



GUTC teachers provide hands-on computer science education to elementary and middle school students, both in afterschool programs and through daytime curricular units created to promote computer science literacy



ENERGIZE NEW MEXICO **GROWING UP THINKING COMPUTATIONALLY**

YEAR 3 ANNUAL REPORT: EDUCATION & OUTREACH

Growing Up Thinking Computationally (GUTC) has a very specific strategic priority: to increase student access to and engagement in computer science, STEM education, and research in K–12. This year, GUTC developed two new curricular units: one to introduce students to computer science and simulations, and a second that focused on climate change and agriculture. Within each 12-week unit, students investigate a local problem, gather data, build a computer model, and run experiments using the model as a virtual testbed. Over 385 students in grades 4–9 participated in GUTC activities, 37% in afterschool clubs and 63% through classes integrated with GUTC curricular units. A Fall Roundtable brought 65 GUTC club members together to demonstrate their projects and share ideas before an audience of STEM professionals, community members, and friends and family.

With NM EPSCoR funding, GUTC engaged over 385 students between grade 4 and grade 9 during the 2015–2016 school year. 59% of students were underrepresented minorities, and 45% of the students were female.

Also in Year 3, GUTC held a Career Connections Conference, which engaged 70 middle school students and 10 teachers with STEM professionals involved in algal biofuels research, aquaponics, energy efficiency, and composting.