

Cornell University

K-12 Education and Outreach, Mathematics Department

406 Malott Hall

MATH 5080 – Mathematics for Secondary School Teachers

October 3, 2015 ♦ 9:00 am – 2:30 pm (lunch provided)

8:45 – 9:00 am Bagels & Juice (provided)

9:00 – 9:15 am Introductions

9:15 – 10:15 am Not All Tasks Are Created Equal

The tasks with which students are engaged in the classroom form the basis for their opportunities to learn mathematics. In this session we will discuss and use the QUASAR Mathematical Tasks Framework, which is designed for analyzing the cognitive demand of tasks as they appear in instructional materials.

Speaker: Mary Ann Huntley (Cornell University)

10:25 – 11:55 am Global Projects in Mathematics

How can we integrate technology, a global perspective, and collaborative projects into our math classes (while still teaching "the Core")? In this session we will work through a simple project and learn by doing.

Speaker: Steven Weissburg (Ithaca High School)

11:55 am - 12:25 pm Lunch (provided)

12:25 – 2:25 pm Cognitively Guided Instruction (CGI): Informal Understanding of Basic Mathematics

CGI is a research program developed in the 1990s at Univ. of WI-Madison to study the strategies and development of strategies children use to solve mathematics problems in early grades. Having this explicit knowledge of children's thinking empowers teachers to provide students with opportunities to build on their own thinking. In this session we will review the CGI framework, watch videos of children using different strategies, and discuss implications for teaching.

Speaker: Cristina Gomez (Ithaca College)

2:25 – 2:30 pm Wrap-Up

RSVP by Thursday, September 24, 2015

Registration Form: https://www.math.cornell.edu/m/Community/5080#form

Questions? Contact Mary Ann Huntley (huntley@math.cornell.edu)