Dr. Heidi D. Carlone

Dr. Heidi Carlone (UNCG School of Education), a leading researcher on one of the nation’s pressing social issues – classroom equity in STEM education – was invited to share her work on June 2, 2015 at Museum of Science, Boston, one of the nation’s pre-eminent science museums. She presented her research on the innovative Engineering is Elementary (EiE) curriculum.

In addition to the museum’s education staff, education faculty from area colleges and universities including Harvard, MIT and Tufts attended, along with area school teachers and administrators.

Carlone, a professor of science education in UNCG’s School of Education, applies theoretical lenses from the fields of anthropology and sociology to investigate the short- and long-term impacts of learning with EiE on how diverse student groups develop identity.

Students who are African-American, Hispanic or from low-income families are less likely to grow up to be scientists or engineers than their middle-class white classmates. To understand why youth from these under-represented groups face such a difficult path to STEM careers, Carlone observes and interviews students and teachers in classrooms that are using the EiE curriculum. Her presentation explores the processes by which students end up labeled ‘smart’ or struggling’ – and how creating a local cultural definition of ‘smart engineer’ may affect a student’s educational trajectory.