

Application and Selection

Eligibility

Participants were selected during the summer before their 7th grade school year. These young women participated in the *Girls in Science* program through the end of their 8th grade school year. The participants were recruited from 21 counties in rural, Appalachia Kentucky.

This age group was selected because literature indicates while girls take about the same number of math and science courses as boys in high school; girls are less likely to take Advanced Placement Courses in science and math (NCES, 1997). This is compounded by changes in girls' achievement, interest, and confidence in science and math. Studies document that girls tend to have less self-confidence in math and science than boys do (Phillips, 1998). Decisions made early on in life, about science and math courses, adversely affect female choices in college. If girls are not encouraged in middle school to see the importance of science and math to scientific careers, girls arrive at the college level inadequately prepared for science majors.

In addition, by 11 years of age, many students have determined ideas about occupational status and education requirements for a particular career. Students began to exclude certain occupations due to inaccurate perceptions of job duties, job status, and educational needs. The misconception of necessary educational requirements can result in unrealistic careers plan and surrendering occupational and educational aspirations that require too much effort. School counselors need to begin career counseling long before high school and possibly before middle school to encourage a comprehensive career exploration (Blackhurst, Auger, & Wahl, 2003), so students more thoughtfully choose advanced science and math courses in high school and consider careers in science.

Each of the girls selected to participate in the program received a \$100 stipend each summer to help defray travel costs to the University of Kentucky, which for some participants was over 3 hours away from home. When the girls completed the 2-year program, they received a \$1000 college stipend.