

Greater Hartford Academy of the Arts
Greater Hartford Academy of
Mathematics and Science

Professional Development
Conference v2

For Middle and Secondary Teachers

November 2, 2010



WELCOME

On behalf of GHAA & GHAMAS, I would like to invite you to join us on November 2nd for our annual Professional Development Conference.

From "Using wikispaces in Your Classroom" to the "Myth of El Niño", we are offering a variety of workshops that cover a wide range of topics in every area of education. We look forward to seeing you and your colleagues on November 2nd at what promises to be an exciting conference.

Eric Bernstein
Director
Greater Hartford Academy of the Arts
Greater Hartford Academy of Math and Science



KEYNOTE SPEAKER PROFILE



Matthew Nemerson **President and CEO** **Connecticut Technology Council**

The Connecticut Technology Council, an organization dedicated to building and strengthening the community of 2,500 technology oriented businesses in the state. These firms represent clusters such as software, IT, advanced manufacturing, aerospace, new media, scientific instrumentation and energy.

In March 2009 Mr. Nemerson became the volunteer board president of TECNA, the trade association for Technology Councils in North America.

Through events, partnerships and advocacy, the Connecticut Technology Council (CTC) facilitates support in the state for technology led economic growth. It fosters the creation of an innovation culture that will lead to investment and job expansion due to an attractive global reputation and policies. CTC works with firms of all sizes, stressing advice and mentoring for start-ups, networking and connections for mid-sized companies and helping larger firms play a role in policy leadership. Through notable events such the Tech Top 40, The Innovation & Entrepreneurship Summit and the Women of Innovation dinner, CTC reaches out to thousands of tech members each year.

Matthew Nemerson joined CTC in September of 2003. He has spent 25 years working to develop the Connecticut economy in different ways. Before CTC, he was the Chief Operating Officer of Netkey, Inc. a global kiosk and electronic signage software company where he remains on the Board of Directors.

In 1983, Mr. Nemerson was the founding Vice President for development of the Science Park Development Corporation, where, in partnership with Yale University and Connecticut, he helped build one time one of the largest university incubator and research facilities in the U.S.

For 13 years after Science Park, Mr. Nemerson was president of the Greater New Haven Chamber of Commerce and the Chamber's Leadership Center. He participated in many efforts to strengthen greater New Haven and started a real estate development entity to manage and rebuilt parts of the center city in the 1990s, including what a major conference center hotel and the redevelopment of the region's 1960s era urban shopping super block.

Before returning to his boyhood home of New Haven to help start Science Park, Nemerson was the publisher of The Washington Monthly, a national political and policy magazine located in Washington DC, was a reporter for Fortune Magazine, was staff director for the Energy Committee of the Connecticut State Legislature and worked in Washington for the late U.S. Senator Abraham Ribicoff (D-Connecticut).

Matthew Nemerson is an honors graduate of Columbia College, the Yale School of Management and has participated in programs at the Center for Creative Leadership in North Carolina. He lives in New Haven with two daughters, Elana and Joy and his wife, Marian Chertow, PhD, an associate professor at the Yale School of Forestry and Environmental Studies.

CONFERENCE AGENDA

7:30 - 8:00 am	Registration and Refreshments
8:00 - 9:00	Keynote Speaker – Matthew Nemerson, President and CEO, The Connecticut Technology Council.
9:00 - 11:00	Morning Sessions (AM)
11:00 - 11:30	Lunch (provided)
11:30 - 1:30 pm	First Afternoon Sessions (PM1)
1:30 - 3:30 pm	Second Afternoon Session (PM2)

MORNING SESSIONS 9:00 - 11:00

AM.1 App Inventor: A Visual Programming Tool For Android Phones

Participants will be introduced to the basics of Google's App Inventor, a visual programming tool for Android-based smart phones. Teachers do not need to have previous programming experience. App Inventor uses the drag and drop mechanisms in other popular programming languages to write practical smart phone apps, make programming enjoyable and accessible to all. You will have hands-on experience of App Inventor and will be supported to develop simple and practical apps. Participants for this workshop must create a Google account and apply for access to App Inventor prior to arrival at the workshop. If you don't have a Google account, you can create one at <https://www.google.com/accounts/NewAccount>. For access to App Inventor, complete the form at <https://services.google.com/fb/forms/appinventorinterest/> Please allow about a week for your account to be approved. If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Chinma Uche, PhD, GHAMAS Math Teacher

Session Grade Level: 5 - 12

AM.2 SmartBoards And Beyond

How can SmartBoards and Document cameras be used in any class for incredible results? In addition, this session will introduce Smart Response which is a remote instant feedback system way to keep continuous track of student progress. This enables you to implement different questions on a page on Smart Notebook and with the remote clickers, the students can answer. You can then have a data sheet of student progress and would have the means to have immediate data on your students' understanding.

Instructor: Greg Boucher, Audio Visual Specialist

Session Grade Level: 5 - 12

AM.3 CT Invention Convention – A Natural Way To Achieve The Standards

Ever wonder what the inside of a keyboard looks like? So do your kids! Invention is our CT heritage and a perfect way to engage and empower those "thinkers" in our schools. No kits to buy, no program to purchase – just flexible standards based lessons to carry you and your students to the 28th Annual Invention Convention next May 14 at UConn. Hands-on, inexpensive, and suitable for K-8.

Instructor: Honora Kenney, President, CT Invention Convention

Session Grade Level: K - 8

AM.4 Demystifying Linear Regression

Students are taught the concept of the “line of best fit” early in Algebra I, if not earlier. They routinely use the linear regression option on their graphing calculators for a set of bi-variate data. However, most have no idea how the equation of the regression line is computed. This is a hands-on workshop designed to explore the regression process, designed for students in (and teachers of) Algebra II or Pre Calculus. Bring your TI-83 or TI-84 calculator.

Instructor: Peter Huybrechts, GHAMAS Math Teacher

Session Grade Level: High School Mathematics, Algebra II and up

AM.5 Overcoming Adversity: From F to A—One Teacher’s Story

This workshop will allow teachers to reflect on their own inspirations so they may inspire others. You will participate in a self-reflection exercise and listen to one teacher’s story of overcoming adversity as a student. You will experience asking yourself introspective questions such as: “Why did I become a teacher?” and “What type of teacher do I want to be?” Topics to be discussed will be:

- What does encouragement look like?
- How committed are we? Are we going to walk with our students on their journey?
- How does a teacher turn unmotivated students into motivated students?

Instructor: Joe DePasqua, Middle School Social Studies Teacher

Co-Instructor: Peter Stred, Middle School Language Arts Teacher

Co-Instructor: Michelle Middleton, CREC’s Specialist for Secondary Literacy

Session Grade Level: K - 12

AM.6 Section 504 And Special Education

This workshop will give you an in-depth overview of the Individuals with Disabilities Education Act (IDEA) and Section 504 of the Rehabilitation Act of 1973. Laws, court cases, and goals of these two major educational Acts will be discussed.

Instructor: Helena Richards GHAMAS Special Education Teacher

Instructor: Antonio Napoleone, GHAMAS Assistant Principal

Session Grade Level: 5 – 12

AM.7 Power Up With PowerUp

PowerUp is a free, multiplayer, 3D, online game the IBM Corporation developed to help attract students to careers in engineering. The game relies on students' interests in virtual fantasy worlds to teach them about science, math and engineering principles as they save the planet "Helios" from ecological disaster, by enabling them to ride over rugged mountains in buggies to build solar towers or search through grim junk yards to repair wind turbines. The activities within the game, developed in partnership with the New York Hall of Science as part of IBM's TryScience initiative, have been correlated to U.S. national science standards and developed with input from high school students. It also includes lesson plans for teachers to leverage the game in the classroom. Because young people learn about energy conservation in completing their missions, PowerUp was chosen as the official game of Earth Day 2008. This workshop will introduce you to the game and demonstrate how it can be used to teach about alternative energy, how to work in teams and diversity in engineering. If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Christopher P. Zack, IBM Global Account Project Manager

Session Grade Level: 5 - 12

AM.8 Strategies For Productive Student Collaboration And Assessment

Whether in the classroom or the workplace, the ability to function effectively within a team and contribute to a team's success is an essential skill for any individual. Still, teachers and team leaders are well aware of how quickly group work can go wrong. This workshop will cover various formats to engage students in meaningful collaboration. Also, it will touch upon how to effectively assess students during collaboration, and how students can assess themselves.

Instructor: David J. Kimball, GHAMAS English Teacher

Session Grade Level: 5 - 12

LUNCH 11:00 - 11:30

AFTERNOON SESSIONS - PM1 11:30 - 1:30

PM1.1 CAPT Reading And Writing Scoring Workshop

This workshop will give an overview of how to holistically score the Response to Literature and Interdisciplinary Writing practice CAPT. We will not specifically address instructional strategies, but will offer training in the scoring process. We will, however, specifically discuss the dimensions of each test, how the tests are scored, and analysis of anchor tests to practice scoring.

Instructor: Cara Manzella, GHAMAS English Teacher

Session Grade Level: 9th and 10th

PM1.2 Connecticut Science Olympiad

Are you looking for something to challenge your students? Would you like to increase their interest in science and technology? Find out about the Connecticut Science Olympiad! Unlike science fairs, the Olympiad is a team competition involving up to 15 students, who compete in pairs over the course of a day in up to 23 different science and technology events. It's challenging, fun and the skills they develop help them in their classes. We run both a high school and a middle school tournament, with the winning team from each division qualifying to go to a national tournament in May.

Instructor: Brendan Herlihy, CT Science Olympiad Director

Session Grade Level: 5 - 12

PM1.3 Creating Multiple Copies Of Custom Board Games

Why pay \$20 for a single board game that only 5 people can play, when you can make multiple copies of your own and all 25 students can play??!! This workshop will give you an in-depth overview of the components needed for you to create your own board games. You will also be supplied with the computer templates from which to create your own games and boards. The majority of the workshop will be devoted to you actually creating your game, aiming for a finished product by the end of the session. If you have a laptop, please bring it, otherwise they will be provided for the session. (Bring a flash drive to save your game.)

Instructor: Joe Barile, GHAA Spanish Teacher

Session Grade Level: 6 - 12

PM1.4 I Jump, You Jump, We All Jump For ClassJump

Are you dealing with the constant excuses from your students...."I forgot to bring the handout home", "I lost the assignment", "When did you tell us about that assignment?".... What can help you deal with these excuses and put the responsibility on the students, where it belongs?

ClassJump! Perhaps you have parents that would like you to provide them a detailed list of upcoming assignments or expect you to contact them individually every time there is something due. What will help you get the information to them without individual emails and phone calls? ClassJump provides you a web site free of charge, where multiple classes can be managed and updated using an easy to understand interface. No knowledge of web site programming is needed to get your class(es) set up and quickly provide up-to-date information for your students and parents. You can post homework assignments, save documents that students can download and print, post upcoming events (such as homework assignments and test dates) to your calendar, post articles of interest and links to resources, receive documents sent by students, start a class message board that is just for you and your students, and even create photo albums. The beauty of ClassJump is that as long as you have access to the Internet, you can get to ClassJump. Come learn how easy it is to get a web page started on ClassJump! Bring with you some of your current/future electronic files (i.e. on a flash drive) that you would like to make electronically available to your students. You will be taught how to up-load them to your ClassJump site. If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Melissa Hall, GHAMAS Chemistry Teacher

Session Grade Level: 5 - 12

PM1.5 Robotics At Trinity College

This talk provides a survey of Robotics activities in Trinity's Engineering Department. The talk will introduce the Trinity College Firefighting and RoboWaiter Competitions and the AVUSI Intelligent Ground Vehicle Competition, events in which Trinity undergraduates compete each year. The talk will present a first year engineering course in Robotics, and it will describe current projects of Trinity's Robot Study Team. The Team is a group of 10-15 students who design Robots for competition each year. The talk will include discussion of educational strategies and outcomes and will show examples of student work.

Instructor: David J. Ahlgren, Professor of Engineering at Trinity College and Director of the Trinity College Fire-Fighting Home Robot Contest

Session Grade Level: 5 - 12

PM1.6 Science With The Children's Museum

Located in West Hartford, The Children's Museum provides an ideal partner for science enrichment, either as a field trip destination, or right at your school through our outreach program. TCM's Jonah "Mr. Science" Cohen will lead a fun and informative session, where participants will get hands-on with science. (Why should the kids have all the fun?) You'll learn some tips for your classes, try experiments, see demonstrations, and find out how The Children's Museum can help you with your science curriculum needs.

Instructor: Jonah Cohen, Outreach and Public Programs Manager

Session Grade Level: 1 - 8

PM1.7 TI-nspire

This session will provide an introduction to the new handheld computer by TI and the new Navigator system. This system provides for wireless communication between the class and the instructor. The combination of these two tools allow for a positive learning environment which provides opportunities for students and teachers to communicate with each other and the rest of the class.

Instructor: Matthew Milch, GHAMAS Math Teacher

Session Grade level: 9-12 (use TI-83 or TI-84 now)

AFTERNOON SESSIONS – PM2 1:30 - 3:30

PM2.1 Atmospheric Structure And The Myths Of El Niño

This session will include instruction on creating a Skew-T diagram for weather balloon data as well as discuss/demonstrate the myths of El Niño. Weather is the one thing in common we all live with every day and you will learn how to bring it from the outside to the inside of your classroom.

Instructor: Joseph (J.J.) DePasqua, Middle School Science Teacher

Session Grade Level: 5 - 12

PM2.2 Self, Symbolism And Society

Discovering Multicultural Symbols of Identity, Communication and Wisdom. You will experience an opportunity to create a one-of-a-kind accordion-style book, which includes individual cultural traits in addition to newly explored symbols of identity, communication and wisdom from global communities. Visual Arts techniques demonstrated will include non-toxic low-tech printmaking, book designing and innovative eco-friendly resources for material usage.

Instructor: Natasha D. Miles, GHAA Visual Arts Educator

Department Chairperson, Center for Creative Youth at Wesleyan

Session Grade Level: 5 - 12

PM2.3 Building An Online Reference Library With Zotero

Do your students hate having to create and format a bibliography when they write research papers? Do you? Did you ever wonder how it would be if you (or your students) could just write and, when you needed to cite a reference, you could do it with a few clicks of the mouse? What about writing your paper from different computers or collaborating with others on a research paper? All of these things are possible with this free plugin for Mozilla. Participants in this workshop will create a zotero account, build a library and learn how to “cite-while-you-write.” If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Greg Shenk, GHAMAS Biology Teacher

Session Grade Level: 5 - 12

PM2.4 Teach The Beginnings Of Programming Through "Scratch"

Scratch is a 2-D animation software from the Lifelong Kindergarten Group at the MIT Media Lab. It enables storytelling, innovation, and enhances creativity. You will get a hands-on experience of Scratch, view student examples, and analyze its use in the classroom. Additionally, you will create simple games and animations, and will brainstorm possible lesson plan ideas to use with any grade level/subject area. If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Heather Saksa, Montessori Magnet School Faculty

Session Grade Level: 5 - 12

PM2.5 Where In The World?

Maps represent 3 or 4 dimensions on a flat surface (length, width depth and time). Large amounts of information come to students via maps. In this presentation we will look at various types of maps from topographic to satellite, navigation to cycles and find out how your students can read and interpret the information from them.

Instructor: Haia Spiegel, GHAMAS Earth Science Teacher

Instructor: Stacey Mowchan, GHAMAS Earth Science Teacher

Session Grade Level: 5 – 12

PM2.6 We Can't Teach What We Don't Know

Diversity in the Classroom: A Professional Development Discussion based on the work and teachings of Gary Howard, President and Founder of the REACH Center for Multicultural Education.

“It is a time for a definition of...America. As [we grow more diverse], our commitment to the future must change....The future calls each of us to become partners in the dance of diversity, a dance in which everyone shares the lead.” - -Gary Howard

Activities Include:

- : Cultural Sensitivity Quiz
- : Discuss experiences working in multicultural classrooms
- : Read excerpts from “White Man Dancing: A Story of Personal Transformation” by Gary Howard
- : Examples of incorporating multicultural themes in lessons
- ; Breakouts to brainstorm ways of...”... by subject area
- : Closing Discussion

Instructor: Matt McDonald, GHAA Social Studies Teacher

Session Grade Level: 5-12

PM2.7 Wikispaces In Your Class

This workshop will show you how to use wikispaces to create class web pages, discussion forums, and collaborative online communities. We will cover the basics, but show you how to use the advanced options. If you have a laptop, please bring it, otherwise they will be provided for the session.

Instructor: Nicholas Chanese, GHAA English Teacher

Session Grade Level: 7 - 12

REGISTRATION

Registration fees include lunch, three workshops, and admission to keynote speech. Fees are not adjustable if you do not attend parts of the conference.

Registration fees are as follows:

Teachers From CREC schools and CREC Member Districts <i>(Avon, Berlin, Bloomfield, Bolton, Bristol, Burlington, Canton, Cromwell, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hartland, Harwinton, Manchester, New Britain, New Hartford, Newington, Plainville, Portland, Rocky Hill, Simsbury, Somers, Southington, South Windsor, Suffield, Vernon, West Hartford, Wethersfield, Windsor, Windsor Locks)</i>	No Charge <i>Note: Register for sessions online. When you will get to the payment option, type in Member in the Purchase Order # Section.</i>
Teachers from All Other Districts	\$40.00

Sign in for the conference begins at 7:45 am and ends at 8:30 in front of the theater prior to the Keynote Speaker. At the sign-in you will be given the room assignments for your workshops.

Please remember in order to earn CEU's, you **MUST** sign in at the keynote as well at all three of your workshops.

Registration opens on Tuesday, October 12, 2010

Workshops will fill quickly. Register early.

To register you will need to

1. go to <http://www.crec.org/>
2. At **top of page**, go to **Events** tab
3. If you **have a username & password**, then **log in**.
If not, **register as new user** and then log in.
4. on **right side of page**, click on **Conference Search**
5. **Scroll down** and click on **Enroll Now**
6. **Select payment**, click on **Invoice (PO, check, cash)**
7. In **PO#**, type in **member** (If your district is a CREC member)
8. Continue with registration
9. CAUTION: **Sign up for Keynote** session and **only one session in each of the 9:00, 11:30 and 1:30** time periods.

If you have any questions, contact **Jake Mendelsohn** at the Greater Hartford Academy of Mathematics and Science at jmendelsohn@crec.org or call **860-757-6359**.

**We hope to see you at the GHAA/GHAMAS
Professional Development Conference.**