On Monday, October 21, UNH’s Faculty Research Excellence Seminar Series continues with a focus on STEM (science, technology, engineering and mathematics) education for K-12 students. Guest Ann Rivet, Ph.D., associate professor at Teachers College Columbia University, will present current research on scientific reasoning, learning progressions, and assessment models that underlie the new science education reforms. She will address implications for what and how science is taught, learned, and assessed, and the potential consequences for future work in both science and education.

Rivet will be joined by discussants/panelists Eleanor Abrams, Ph.D., UNH professor of science education; Jade Caines, Ph.D., UNH assistant professor of education; and Jon Bromley, Oyster River High School science teacher.

This seminar is free and open to the public.

Seminar: Research on Science Learning and Assessment for the Next Generation

- Monday, October 21, 2013, 4:00 – 6:30 p.m.
- Seminar: 4:00-5:15 p.m. Networking reception to follow.
- Squamscott Room, Holloway Commons, UNH in Durham
- RSVP: [https://www.events.unh.edu/RegistrationForm.pm?event_id=15497](https://www.events.unh.edu/RegistrationForm.pm?event_id=15497)

Ann Rivet serves as the earth science content-area specialist in the science education program at Columbia University, with specific expertise in students’ interpretation and use of models and other representations for developing understandings of the Earth. Her research examines the role of teachers and innovative curriculum in inquiry-based learning environments, and how students develop rich understandings of science content in urban middle school settings. Supported by the National Science Foundation and other sponsors, her work has been published in several leading journals including *Science*, the *Journal of Research in Science Teaching*, and the *American Education Research Journal*, and presented at multiple national and international settings. Rivet holds a bachelor’s degree in physics from Brown University and a doctoral degree in science education from the University of Michigan. (See “Science Learning Progressions” at [http://www.sciencemag.org/content/339/6118/396.full](http://www.sciencemag.org/content/339/6118/396.full).)

Eleanor Abrams has been a faculty member in science education at UNH for 20 years. She is the principal investigator of a $1.2 million National Science Foundation Informal Science Education project that encourages rural and indigenous adolescents to investigate and present on community-based sustainable practices. The project examines whether contextualizing science learning to students’ culture and community will enhance rural majority and indigenous early adolescents’ science knowledge and positively strengthen their motivation and attitudes toward science. Professor Abrams was the guest editor for a special issue on the teaching and learning of science and mathematics for indigenous learners for the *International Journal of Mathematics and Science Education* in 2013. She is also the lead author for a chapter on how to support indigenous students’ learning of science. The chapter will be published in the *Handbook of Research in Science Education* later this year.
Jade Caines is a permanently certified public school teacher who has taught every grade (pre-kindergarten through college) during her decade-long teaching career. As an Emory University graduate student, she worked on several research projects, including an evaluation of Georgia statewide efforts to increase retention and graduation rates of African American males. Caines was a Research Associate at the National Center for Research on Evaluation, Standards, and Student Testing at UCLA, where she managed a statewide evaluation of after-school programs. In addition to her applied qualitative and quantitative research experiences, Caines completed her dissertation – Using Rasch Measurement Theory to Validate the Student Performance Character and Student Moral Character Scales – utilizing measurement and validity theory. She joined the UNH faculty in August. (See Caines, J., & Engelhard Jr., G. (2012). How good is good enough?: Educational standard setting and its effects on African American test takers. Journal of Negro Education.)