



Engineering and Science Education Seminar
Friday, February 20, 2009, 9:00 – 10:00 am
302 Rhodes Engineering Research Center

**Creating Communities of Learners at the Boundaries of Disciplines:
A Mixed Methods Approach to Studying Today's Students as Catalysts of Change**

Dr. Pamela Jean Théroux
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This paper describes an ongoing exploratory study examining the complex relationships involved in student and faculty engagement in an innovative program that promotes curricular and cultural change in doctoral education. It demonstrates the experience of graduate students and faculty exposed to the curricular innovation as they engage in and potentially expand the boundaries of learning across traditional disciplines. The current phase of this longitudinal study includes three cohorts of students and a number of faculty who have participated in the project as well as a comparison group of students not participating in the innovative curriculum. This phase of the study documents student (and their faculty mentor's) perceptions of their learning experience as well as their activities in communicating and collaborating across academic disciplines and national/international borders in academic and industry settings. In the spirit of "citizen scholars," this study places graduate student experiences at the center of societal change utilizing the lens of higher education reform. Using a longitudinal, mixed methods approach, it explores the relationship between integrating educational opportunities and developing communities of learners at the boundaries of disciplines.

Presenter Biography

Pamela Théroux is an Assistant Professor in the department of Educational Administration & Policy Studies, School of Education, University at Albany/SUNY (since 2006) and a Visiting Assistant Professor, School of Engineering, Rensselaer Polytechnic Institute (since 2003, previously a Research Assistant Professor and Assistant Director of Educational Research & Assessment). Dr. Théroux holds a Ph.D. with Distinction from Columbia University in Sociology, with Masters Degrees in Sociology & Education and International Educational Development from Columbia University Teachers College. As a sociologist, she studies the associations between teaching and learning within the context of formal and informal educational environments. Focusing on the social ecology of learning, she is interested in the concept of teaching-learning across domains, learning as a social process, and the importance of connections among educating networks. As an applied research methodologist, Dr. Théroux is concerned with research design, development, analysis and data interpretation. Her research combines multidisciplinary perspectives drawn from the social sciences with both qualitative and quantitative research methods. She has engaged in longitudinal research and mixed model designs as a means of embracing complex research questions and addressing teaching and learning in a time of social change. She is currently involved in a 5 year NSF funded study of innovative graduate education involving both students and faculty. As an extension of this research, she has conducted a pilot project focused on documenting cross-generational teaching/learning/mentoring opportunities involving the collaboration of doctoral students with freshman high school students and their teachers.

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