

Bureau of Educational Research
2007-2008 Seminar Series
**with the Department of Educational Psychology
and the Department of Physics**
Present

MODELING TEACHER CHANGE

TUESDAY, MAY 13

12:00PM-1:00PM, RM 242

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*Scientific Reasoning Research Institute &
Department of Physics*
University of Massachusetts Amherst



Physicists like to model things. Physics-based educational researchers like to model the dynamics of learning and teaching, at various scales and granularities: from the cognitive processes of learning and doing science, to the interactions between students working collaboratively, to the dynamics of classroom instruction.

Teacher Learning of Technology-Enhanced Formative Assessment is a five year, NSF funded research project focused on modeling a different sector of the educational space: the processes of teacher change and professional development. We combine **classroom response system technology**, **innovative pedagogy**, and an **intensive professional development** program to stimulate and support change in approximately 38 middle and high school science and math teachers.

Meanwhile, we capture a broad range of data about their thinking and practice in order to illuminate the change process. Teachers' learning trajectories are idiosyncratic, but we are finding common patterns and themes. And — perhaps more significantly — we are developing a “**model for the co-evolution of teacher and practice**”, which we believe has major implications for in-service teacher professional development, pre-service teacher preparation, instructional reform, and educational assessment at all levels.



College of Education
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Bureau Of Educational Research, Room 38
www.ed.uiuc.edu/ber/webpages/Seminars_and_Events.html