TI Professional Development
New England Fall Workshop
November 14-15, 2008

Massachusetts Academy of Math and Science
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Overview
Welcome to the TI Professional Development New England Fall Workshop. The purpose of this Workshop is to offer high quality 3-hour (Friday) and 4-hour (Saturday) Professional Development opportunities for secondary school educators using TI products. **You may attend Friday only, Saturday only or both days**. There will be eight 3-hour sessions on Friday – four in the morning and four in the afternoon. On Saturday, there will be five 4-hour sessions in the morning. Each session will be taught by a T^3 Instructor. Door prizes will be drawn Friday during lunch, end of day Friday and Saturday Noon.

Friday, November 14th

7:30 – 8:15 **Check-in and Continental Breakfast**

8:15 – 11:15 **Sessions 1-4 Choose one Session for this time period**

1 *Introduction to the TI-Nspire Handheld, Part 1* Jean McKenny

This session will focus on the basics of TI-N*spire* ™. Participants will learn about the various applications available and how these applications can be incorporated into documents. These documents can be used to help students learn mathematics and science. This is a hands-on session intended for beginners with a goal of making certain that participants feel comfortable as they learn this new technology.

2 *Data Collection with the TI-84* Neelia Jackson & James Early

Participants will explore data collection from two aspects – data entry and collection of data over time. Groups will collect and enter data into lists, graph using scatter plots, investigate the correlation between two variables, predict the line of best fit, calculate the line of regression and then augment their lists to include data from all participants.
In the second activity, partners will model a piecewise function by walking in front of a CBR2, examine the data and write equations descriptive of the recorded motion.
In the remaining time, participants will use temperature probes to observe changes in temperature over time.

3 ***Geometry and the TI-84*** Karen Campe

Explore geometric concepts and problems while mastering the key features of Cabri Jr. dynamic geometry technology on the TI-84. Participants will experience laboratory activities that investigate main ideas in the geometry curriculum and adapt these for use in their classrooms. (*Different activities will be used than in the afternoon TI-Nspire session*.)

4 ***Algebra and the TI-Nspire handheld*** Fred Decovsky

After a brief introduction to the many new features of TI-Nspire v1.4, we will create documents from scratch as well as use pre-constructed files to explore pre-algebra and algebra topics using the various APPs on TI-Nspire.

11:15 – 11:55 Lunch (catered in)

Noon – 3:00 Sessions 5-8 Choose one Session for this time period

5 ***Introduction to the TI-Nspire Handheld, Part 2*** Jean McKenny

This session will briefly review the learning of the Part 1 session. It will then continue with learning more of the basics about TI-N*spire* ™. Working with pre-made documents, as well as learning how to create documents, will be included in both sessions. It is also a hands-on session with comfort for participants as a goal.

6 ***Geometry with the TI-Nspire Handheld*** Karen Campe

Explore geometric concepts and problems while mastering the key features of the TI-Nspire learning handheld and its dynamically linked multiple representations. Participants will experience laboratory activities that investigate main ideas in the geometry curriculum and adapt these for use in their classrooms. (*Different activities will be used than in the morning TI-84 session*.)

7 ***Data and Statistics with the TI-Nspire Handheld*** Fred Decovsky

After a brief introduction to the many new features of TI-Nspire v1.4, we will create documents from scratch as well as use pre-constructed files to explore categorical and numerical data using the TI-Nspire Data and Staistics APP. We will enter and manipulate data, calculate descriptive statistics, and create various graphs. The new statistical functionality of the TI-Nspire will be highlighted.

8 ***Algebra and the TI-84*** Bob Knittle

How does the TI 84 help facilitate the development of young mathematicians? Come see successful activities that encourage all students to feel more confident within the math classroom. Activities will explore through a variety of Algebra 1 topics, with extensions that can be implemented into the Algebra 2 class. Having an open mind and a willingness to adapt activities toward your particular teaching load will make this a productive workshop for you. Participants will also be encouraged to create a lesson that will apply to your own class. Get up and get involved!

Saturday, November 15th

7:15 – 8:00 Check-in and Continental Breakfast

8:00 – Noon Sessions 9-13 Choose one Session for this time period

9 *Introduction to the TI-Nspire CAS Handheld* Jean McKenny

This session is an introduction to the basics of TI-N*spire* CAS™. It will explore the computer algebra system available on this handheld. Activities will be included that utilize the CAS features of the handheld to help students learn. It is a hands-on session intended for beginners with a goal of making certain that participants feel comfortable with this new technology.

10 *TI-Navigator - Basic* Seth Danner

Participants will be exposed to the basic features of the TI-Navigator system utilizing a hands on approach. We will explore the Activity Center in detail and go through steps on the Learning Check program. Students will participate in several activities so don't expect to remain seated the entire morning! Bring your own TI-83, TI-84 or TI-Nspire (with the 84 keypad) calculator and learn to download APPS from the TI-website and send them to your entire class via the Navigator.

11 *Calculus on the TI-84* Terry Luskin

Become familiar with the strengths of the TI-84 for teaching calculus: how the algebraic, graphical and numerical aspects of function behavior weave together. Investigate both derivative and integral functionalities, and gain insights on calculus concepts from the Sandwich Theorem through differential equations. Expect to leave with programs for Reimann sums and slope field displays. Not directed only to the AP curriculum!

12 *TI-Navigator – Beyond the Basics* Scott Trahan

In this session, we will explore some of the features of TI-Navigator more in-depth, from creating LearnCheck documents using previously generated documents and publisher libraries to some advanced features of the Activity Center including using forms. Activities involving aggregating data from individual students and sending them back tasks to complete will also be discussed.

13 *TI-Nspire – Beyond the Basics* Fred Decovsky

We will use TI-Nspire in the context of problem solving from Algebra 1 to Calculus. See how graphical, numerical and symbolic perspectives are truly interconnected, dynamic and enhance student understanding. We will explore math concepts through interactive docs by using pre-made documents as well as by creating our own documents.

Pre-Registration is required

Send email to Jackie Bonneau and indicate which session number(s) you will be attending Bonneau@wpi.edu.

Questions? Email Jackie Bonneau – bonneau@wpi.edu or call Mass Academy at 508-831-5859

Cost (Includes Continental Breakfast and Lunch)

Both days	$75
Friday only	$50
Saturday only	$45

Make checks payable to Mass Academy and send to:
Massachusetts Academy of Math and Science
85 Prescott St
Worcester, MA 01605
Attention: Jackie Bonneau
Cash, checks or PO's accepted. No Credit Cards will be accepted for payment

Hotel Information
Adjacent to site
Marriott Courtyard on Grove
Grove Street
Worcester, MA
508-363-0300
Ask for WPI rate

A couple of blocks away but within walking distance
Crowne Plaza Hotel
10 Lincoln Square
Worcester, MA 01608
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