



ONLINE



**TEACHERS  
DEVELOPMENT GROUP**

A non-profit organization  
dedicated to improving  
all students' mathematical  
understanding and achievement  
through meaningful, effective  
professional development

## A Conceptual Introduction to Function: Using Visual Models

### ABOUT THIS ONLINE WORKSHOP

This workshop will help middle school teachers learn approaches to teaching functions using visual models. Through a variety of activities and readings, participants in this workshop will:

- Learn approaches to teaching functions using visual models
- Become familiar with strategies to help students develop a strong conceptual understanding of function
- Become familiar with tasks that allow middle school students to explore situations of both linear and non-linear functions
- Create classroom tasks that allow students to make connections between multiple representations of functions (patterns, tables, graphs and equations)
- Develop strategies for generalizing a pattern or situation
- Explore the use of technology in supporting student learning about functions

In the final project for this course, participants will design a lesson plan using an applet to explore the concept of function.

### PARTICIPANTS

Middle school teachers and high school Pre-Algebra and Algebra I teachers, math coaches, curriculum and professional development specialists, special educators, and instructional assistants. Participation by school or district teams is encouraged. To complement the online work, teams may wish to meet face-to-face to explore math tasks, readings, and/or assignments.

### INSTRUCTOR

**MURREL HOOVER** is a Mathematics Consultant for Teachers Development Group with over 30 years experience across all grades (mostly secondary). She previously directed an NSF statewide grant for middle school teachers implementing a Standards-based curriculum. Her recent work includes supporting Algebra I teachers in studios and other school-based professional development.

### DATES

June 30 - August 17, 2010

### OPTIONAL UNIVERSITY CREDIT

Mth 810, Portland State University, 3 quarter-hours graduate credit. Pay \$165 for optional PSU credit at first workshop session.

### QUESTIONS

Contact Julie Fredericks  
Email, [julie.fredericks@teachersdg.org](mailto:julie.fredericks@teachersdg.org)  
Local Phone, 503-650-1914  
Toll-free, 877-650-1914

### COST AND REGISTRATION

\$300 per person if registration received on or before June 16, 2010.

\$350 per person for registrations received after June 16, 2010.

Register online, [www.teachersdg.org](http://www.teachersdg.org), prior to June 30, 2010

Cancellations: If you must cancel, a substitute is welcomed. Otherwise, \$50 is nonrefundable; all additional payments are fully refundable prior to the workshop start date, non refundable thereafter.