RUTGERS–NEW BRUNSWICK
Graduate School of Education

Teachers Arguing About Argumentation: When Epistemology is the Tip of an Identity Iceberg

Andy Elby, PhD
Professor of Science Education
College of Education, University of Maryland

12:00pm–1:00pm
Wednesday, February 26th, 2025

Connect with colleagues during this <u>in person</u> presentation at the GSE (Room 124).
<u>Lunch will be provided</u>! Can't attend in person? Join us remotely via Zoom!

This study explores how personal epistemology is entangled with identity and affect and how such entanglements help explain the nature and emergence of teachers' epistemic stances in the classroom. Our focal case centers around a disagreement between a mentor teacher and her teacher intern about how students should engage in scientific argumentation, a disagreement that erupted into debate during class, in front of the students. At first glance, the debate appears to be purely epistemological, a disagreement about what counts as evidence and as "good" arguments. Further exploration through interviews and other data streams, however, illustrates how modeling entanglements among epistemology, affect, and identity can best help us understand the emergence and persistence of the teachers' epistemic stances across three days of debate.

***Andy Elby**, a professor of science education at the University of Maryland, studied philosophy and physics before turning to science education. He taught high school physics for several years before coming to the University of Maryland. Andy is best known for work with David Hammer on a "resources" based cognitive model of student and teacher epistemologies, and for research and curriculum development aimed at fostering both conceptual and epistemological development in introductory physics students. His more recent work focuses on connections between epistemologies and identity and emotions; students' engagement in science practices such as argumentation; and "responsive" science teaching that builds on the substance of students' ideas and reasoning. Other interests include engineering education, disciplinary identities and emotions in STEM, and STEM cultures.*