# SMARTER TOGETHER! Groups, Equity, and Rigorous Mathematics in K-8 Classrooms

## CONTACT INFORMATION

## Marcy Wood

Teaching, Learning, & Sociocultural Studies University of Arizona mbwood@email.arizona.edu http://mbwood.faculty.arizona.edu/

#### Lisa M Jilk

Mathematics Education Project (MEP) University of Washington, Seattle jilklisa@uw.edu

## Helen Featherstone

**Brandeis University** feather1@msu.edu

### Sandra Crespo

Teacher Education Michigan State University crespo@msu.edu

## Joy Oslund

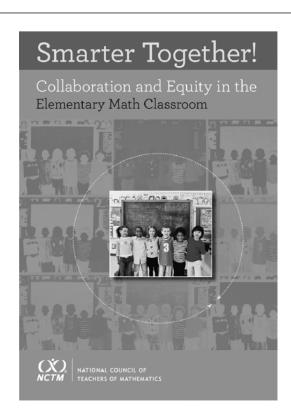
University of Michigan oslund@umich.edu

### **Amy Noelle Parks**

Elementary and Social Studies Education University of Georgia amyparks@uga.edu

# JOIN US FOR OUR BOOK SIGNING!

**THURSDAY 1-2:30 NCTM BOOKSTORE EXHIBIT HALL** 



Helen Featherstone, Sandra Crespo, Lisa Jilk, Joy Oslund, Amy Parks, & Marcy Wood. Smarter Together! Collaboration and Equity in the Elementary Classroom. Reston, Va: NCTM, 2011.

## STATUS IS....

Belief that some people are smarter and more worthy of being heard or directing activity than others. Thus those who are assumed to be smarter have more opportunities to get smarter and appear smarter!

## **Facilitator**

Gets the team off to quick start Makes sure everyone understands the task Organizes the team to complete the task Keeps track of time

- "Who knows how to start?"
- "Does everyone get what to do?"
- "I can't get it yet... can someone help?"
- "We need to keep moving so we can..."
- "Let's find a way to work this out."

## **Resource Monitor**

Collects supplies for the team
Calls the teacher over for a team question
Cares for and returns supplies
Organizes clean up

- "I think we need more information."
- "I'll call the teacher over"
- "We need to clean up. Can you... while I...?"
- "Do we all have the same question?"

# Recorder / Reporter

Gives update statements on team's progress Makes sure each member of the team records the data

Organizes and introduces report

- "We need to keep moving so we can..."
- "I'll introduce the report, then..."
- "Did everyone get that in your notes?"

These roles were originally created by the teachers in the Mathematics Department of Railside High School.

## Questioner

Asks questions about the group's activity and individual contributions:

- "Could you explain that?"
- "What is an example of ----?"
- "What's another way we could ---?"

**Encourages participation** 

Enforces use of norms

- "Remember, no talking outside the team."
- "We need to work on listening to each member of the team."

Substitutes for absent roles

# THREE CIRCLES OF COMPLEX INSTRUCTION

Multiple-Ability Curriculum

- Rigorous task
- Multiple abilities
- Open-ended
- Something to talk about

Norms and Roles

 Expectations and responsibilities for participation and learning

Status and Accountability

- Multiple abilities orientation
- Assigning competence
- Final product

Adapted from Cohen, 1994.

Other Resources

Cohen, Elizabeth. *Designing Groupwork*, 2<sup>nd</sup> ed. New York: Teachers College Press, 1994.

Erickson, Tim. *United we solve: Math problems for groups, grades 5-10.* Oakland, CA: eeps media, 1996.

Goodman, Jan M. *Group Solutions: Cooperative Logic Activities for Grades K-4.* Berkeley, CA: Lawrence Hall of Science, 1992.