

Chem Department Colloquium; ChemEd Seminar Series, 2013

Friday, September 13; 3:30
Seminar Hall (room 1315 Chemistry)

Discipline-Based Education Research (DBER): An NRC Report from an Emerging Field

Prof. Melanie Cooper, Michigan State University

As stated by the National Research Council, "DBER combines knowledge of teaching and learning with deep knowledge of discipline-specific science content. It describes the discipline-specific difficulties learners face and the specialized intellectual and instructional resources that can facilitate student understanding." The DBER Report, *Understanding and Improving Learning in Undergraduate Science and Engineering*, provides a description and synthesis of empirical research on the teaching and learning of Science and Engineering.

In this presentation, Prof. Cooper will provide an overview of the findings and their implications, along with implications for teaching and learning in the Sciences, and where that research might be extended in the future.



Melanie Cooper received her B.S. M.S. and Ph.D. in Chemistry from the University of Manchester, England. She is the Lappan Phillips Professor of Science Education and Professor of Chemistry at Michigan State University.

Her research has focused on improving teaching and learning in large-enrollment General and Organic Chemistry courses, and she is a proponent of evidence-based curriculum reform.

She is a Fellow of the American Chemical Society and the AAAS, a member of the Leadership Team for the Next Generation Science Standards, and a member of the National Research Council Advisory Board on Science Education. Her most recent teaching award is the 2013 James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry from the Northeastern Section, ACS.

**Please join us for refreshments in the Charter Street Atrium
after the discussion**