During the Summer 2009 semester teachers had the opportunity to take either MAT 789 (Math and Music) or MAT 655/793 (Computers).

Program participants were given the opportunity to hear a series of guest speakers discuss the use of mathematics in various careers.

**Special Topics Summer Speaker Series**

When the MTTI grant proposal was written there was a unique component included: The Special Topics Summer Speaker Series. The intention was to invite men and women from various fields to present to our participants the importance of how their middle and high school mathematics is used in their current profession or trade. The hope that reinforcing these ‘real world’ connections for our participants would assist them in preparing more meaningful lessons for their students.

In July 2009 we began our Special Topics Summer Speaker Series. We invited speakers from various occupations to take part in a series of four, one and a half hour sessions. Each one would address the participants for 45 minutes, including a presentation highlighting on how they used their mathematics education on a regular basis and a Q&A period.

On July 7, 2009, the two speakers were George Mugno, a former carpenter, and John McDonagh a math instructor at the Carpenter’s Union School for Apprentice Carpentry Workers.

George spoke about the connections between his carpentry experience and the geometry he studied in high school, including the understanding and use of use of complementary and supplementary angles.

John told of his experience with apprentice carpenters, the difficulty some experience with measurement, as taught at the middle school level, especially when dealing with fractions.
On July 9, Robert Selsam, Chairman of the Board of the Salvadori Center and Senior Vice President of Boston Properties, and Bryan Brady, Director of training for Ironworkers Local 40 & 361, addressed our group.

Robert discussed the mathematics used in computing the ‘Time Value of Money’ using the concepts generally taught at the Intermediate Algebra level to compute future revenue in terms of present value.

Bryan, after showing a film on the work ironworkers do, emphasized the need for a high school diploma to be considered for the well paying iron working industry.

Our next session, July 14, featured one speaker, Phyllis Shannon, a registered nurse. Phyllis explained the many ways that accuracy in measurement, especially in solutions requiring percent concentration of specific medications can be a matter of life or death. She shared problems and involved us with hands on activities that demonstrated the importance mathematics in medicine.

For our final session, July 16, Andrew Friedman, an architect, and Luis Antonio Roman, a retired building inspector and project manager for the NYC Housing Authority addressed our group.

Andrew used a power point presentation to show the many uses of the ‘golden ratio’ and the related golden rectangle in architecture over last 2500 years. Determining the best placement of lighting fixtures and the use of symmetry for aesthetic purposes were some of the other connections he made to secondary math curriculum.

Luis related his work in the building trades with his experience in school. He made the point that it was the hands on and practical applications of mathematics that kept his interest and influenced his occupational choices. He closed by challenging our teachers to help those borderline students to make these ‘real world’ connections, it may make a world of difference.

Fall 2009......

During the Fall 2009 semester teachers will have the opportunity to take the course they didn’t take during the spring.

Carl Curiale, reporting
Rosalyn Krakowsky, editing and layout