

After-School Science



After-School Science PLUS (AS+) is an inquiry-based science program for after-school centers serving students aged 6-14. Funded under a grant from the National Science Foundation Program for Gender Equity, After-School Science PLUS is designed to help after-school programs:

- Facilitate inquiry-based science activities that are fun to do and, at the same time, develop higher-order thinking skills such as problem-solving, creative-thinking, decision-making, and spatial relations;
- Use science as a vehicle to promote literacy through journal, letter, and story writing; library research; oral communication, and reading on subjects of interest stemming from science activities;
- Provide positive role models of scientists from diverse racial/ethnic groups;
- Present ideas about careers in science, math, and technology;
- Dispel stereotypes about who can do science; and
- Create opportunities for students to see science as part of their everyday experiences.

The program includes ten core activities that focus on inquiry-based science and literacy-through-science, and an introductory activity that sets the stage for students to change their mindset about *who* does science. ASM+ uses simple materials that are low-cost or free, readily available, and culturally relevant, e.g. recyclables, cooking oil, corn starch, beans, etc. A Facilitator's Guide provides information about how to conduct the program, and includes step-by-step activity instructions, role model materials, a self-assessment tool for group leaders, family involvement letters in English and Spanish, and science/literacy resources. After-School Science PLUS staff development builds on the concept that group leaders already know more science than they realize, and reinforces confidence in their scientific abilities and interests. It includes information on how to conduct inquiry-based science activities; how to extend these activities for literacy programs; group management techniques; strategies for involving parents; and equity resources.

Impact on Students: Group leaders reported that as a result of their participation in After-School Science PLUS, students:

- now think that science is fun;
- want to do more projects;
- discovered that science applies to everyone;
- had more opportunities for hands-on science;
- were more apt to say everyone does science;
- became more positive and not at all stereotyped about girls who do science.

Including students with disabilities in after-school is a priority for EEC. Workshops offered to group leaders provide ideas and strategies to engage children with and without disabilities.

AS+ is a program of Educational Equity Center at the Academy for Educational Development. Our goal is to foster equal educational opportunities to help eliminate bias due to gender, race/ethnicity and disability. The work of this program has been supported by the National Science Foundation, the Altman, Booth Ferris, Chase Manhattan, Charles Hayden, Greentree, Pinkerton, Patrino, and Taconic foundations, and the Reader's Digest Scholarship and Leadership Fund of the New York Community Trust.

For information contact: Maryann Stimmer, Coord. Science/Math Programs, mstimmer@aed.org, 212-367-4574