

CBMS meeting – October 4 breakout session – C3 at 9:45 a.m. - Summary

Mathematics Teachers as Professionals

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The Conference Board for the Mathematical Sciences invited an Ad Hoc committee representing national mathematics education organizations to meet in July 2011 in Park City, Utah to discuss how teachers can advance their own professional status. The following organizations were represented and have continued the work of the committee: Achieve, American Federation of Teachers (AFT), Association of State Supervisors of Mathematics (ASSM), Association of Mathematics Teacher Educators (ASMT), Conference Board for the Mathematical Sciences (CBMS), Park City Mathematics Institute, University of Arizona Institute for Mathematics & Education, Math for America, National Council of Supervisors of Mathematics (NCSM), National Council of Teachers of Mathematics (NCTM) and seven teachers.

The presenters explained that the Ad Hoc Committee on Teachers as Professional (C-TaP) support the following key goals of the Common Core State Standards:

- To improve student learning through common standards that shape high-quality curricula and assessments for all students; and
- To provide an opportunity to improve other aspects of the educational system, in particular the elevation of the teaching profession itself by affording LEADERSHIP opportunities from within.

The C-TaP also supports the notion that the body of teachers of school mathematics must be composed of highly talented, well-prepared professionals who continually upgrade their knowledge and skills. The participants in the breakout session discussed what it means to be “professional”. A professional

- ✓ Has a measure of autonomy-both internal and external;
- ✓ Has high standards for self and others;
- ✓ Is responsible to practice competently and is expected to practice without second guessing;
- ✓ Is respected, reflective, collegial, passionate, current with research;
- ✓ Is active in professional organizations;
- ✓ Has a mastery of practice, an expertise in the field; and
- ✓ Is always trying to improve knowledge and practice.

From that discussion, the participants discussed the following:

1. Define what we mean by a teaching professional.
The participants offered the following definitions: A professional -
2. Define what a teaching professional community would look like and how to build it.
3. Define a structure through which teaching professionals progress—sequences of roles or tasks, not necessarily hierarchical.
4. Describe how teaching professionals can help and support their colleagues.

A long term goal of C-TaP is to advance the professionalism of teaching. A short term goal is to provide leadership opportunities for teachers in the context of CCSSM implementation. The presenters discussed a white paper that C-TaP produced which supported the following elements:

- Teachers should have a leadership role in implementing the CCSS from the beginning and that role should expand throughout implementation.
- Teachers need leaders from within their own ranks.
- Teachers ultimately MUST take charge of their own profession—they must be full partners in establishing the norms and mechanisms of professional progress.

To implement the short term goals of C-TaP, a timeline was developed for the next year to achieve these results:

- Develop a CCSSM implementation toolkit;
 - University of Arizona Institute for Mathematics & Education is leading the development
- Develop 30 facilitators to provide, in summer 2012, one-day CCSSM professional development as part of existing PD projects; and
- Identify Math-Science Partnerships, Improving Teacher Quality projects, state NCTM affiliates and others who may apply to participate in piloting the toolkit with an announcement in late 2011.

The participants then discussed the following questions and the discussion was captured on chart paper and listed below:

- How can administrators enable teachers to become leaders?
 - ✓ Let teachers out of the building to attend professional development (such as NCTM).
 - ✓ Administrators should provide time and funds for professional development.
 - ✓ Encourage collaboration among peers.
 - ✓ Emphasize continual improvement of teaching.
 - ✓ Provide time for collaboration, for lesson study, for professional learning communities.
 - ✓ Provide school or institutional membership to professional organizations.
 - ✓ Administrators should be supportive of teachers' ideas.
 - ✓ Encourage growth of teachers and mathematics departments.
 - ✓ Empower teachers through a decision making process.
- How can K-12 and higher education work together to foster teacher leadership?
 - ✓ Higher education faculty should work as peers with teachers.
 - ✓ Higher education should establish advisory panels with teachers and listen to what they have to say.
 - ✓ Higher education faculty should develop an active role in continuing education of teachers.
 - ✓ Higher education should develop a Teaching Fellows Program (like Ohio State University).
 - ✓ Be responsive to the community.
 - ✓ Develop models for faculty and schools to work together.
 - ✓ Develop teacher leadership programs.
 - ✓ Increase involvement of practicing teachers in pre-service and in-service training.
 - ✓ Support and initiate 'mathematics circles' or professional learning communities (PLC's) and focus on content in K-12 education.
 - ✓ Develop P-20 collaboration mechanisms.
 - ✓ Teachers should invite higher education faculty into the classrooms or schools and then higher education faculty should invite K-12 teachers to participate in university pre-service training.
- How can teacher leaders influence policymakers and the larger public to become stakeholders advancing the professionalism of teaching?

- ✓ Stand up and be heard. Be political.
- ✓ Be part of the clinical development of teachers.
- ✓ Teacher leaders should forge links with parents.
- ✓ Teacher Leaders should write, publish, volunteer to speak.
- ✓ Teacher leaders should be active in professional organizations,, join committees of professional organizations.
- ✓ States should require continuing certification with genuine, defined criteria.
- ✓ National Board Certification is necessary but not sufficient. It demands reflection but not new knowledge.
- ✓ Ensure continuing education by making it licensure dependent.
- ✓ Inform policy makers and the public about the needs and obstacles of teachers.
- ✓ Share and communicate current realities in schools.
- ✓ Invite stakeholders into classrooms or schools.
- Additional comments from the participants:
 - ✓ What is a teacher leader? Examples-workshop leader, technology person, course leader, resource person; a person who should become familiar with different roles of leadership for teachers.

The presenters summarized by challenging the participants to take the following action steps:

- Join the mathematics education professional organizations (AMTE, NCSM, NCTM, and if you work at a state education agency, then ASSM).
- Establish networks across the enterprise of mathematics teaching and learning.