

Department of Education presents

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**THURSDAY, FEBRUARY 2, 2012**

**12 NOON—1:15 P.M.**

**CONFERENCE ROOM 2024, EDUCATION BUILDING**

### ***CONSTRUCTING EXPLANATIONS: A ROLE FOR EPISTEMIC KNOWLEDGE IN SCIENCE LEARNING***

SCIENCE EDUCATION RESEARCH AND REFORM EMPHASIZE THE IMPORTANCE OF STUDENTS CONSTRUCTING EXPLANATIONS FOR NATURAL PHENOMENA. BROADLY, MY WORK ADOPTS A COGNITIVE PERSPECTIVE TO STUDY THE TYPES OF KNOWLEDGE STUDENTS USE DURING EXPLANATION CONSTRUCTION. IN PARTICULAR I EXPLORE EPISTEMIC KNOWLEDGE - KNOWLEDGE ABOUT APPROPRIATE KNOWLEDGE BUILDING STRATEGIES AND APPROPRIATE TYPES OF KNOWLEDGE TO USE. DRAWING ON DATA BOTH FROM CLASSROOM DISCUSSIONS AND CLINICAL INTERVIEWS, IN THIS TALK I WILL EXAMINE THE POTENTIAL ROLE OF EPISTEMIC KNOWLEDGE IN INFLUENCING WHY STUDENTS AT TIMES ENGAGE IN SOPHISTICATED EXPLANATION CONSTRUCTION AND AT OTHER TIMES DO NOT. I CONCLUDE BY EXPLORING THE IMPLICATIONS OF THIS WORK BOTH FOR MODELS OF LEARNING AND FOR TEACHER PRACTICE.

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