Fostering the Next Generation of Scientists

The NSF GK-12 project at SUNY-ESF

Nine graduate Fellows infuse scientific research and inquiry-based learning into urban, suburban and rural NY high schools that offer the college-level Global Environment course through the ESF in the High School Program. In 2009-10 the project engaged 500 students in 30 high schools in New York State. Over 1800 K-12 students were reached through school-based and community outreach.

Global Environment course goals are to:
1. Teach students about the scientific process.
2. Introduce students to environmental issues including human population growth, sustainability, biodiversity, energy, and stewardship.

Research Consultants

- GK-12 Fellows engage local high school students in the scientific method and research process.
- Each Fellow is paired with a local “home” school, where they introduce research both in and out of the classroom. Fellows also present at participating schools throughout the state.

Students as Scientists

- Students explore the research process by developing independent, year-long research projects.

Students Present Results

- The program culminates at the Environmental Summit, a conference-style event on the ESF campus, where students explain their research results to their peers, Fellows, teachers and college faculty.

- Evaluation of previous NSF GK12 projects at ESF found 65% of students from schools with dedicated Fellows completed full research projects and 21% finished partial research projects. Schools without Fellows did not complete full research projects.