Notes from Situation Project Meeting at UGA 05/08/06

Suggested agenda for meeting with PSU on Thursday, May 11, 9:30 am, by PolyCom.

- 1) Create an agenda and pre meeting tasks for joint meeting at U of Maryland on May 30-31.
- 2) Look at situations revised by PSU group

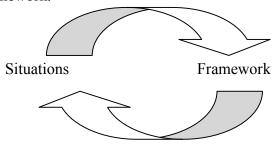
Thinking about the proposal to NSF for joint work between MAC and CPTM (Situations Project)

Purpose of Situations Project:

From the web page:

The effort in this project is to look for means to identify, understand, or discuss the mathematical knowledge for teaching (MKT) for secondary school mathematics.

Strategy: Develop a collection of Situations grounded in classroom practice that will provoke thinking about the nature and characteristics of MKT at the secondary level. Our work in creating situations will inform the building of a theoretical framework for MKT at the secondary level. The framework will inform the choice and content of situations and the cyclic relationship will continue to strengthen both the collection of situations and the framework



Foundation for work/Informed by:

- Mathematics Education of Teachers Report (Secondary chapters by Jim Fey)
- Adding It Up (K-8)
- Work on MKT at the elementary level by group at Michigan (e.g., Ball, Bass, Hill, Hoover-Thames)

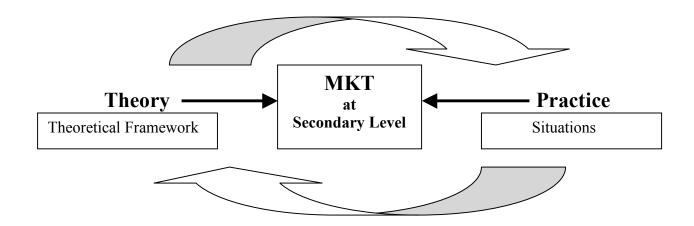
Ongoing joint work - Penn State University and University of Georgia

- Write situations
- Create set of polished situations
- Write papers for web site:
 - o Goals, process and strategy for project
 - o Essential elements of a useful framework

- Develop draft framework
 - Possible components: Big ideas, connections, reasoning, structures, representations, definitions, change, dimensions
 - o Purpose of framework
 - o Identify MKT at the secondary level
 - o Inform planning of secondary teacher education in mathematics
 - o Inform design of mathematics courses (which secondary teachers take)
 - o (Influence assessment of MKT at the secondary level)
- Write proposal to NSF responding to Dear Colleague Letter. JULY 15, 2006
 - o Identify current work of Centers that must be developed by additional investment by NSF (i.e. Situations, Framework, other??)
 - o Identify process, events, products to funded by additional grant
 - o Describe added value of the proposed work
- Hold "very small group" working meeting to critique draft framework FALL 2006?
- Revise framework based on feedback from meeting
- Continue to write and revise situations that are informed by the framework
- Products of Centers' work on Situations Project SPRING 2007?
 - Collection of polished situations
 - o Framework
 - o Papers on process, strategy, rationale, purpose

Work to be proposed for new funding:

- Purpose: Identify and characterize MKT at the secondary level *from two critical perspectives* (which has not been done before):
 - Theory a theoretical framework
 - O Practice situations grounded in secondary teaching



Situations Camp

- Generate situations from practice that exemplify and continue to contribute to the framework. (Pay attention to what the situations imply for the framework.)
- Invitees include secondary mathematics teachers, mathematicians, mathematics educators
- Working Conference on MKT at the secondary level
 - Participants: people from RUME, AMTE, MAA, NCTM, COMET interested in the mathematical preparation and development of secondary mathematics teachers
 - Rationale for conference (proposal?):
 AMTE, MAA, RUME, NCTM, COMET have members who are interested in issues related to MKT at the secondary level and the mathematical preparation and development of secondary mathematics teachers, but they are a small subset of each group and the subsets rarely intersect each other. We believe that by combining these subgroups we can make substantial progress in building and using a framework that characterizes MKT at the secondary level.
 - o Purpose
 - Dissemination of framework and situations
 - ¬ Feedback on framework
 - ¬ Brainstorming uses of framework and situations in teaching and research
- Publications
 - Framework for MKT at the secondary level
 - Situations exemplifying framework
 - O Rationale for and process of creating framework and situation

OUESTIONS

- 1) How do we interface with the Ferrini-Senk work at Michigan State?
- 2) How do we work with and not interfere with Jim Fey's efforts to connect MAC/CPTM/CSMC?
- 3) Who are the participants and staff at various stages?

(Also Who in MAC? Who in CPTM?)

- 4) What tasks do we have before the DC meeting?
 - Reading before meeting?
 - Agenda?
 - Materials for meeting?
 - Draft sections of proposal?
- 5) Who does what? (What do we want Mark Hoover-Thames to do?)