Women are underrepresented in Physics and Geology.

- In 2004-05, 43% of Geology graduates and 21% of Physics graduates were women. (Compared to 62% and 51% for Biology and Chemistry, respectively.)

We need to encourage girls before they enter college.

- In a survey of women physicists, 60% of the respondents indicated that they first thought of studying physics while in high school; only 17% indicated that they were influenced to study physics while undergraduates.

When considering careers, girls want to “help others”.

- Among 6th graders, more females than males list “Help other people” as an important characteristic of a future job.

Can an intervention that emphasizes the societal benefits of physics and geology change girls’ perceptions?

The POPS Plan

- Explore the science education literature to provide a strong, research-driven basis for the design of the enrichment curriculum.
- Develop an enrichment curriculum that will supplement and enhance the New York State-defined curriculum in physics and earth science.
- Create intriguing, hands-on activities.
- Gather baseline data on students from the Core Partner and Support Partner secondary schools.
- Host a series of workshops for science educators and administrators from Core Partner Support Partner institutions to elicit feedback and guidance on the proposed study.
- Complete a pilot study of the impact of engaging educational curriculum modules that focus on areas of physics and geology with broader social impact.
- Host Family Science Nights so that participating students can share their work with their families.

“The POPS Plan

The POPS Team

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References