science and Social Studies Gr. 4-6	PowerPoint & PhotoStory in the Middle School Resource Room Gr. 4-8	Visual Tools in the Middle School English and SS Classroom w/Essley Gr. 4-12	Active Learning Strategies For Standardized Test Prep Gr. 4-8	Goody Goodies for Your Classroom Gr. 4-12
11:00 – 12:00	Cheel Campus Center - Lunch & Poster Displays																			
12:15-1:15 p.m.	Lego Robotics Gr. 4-6	Genetics Gr. 4-12	Computer Graphics: Math & Technology Projects for MS & HS Gr. 4-12	Health Sciences Gr. 4-12	The History of Tangrams Gr. 4-6	Using the Smart Airliner in HS Math Gr. 7-12	Back to the Future with Geometry: Transitioning from Math A/B to Geometry (repeated) Gr. 9-11	Pi Plate Trig Gr. 11	Hands-On Math Gr. 4-6	Visual Tools in the Science Classroom w/Essley Gr. 4-12	Google Earth & Sky Work Session Gr. 4-12	The Science of Food Gr. 7-12	On the Shoulders of Technology in Math Gr. 6-12	Receptive Teaching: A Natural Approach to Identifying High-Tech Learning w/Stager Gr. 4-12	TI Smartview in HS Math Gr. 9-12	Reading Comp Strategies to Improve Social Studies Instruction Gr. 4-12	Discipline without Stress Punishment or Rewards Gr. 4-12	Literature About Special People and Special Needs Gr. 4-12	Active Learning Strategies Facilitated Work Session Gr. 4-8	Goody Goodies for Your Classroom (repeated) Gr. 4-12
1:15 – 1:30 p.m.	BREAK																			
1:30-2:30 p.m.	Promoting Energy Literacy Gr. 4-12	Cyber Civics Gr.7-12	From Contest to Classroom Gr. 5-12	St. Lawrence County STEM Initiatives (repeated) Gr. 4-12	Making Math AIS Work Gr. 4-12	Visual Tools in the Middle School Math Classroom w/Essley Gr. 4-8	Algebra in Motion in Math A Gr. 7-10	Great Ways to Include Technology in Your Math Lessons Gr. 4-6	NASA- Electro magnetic Spectrum (repeated) Gr. 4-9	Google Earth & Sky Work Session (repeated) Gr. 4-12	Be Inspired with TI Nspire in HS Science Gr. 9-12	On the Shoulders of Technology in Math (repeated) Gr. 6-12	Question & Answer Session w/Stager Gr. 4-12	Exploring Internet Resources in Math and Science on Thinkfinity Gr. 4-12	Building a Democratic Classroom Community Gr. 4-12	VESID Information Session Gr. 4-12	Teachers as Readers Gr. 4-12	Student Run Activities: Practical Strats for Classm Application Gr. 4-12	Goody Goodies for Your Classroom (repeated) Gr. 4-12	

**Math, Science, and Instructional Technology Conference for Gr. 4-12 Educators  
Thursday, March 20, 2008  
Clarkson University, Potsdam, NY 13676**

**7:30 A.M. – 8:30 A.M.  
Registration in Snell Hall. Morning Refreshments and Vendor exhibits.**

<b>Keynote Address Choices 8:30 A.M – 9:30 A.M.</b>
<p><b>Constructing Modern Knowledge: A Computational Approach to Science, Math, Technology with Gary Stager <a href="http://www.stager.org">www.stager.org</a></b></p> <p>The 1990 NCTM Standards said that 50% of all mathematics has been invented since World War II, yet nearly twenty years later little of that new mathematical content has found its way into the curriculum. The same is true for science education. This is particularly unfortunate since computers make it possible to learn traditional content with less pain and perhaps greater understanding. More importantly, whole new computational domains motivate children to explore the frontiers of math, science and engineering while developing traditional skills in a meaningful context. Engineering activities, including robotics and computer science, concretize abstract concepts and provide the tools students need to solve problems across the grades, subject areas and as citizens. Examples of best teaching practices and student projects will be shared.</p> <p>GARY STAGER, Editor, Educational Visionary For 25 years, Gary Stager, Ph.D., an internationally recognized educator, speaker and consultant, has helped learners of all ages on six continents embrace the power of computers as intellectual laboratories and vehicles for self-expression. He led professional development in the world's first laptop schools (1990), has designed online graduate school programs since the mid-90s and is a collaborator in the MIT Media Lab's Future of Learning Group. Dr. Stager's doctoral research involved the creation a high-tech alternative learning environment for incarcerated at-risk teens. Recent work includes teaching and mentoring some of Australia's "most troubled" public schools. Gary is Senior Editor of District Administration Magazine, Editor of The Pulse: Education's Place for Debate, Adjunct Professor at Pepperdine University and an Associate of the Thornburg Center for Professional Development. Dr. Stager is also the Executive Director of The Constructivist Consortium. In 1999, Converge Magazine named Gary a "shaper of our future and inventor of our destiny." The National School Boards Association named Dr. Stager one of "Twenty to Watch" in 2007. Most recently, Gary was the new media producer for The Brian Lynch/Eddie Palmieri Project - Simpatíco, 2007 Grammy Award Winner for Best Latin Jazz Album of the Year.</p> <p align="center"><b>Location: TBA</b></p>
<p><b>Visual Tools for Inclusion and Differentiation with Roger Essley <a href="http://www.rogeressley.com/">http://www.rogeressley.com/</a></b></p> <p>"A Picture is Worth a Thousand Words...or More" Roger Essley is an author, artist, educator, and teacher educator. In this inspirational session, Roger will share how he turned his own difficult experiences as a student with dyslexia into new classroom strategies for all teachers to use. He will share his story and give an introduction to using visual tools in your very own classroom to reach all students, even those most difficult to engage in any classroom activity or assignment.</p> <p>Roger Essley is an author and illustrator of children's books and an author of a book with Linda Reif on using visual tools in the classroom for inclusion and differentiation.</p> <p align="center"><b>Location: TBA</b></p>

**9:30 a.m. – 9:45 a.m. BREAK**

<b>9:45 a.m. – 10:45 a.m. Break Out Session 1 Workshop Choices</b>		
Gr. 7-9	<p><b>VEX Robotics</b> Demonstration and discussion about using robots to enhance Science, Technology, Engineering, and Mathematics Education will be highlighted in this session. Building and programming robots is a highly interdisciplinary activity that develops creative problem solving, teamwork, leadership, and project management skills.</p> <p><b>Dr. James Carroll, Clarkson Associate Professor of Electrical &amp; Computer Engineering</b></p>	<i>Room</i>
Gr. 4-12	<p><b>Finding NANO</b> The term "nanotechnology" is becoming ubiquitous, but what does it really mean and how does it impact our lives? ...This workshop will help teachers to discover how small "nano" really is, and provide activities that can be used with math, science and technology students to explore the technological importance of nanomaterials.</p> <p><b>Dr. Richard Partch, Dr. John Moosbrugger, Clarkson Professors, Dr. Ian Suni, Dr Weiqiang Ding, Dr. Fen Hua, Clarkson Associate Professors</b></p>	
HS Math and Physics	<p><b>Roller Coaster Physics</b> Participants will use computer software and mathematics, physics and computing presentations to experience effective design of a roller coaster. Strong emphasis will be on force and momentum, calculations and other properties of physical science. Information will be provided about IMPETUS, an enrichment program targeting low income students in grades 7 – 12.</p> <p><b>Dr. Peter Turner, Clarkson Chair &amp; Professor of Mathematics &amp; Computer Science</b></p>	<i>Room</i>
Gr. 4-12	<p><b>St. Lawrence County STEM Partnership</b> A brief overview of all STEM Partnership opportunities with Clarkson University will be outlined in this session. Presenters will explain how content knowledge acquired from the STEM Partnership has been used to create rigorous and relevant lessons that integrate math science and technology across disciplines. The STEM Partnership will be providing professional development through summer institutes and workshops during the next two years. These opportunities are available to all teachers in the SLL BOCES districts.</p> <p><b>Patrick Farrand, Charles French, and Ellen Glasgow, St. Lawrence – Lewis BOCES</b></p>	<i>Room</i>
Gr. 4-6 math	<p><b>Math + Magic = Enrichment</b> Learn some math magic tricks and how to connect them to middle level school mathematics. Materials will be provided for you to adapt to your classroom.</p> <p><b>Blair Madore, SUNY Potsdam</b></p>	<i>Room</i>
Gr. 7-12 math	<p><b>Engaging Problems with Unexpected Answers: Stimulating Curiosity and Deepening Insight</b> Problems whose answers seem to conflict with students' intuition provide opportunities to capture students' interest and deepen</p>	

	<p>their mathematical insight. A collection of such problems for grades 7-12 will be shared and solved.</p> <p><b>Peter Brouwer, SUNY Potsdam</b></p>	
Gr. 9-11 math	<p><b>Back to the Future with Geometry: Transitioning from Math A/B to Geometry</b> This session will engage the participants in a discussion about designing a curriculum that meets the new standards in fact and spirit, by making geometry accessible and enjoyable for the greatest number of students.</p> <p><b>Janet Learned, Parishville-Hopkinton Central School</b></p>	
Gr. 9-12 math	<p><b>Connecting Algebra and Geometry for HS math teachers</b> Come see new ways to connect algebra and geometry in the classroom through the use of technology. Connections between geometric constructions, data, graphs, and algebra will be made through investigations. Come and be inspired.</p> <p><b>Dana F. Morse, Educational Technology Consultant, Texas Instruments, New York</b></p>	
Gr. 4-6	<p><b>Integrating Literature and Mathematics: Making Connections in Math Content by Connecting Math and Literature</b> SUNY Potsdam education students will share many creative and exciting activity and lesson ideas connecting literature to the mathematics curriculum, all tied to the NYS Learning Standards. All participants will leave with a bibliography identifying several books to particular math topics. Making connections to math content by connecting math and SUNY Potsdam education students will share many creative and exciting ideas connecting literature and hands-on activities to the mathematics curriculum, all tied to the NYS Learning Standards. Come see come of tomorrow's teachers share their bright ideas.</p> <p><b>Becky Duprey, SUNY Potsdam</b></p>	
Gr. 4-9 teachers	<p><b>NASA - Electromagnetic Spectrum</b> The light that we see with our eyes, visible light, represents only a small portion of light (electromagnetic spectrum.) Developing the technology to detect and use other portions of the electromagnetic spectrum, the invisible light that our eyes cannot see, has had a tremendous impact on our daily lives. When you listen to a radio, heat your food in a microwave oven, use a remote control, or have an x-ray taken, you are using "invisible light".</p> <p>During this workshop, teachers will construct a spectroscope, investigate invisible light and make a simple telescope. Teachers will build and calibrate their spectroscope and use it to examine light from different sources. Using specialized instruments at different stations (visible, infrared, and ultraviolet), groups will conduct experiments. This will allow teachers the opportunity to learn techniques to help their students discover, that invisible light is as real as visible. Teachers in groups will assemble a simple version of a telescope, experiment with the telescopes and investigate their properties. Participants will also receive NASA educational materials and learn about the many materials offered on the internet.</p> <p><b>Sonya Williams, Aerospace Education Specialist, Goddard Space Flight Center</b></p>	
4-12 science teachers	<p><b>Using Google Earth and Google Sky Effectively</b> The flexibility and open nature of Google Earth allows for students to produce strong visualizations from the wealth of free, up-to-date data available on the Internet. Beyond just a mapping program, lessons can be produced that allows students to see relationships between data sets that would normally require much more effort on the part of the teacher to prepare. Session participants will learn how to develop lessons effectively utilizing the available information that allows students to explore topics at deeper levels than previously were available. Some of the basics on how to use Google Sky will also be explored along with applicable usage ideas in science curriculum.</p> <p><b>To log onto the computer use Username: guest Password: password</b></p> <p><b>Sean Ellison, science teacher, Norwood-Norfolk Central School</b></p>	
Gr. 7-12 Bio/Life Science teachers	<p><b>Cancer and the Cell Cycle</b> Interactive student centered activities relating aspects of cancer to the cell cycle and immunology will be shared. Traditional and non-traditional instructional approaches will be incorporated in the presentation of these interrelated activities. Participants are encouraged to bring copies of their favorite activities pertaining to cancer or the cell cycle to share, if they have a favorite activity.</p> <p><b>Jim Buckley, Science teacher, Edwards-Knox Central School, Member of the NYS Biology-Chemistry Professional Development Network, STANYS Biology SAR/Section Chair North Central</b></p>	
Gr.11-12	<p><b>Using Probes to connect Pre-Calc and Physics</b> Use of motion detectors to introduce students to period functions allows students to easily collect and analyze real-world data. Explore <i>distance vs. time</i> and <i>velocity vs. time</i> graphs through swinging pendulums, walking to and fro, bouncing balls and dropping objects.</p> <p><b>Donna Kennedy, SUNY Potsdam</b></p>	
4-12 educators	<p><b>Question and Answer session with Gary Stager, Educational Visionary</b></p>	
5-8 educators	<p><b>Collins Writing in the Middle School Science and Math Classroom</b> Two middle school teachers will share the learning process they went through as they began to implement Collins Writing into their own classrooms. They will share their successes and failures and insight into why Collins Writing works so well in the math &amp; science classrooms. They will also share ready-to-use classroom ideas and lesson plans for you to use on Tuesday when you return to your own classroom.</p> <p><b>Dianne Morrison, 8<sup>th</sup> grade math, Norwood Norfolk Middle School</b> <b>Geri Belt, 8<sup>th</sup> grade science, Norwood Norfolk Middle School</b></p>	
Gr. 4-6 science and social studies	<p><b>Making Writing Easier in Gr. 4-6 Science and Social Studies</b> In this brief overview of the Collins Writing Program, teacher designed writing prompts for use with grades 4-6 science and social studies will be shared. Participants will learn about ways to make writing more fun for your students and more manageable for yourself. Writing in the content areas is a great way for students to understand and retain material learned while developing important writing skills.</p> <p><b>Jacquelyn Kelly, Madill Elementary, Ogdensburg</b></p>	
Gr. 4-8 educators	<p><b>PowerPoint &amp; PhotoStory in the Middle School Resource Room</b> This session will focus on how to use these two software programs to help resource room teachers and their students in daily assignments and lessons. Classroom examples and lessons will be shared and explained.</p> <p><b>Katina Meacham; Norwood Norfolk Middle School teacher</b></p>	
Gr. 4-8 educators	<p><b>Visual Tools for the English and Social Studies Classroom</b> Teachers will explore how to tailor visual tools and techniques to help reluctant learners engage and gifted learners excel in their English or Social Studies classrooms. Session will be half presentation and half work session, so teachers will have time to begin creating plans and teaching tools to use in their classroom on Tuesday!</p> <p><b>Roger Essley, artist, author, illustrator</b></p>	

Gr. 4-12 educators	<p><b>Active Learning Strategies For Standardized Test Prep</b>  This is a practical application workshop. A second hour (optional) will be provided for teachers to design lessons using some of the active learning strategies that will be shared and discussed. Among the ideas that will be addressed are:</p> <ul style="list-style-type: none"> <li>• How do you teach the required curriculum, prepare students for standardized tests, and maintain an active learning focus? How do you utilize projects to increase student learning rather than taking time away from the curriculum?</li> <li>• What makes a task authentic?</li> <li>• How do you assess performance so that the assessment is embedded in the activity and how do you “work the room” while your students are actively engaged in performance based learning?</li> </ul> <p>This session offers practical teaching strategies for motivating students through interactive learning so that you can teach more of the curriculum in less time. Participants are encouraged to bring a copy of one of their better projects (or any lesson that required significant student engagement).</p> <p>This workshop/course is based on the book Captivating Classes With Constructivism – Practical Strategies for Pre-Service and In-Service Teachers by Pat Flynn, Don Mesibov, R. Michael Smith, and Paul Vermette. It integrates some of the theories of William Glasser.</p> <p><b>Don Mesibov, co-author and consultant</b></p>	
4-12 educators	<p><b>Goodie Goodies for your Classroom</b>  Dan Sporn, owner of Goodie Goodies specialty toy stores, will lead an interactive play session for all teachers who want to attend. Dan will share fun games and playthings that can help you engage the most reluctant learners in classroom activities and games that address New York State Learning Standards.</p> <p><b>Dan Sporn, business owner</b></p>	<i>Vendor table</i>

**10:45 a.m. – Noon**  
**LUNCH and Poster Exhibits at the Cheel Campus Center. Visit Vendors too!**

<b>12:15 p.m. – 1:15 p.m. Break Out Session 2 Workshop Choices</b>		
Gr. 4-6	<p><b>Lego Robotics</b>  Demonstration and discussion about using robots to enhance Science, Technology, Engineering, and Mathematics Education will be highlighted in this session. Building and programming robots is a highly interdisciplinary activity that develops creative problem solving, teamwork, leadership, and project management skills.</p> <p><b>Dr. James Carroll, Clarkson Assistant Professor of Electrical Engineering &amp; Computer Science</b></p>	<i>Room</i>
Gr. 4-12	<p><b>Genetics</b>  Connections between genetics, evolution, and DNA will be discussed in this session. Teachers will learn how scientists use computers in the cutting-edge field of bioinformatics to study the differences in the genes of organisms.</p> <p><b>Dr. James Schulte, Assistant Professor of Biology</b></p>	
Gr. 4-12	<p><b>Computer Graphics: Math &amp; Technology Projects for MS &amp; HS</b>  Introduction to the mathematical fundamentals of computer graphics and animations. This involves applications of geometry, computer technology, simple programming and computations.</p> <p><b>Dr. Peter Turner, Clarkson Chair and Professor, Mathematics &amp; Computer Science, Dr. Brian Helenbrook, Associate Professor, Mechanical &amp; Aeronautical Engineering and Mathematics</b></p>	
Gr. 4-12	<p><b>Health Science</b>  Examples developed in Health Sciences will enhance the teaching of biology, chemistry, mathematics, and physics, as basic sciences. These examples will support the teaching and learning of health and life issues during students’ formative years.</p> <p><b>Dr. Scott Minor, Clarkson Associate Dean for Health Sciences, Chair, Department of Physical Therapy</b></p>	<i>Room</i>
Gr. 4-6??	<p><b>The History of Tangrams</b>  Participants will learn about the history of tangrams and learn instructional strategies for using them with students.</p> <p><b>Blair Madore, SUNY Potsdam</b></p>	
7-12 Math	<p><b>Using the Smart Airliner in HS Math</b>  This session will integrate the use of Smart Software and the Smart Airliner in teaching high school math content.</p> <p><b>Kelly Stone, HS math teacher, Edwards-Knox Central School</b></p>	
Gr. 9-11 math	<p><b>Back to the Future with Geometry: Transitioning from Math A/B to Geometry (repeated)</b>  This session will engage the participants in a discussion about designing a curriculum that meets the new standards in fact and spirit, by making geometry accessible and enjoyable for the greatest number of students.</p> <p><b>Janet Learned, Parishville-Hopkinton Central School</b></p>	
Gr. 11	<p><b>Pi Plate Trig</b>  Learn a fabulous way to introduce you students to trigonometry. Using this method, students will know and understand the difference between radians and degrees as well as common trig ratios.</p> <p><b>Donna Kennedy, SUNY Potsdam</b></p>	
Gr. 4-6	<p><b>Hands-On Math: Getting Students Actively Engaged in Understanding Concepts</b>  Looking for a way to put the ownership of learning on your students? SUNY Potsdam education students will share many creative and exciting activities and lessons connecting hands-on learning to the mathematics curriculum to better help students understand the concepts. All participants will leave with several ideas they can put to use in their classroom immediately.</p> <p><b>Becky Duprey, SUNY Potsdam</b></p>	
4-12 educators	<p><b>Visual Tools for the Science Classroom</b>  Teachers will explore how to tailor visual tools and techniques to help reluctant learners engage and gifted learners excel in their Science classrooms. Session will be half presentation and half work session, so teachers will have time to begin creating plans and teaching tools to use in their classroom on Tuesday!</p> <p><b>Roger Essley, artist, author, illustrator</b></p>	
4-12 science	<p><b>Google Earth and Google Sky Work Session</b>  Participants of the session entitled “Using Google Earth and Google Sky Effectively” will be able to stay and play on the sites</p>	

teachers	<p>explored during the previous session with a facilitator in the room to brainstorm ideas for integrating these tools into your classroom and to insure that participants are able to navigate through the sites effectively.  <b>To log onto a computer use Username: guest Password: password</b></p> <p><b>Sean Ellison</b>, science teacher, Norwood-Norfolk Central School</p>	
7-12 science teachers	<p><b>The Science of Food</b>  Teaching strategies including an introduction to Food Science and Sensory Perceptions, Food Processing, Food Microbiology, and Food Chemistry will be shared. Activities will be shared including several relating to food science and sensory perceptions. Information about the Food Science program at Cornell University will also be shared.</p> <p><b>Steve Manders</b>, science teacher, Colton-Pierrepoint CS</p>	
Gr. 6-12 math	<p><b>On the Shoulders of Technology in Math</b>  Let the power of technology bring mathematical insights to your students that they will not get with chalk or paper. Using the visual capabilities of computers, digital images and software make your classroom come alive for twenty first century students.</p> <p><b>Frank Sobierajski</b>, North Rose Wolcott Central School District</p>	
4-12 educators	<p><b>Receptive Teaching – A Natural Approach to Identifying High-Tech Learning Opportunities</b>  This session will offer practical strategies designed to help teachers imagine new ways of using computers in productive learning environments. Educators receptive to the learning invitations all around them make the best teachers.</p> <p><b>Gary Stager</b>, Educational Visionary</p>	
Gr. 9-12	<p><b>TI Smartview in Your Classroom for HS math teachers</b>  Learn how to script lessons, make worksheets with screen captures with ease, bring a flash drive to take ready made files, and save your work.</p> <p><b>Dana F. Morse</b>, Educational Technology Consultant, Texas Instruments, New York</p>	
4-12 educators	<p><b>Reading Comprehension Strategies to Improve Social Studies Instruction</b>  This session is full of research based strategies to help middle school teachers guide their students through the process of reading and writing to create solid DBQ responses. Reciprocal teaching, questioning the author and other research proven strategies will be shared and discussed.</p> <p><b>Mark Bennett</b>, teacher, Norwood-Norfolk Central School</p>	
Gr. 4-12 educators	<p><b>Discipline Without Stress, Punishment, or Rewards</b>  The RAISE RESPONSIBILITY SYSTEM is a 3-step system that can be used in any school, at any grade level, and with any subject areas. This session will provide an overview of the system to facilitate <b>students in disciplining themselves</b>. Learn how to use <b>internal motivation</b> to promote both <b>responsibility</b> and <b>learning</b> by employing concepts of Stephen Covey (proaction), William Glasser (noncoercion), W. Edwards Deming (collaboration and empowerment), and Abraham Maslow (hierarchy and autonomy).</p> <p><b>David Lennox</b>, Norwood-Norfolk Central School (retired)</p>	
Gr. 4-12 educators	<p><b>Literature About Special People and Special Needs</b>  Join this informal session to discover literature and resources about youth and adults with special needs. Novels and non-fiction for all ages will be previewed and discussed.</p> <p><b>Heidi McCasland</b>, Norwood Norfolk Middle School Teacher</p>	
Gr. 4-12 educators	<p><b>Active Learning Strategies Facilitated Work Session</b>  This is an optional second hour for attendees of Active Learning Strategies for Standardized Test Prep session. This facilitated work session will allow teachers to design lessons using some of the active learning strategies that will be shared and discussed in the previous session.</p> <p><b>Don Mesibov</b>, co-author and consultant</p>	
4-12 educators	<p><b>Goodie Goodies for your Classroom</b>  Dan Sporn, owner of Goodie Goodies specialty toy stores, will lead an interactive play session for all teachers who want to attend. Dan will share fun games and playthings that can help you engage the most reluctant learners in classroom activities and games that address New York State Learning Standards.</p> <p><b>Dan Sporn</b>, business owner</p>	Vendor table

**1:15 p.m. – 1:30 p.m. BREAK**

<b>1:30 p.m. – 2:30 p.m. Break Out Session 3 Workshop Choices</b>		
Gr. 4-12	<p><b>Promoting Energy Literacy</b>  Promoting Energy Literacy involves STEM integration, knowledge and application, coupled with social sciences and other humanistic considerations. Members of the Promoting Energy Literacy Institute will share their experiences and how they will be able to use the content knowledge gained.</p> <p><b>Dr. Susan Powers</b>, Clarkson Associate Dean of Engineering, <b>Dr. Kenneth Visser</b>, Clarkson Associate Professor, <b>Department of Mechanical &amp; Aeronautical Engineering</b>, <b>Jan DeWaters</b>, Clarkson Graduate Assistant</p>	Room
Gr. 7-12	<p><b>Cyber Civics</b>  Emerging computer and communications technologies directly impact the traditional rights and responsibilities of citizens in the United States and other countries around the world. Teachers will be provided an overview of how to incorporate CyberCivics into their classroom. Important social and political issues accompanied with hands-on activities to better understand underlying technologies will be explored.</p> <p><b>Dr. Jeanna Matthews</b>, Clarkson Associate Professor, Computer Science, <b>Jim Owens</b>, Clarkson Graduate Student, <b>Computer Science</b></p>	Room
Gr. 5-12	<p><b>From Contest to Classroom</b>  This session provides an overview of MathCounts, COMAP and Science Olympiad enrichment activities. Presenters will provide ideas for engaging students in classroom activities in preparation for these enrichment competitions.</p> <p><b>Dr. Peter Turner</b>, Clarkson Chair &amp; Professor of Mathematics and Computer Science, <b>Dr. Michael Ramsdell</b>, Clarkson Assistant Professor, Physics</p>	Room
Gr. 4-12	<p><b>St. Lawrence County STEM Partnership</b>  A brief overview of all STEM Partnership opportunities with Clarkson University will be outlined in this session. Presenters</p>	Room

	<p>will explain how content knowledge acquired from the STEM Partnership has been used to create rigorous and relevant lessons that integrate math science and technology across disciplines. The STEM Partnership will be providing professional development through summer institutes and workshops during the next two years. These opportunities are available to all teachers in the SLL BOCES districts.</p> <p><b>Patrick Farrand, Charles French, and Ellen Glasgow, St. Lawrence – Lewis BOCES</b></p>	
Gr. 4-12	<p><b>Making Math AIS Work</b> Discover ways to make your math AIS class more productive and less stressful for your students... and you. Practical planning and record keeping strategies will be shared along with fun ideas for engaging activities.</p> <p><b>Jason Gallant, Norwood Norfolk Middle School teacher</b></p>	
4-12 educators	<p><b>Visual Tools for the Math Classroom</b> Teachers will explore how to tailor visual tools and techniques to help reluctant learners engage and gifted learners excel in their math classrooms. Session will be half presentation and half work session, so teachers will have time to begin creating plans and teaching tools to use in their classroom on Tuesday!</p> <p><b>Roger Essley, artist, author, illustrator</b></p>	
Gr. 7-10	<p><b>Algebra in Motion in Math A</b> Introduce students to the basic vocabulary and characteristics of the coordinate plane (+ history). Dynamically display the definition of slope. Practice graphing lines from <math>y=mx+b</math> and <math>Ax+By=C</math> forms. Explore the relationship of parallel and perpendicular lines to slope. Develop the formulas for midpoint and distance. Test relations using an animated vertical line test. Present 4 different graphing grids on the same screen.</p> <p><b>Donna Kennedy, SUNY Potsdam</b></p>	
Gr. 4-6	<p><b>Great Ways to Include Technology in Your Math Lessons: Everything from Virtual Manipulatives to CPS Units to Smart Boards</b> Get your students involved with technology in mathematics!! SUNY Potsdam education students will share a variety of ideas connecting technology to the mathematics curriculum, all tied to the NYS Learning Standards. All participants will have the opportunity to work with the technology and gain ideas of how they could use it in their classroom.</p> <p><b>Becky Duprey, SUNY Potsdam</b></p>	
Gr. 4-9	<p><b>NASA - Electromagnetic Spectrum</b> The light that we see with our eyes, visible light, represents only a small portion of light (electromagnetic spectrum.) Developing the technology to detect and use other portions of the electromagnetic spectrum, the invisible light that our eyes cannot see, has had a tremendous impact on our daily lives. When you listen to a radio, heat your food in a microwave oven, use a remote control, or have an x-ray taken, you are using "invisible light".</p> <p>During this workshop, teachers will construct a spectroscope, investigate invisible light and make a simple telescope. Teachers will build and calibrate their spectroscope and use it to examine light from different sources. Using specialized instruments at different stations (visible, infrared, and ultraviolet), groups will conduct experiments. This will allow teachers the opportunity to learn techniques to help their students discover, that invisible light is as real as visible. Teachers in groups will assemble a simple version of a telescope, experiment with the telescopes and investigate their properties. Participants will also receive NASA educational materials and learn about the many materials offered on the internet.</p> <p><b>Sonya Williams, Aerospace Education Specialist, Goddard Space Flight Center</b></p>	
Gr. 4-12	<p><b>Google Earth and Google Sky Work Session</b> Participants of the session entitled "Using Google Earth and Google Sky Effectively" will be able to stay and play on the sites explored during the previous session with a facilitator in the room to brainstorm ideas for integrating these tools into your classroom and to insure that participants are able to navigate through the sites effectively. <b>To log onto a computer use Username: guest Password: password</b></p> <p><b>Sean Ellison, science teacher, Norwood-Norfolk Central School</b></p>	
Gr. 9-12	<p><b>Be Inspired with TI-Nspire for HS science</b> This session will focus on the capabilities of TI's newest technology: TI-Nspire. Calculators will be available for use during the session. This is your chance to experience the newest handheld.</p> <p><b>Dana F. Morse, Educational Technology Consultant, Texas Instruments, New York</b></p>	
Gr. 6-12 math	<p><b>On the Shoulders of Technology in Math (repeated)</b> Let the power of technology bring mathematical insights to your students that they will not get with chalk or paper. Using the visual capabilities of computers, digital images and software make your classroom come alive for twenty first century students. This margin is too narrow to list all the details.</p> <p><b>Frank Sobierajski, North Rose Wolcott Central School District</b></p>	
4-12 educators	<p><b>Question and Answer session with Gary Stager, Educational Visionary</b></p>	
Gr.4-12 all educators	<p><b>Exploring Internet Resources in Math and Science on Thinkfinity</b> Thinkfinity (formerly called Marco Polo) provides teacher designed and field tested lessons aligned to NYS learning standards for all disciplines. The workshop provides a hands-on introduction to this useful tool.</p> <p><b>Jennifer French, Supervisor of Instructional Technology, SLL BOCES</b></p>	
Gr. 4-12 educators	<p><b>Building a Democratic Classroom Community</b> Join this workshop to learn about how to build a democratic learning community in your classroom with strategies and methods clearly supported by current education and brain research.</p> <p><b>David Lennox, Norwood-Norfolk Central School (retired)</b></p>	
Gr. 4-12	<p><b>VESID Information Session</b> Join this panel information and question and answer session to get important updates on Special Education in New York State. Regional associate, Jerry Forshaw and her colleagues, will be on hand to answer your questions and discuss issues facing regular classroom teachers, aides, and special education teachers.</p> <p><b>Jerry Forshaw, NYSED Regional Associate</b></p>	
9-12 educators	<p><b>Teachers as Readers</b> A panel of teachers will share their favorite new fiction and non-fiction and discuss how these recent releases can be incorporated in the classroom and/or book circles.</p> <p><b>Amanda Hamilton, teacher, Massena Central School</b></p>	

4-12 educators	<p><b>Student Run Activities: Practical strategies for classroom application</b></p> <p>An ideal classroom is exemplified by students taking responsibility for their own learning. In a student-run activity, the teacher sits in the back of the room while the students, following a period of teacher-directed preparation, teach each other what the teacher wants them to know, understand, and be able to apply.</p> <p>What if students share misinformation with their peers? This, too, will be addressed in this workshop.</p> <p><b>Don Mesibov, co-author and consultant AND Various student presenters</b></p>	
4-12 educators	<p><b>Goodie Goodies for your Classroom</b></p> <p>Dan Sporn, owner of Goodie Goodies specialty toy stores, will lead an interactive play session for all teachers who want to attend. Dan will share fun games and playthings that can help you engage the most reluctant learners in classroom activities and games that address New York State Learning Standards.</p> <p><b>Dan Sporn, business owner</b></p>	<i>Vendor table</i>

### Educational Resources & Agencies Exhibition

Plan to arrive early to take in the vendors and exhibitors in the Snell Hall Atrium. Be sure to bring your checkbook and/or cash to get lots of goodies for your classroom. The following vendors and exhibitors will be on hand:

Goody Goody's  
School Daze  
Scholastic Bookfair  
Books Are Fun  
Seaway Valley Prevention Council  
St. Lawrence County Health Initiative  
Prentice Hall  
Glencoe  
McDougal Little  
Boreal Science  
Texas Instruments  
Remington Art Museum  
Crystal Spring Books  
Teaching Tolerance  
Amsco  
...and more

DRAFT