

FACULTY LEADERSHIP & PROFESSIONAL DEVELOPMENT

For two days in September 2014, the Faculty Leadership and Professional Development Institute (FLPDI) continued to work with new curriculum from Micromessaging to Reach and Teach Every Student[™] from the National Alliance for Partnerships in Equity (NAPE).

Undergraduate faculty from 12 institutions learned to use research-tested pedagogy that improves enrollment, retention, and completion of girls and underrepresented populations in STEM courses. An online follow-up session furthered the discussion of how culture shapes our biases and beliefs about people, often without our realization.

G R O W I N G U P T H I N K I N G C O M P U T A T I O N A L L Y

Growing Up Thinking Computationally (GUTC) provided support in the classroom and after-school clubs for middle school students, and offered professional development for teachers during the 2014–2015 school year. In total, 327 students participated—45% were female, and 64% were from underrepresented groups.

Through activities, GUTC engaged participants in the use of computational models for scientific inquiry and research, and introduced two curricular units: Sustainability & Biofuels, and Geothermal Energy. In each 12-week unit, students investigate a problem, gather data, create a computer model, and run experiments using the model as a virtual test bed.

