

## GENERAL SCIENCE

# Encouragement in Science

Facts and figures about the 320 finalists in the tenth National Science Fair indicate the boys and girls became interested in science very early in their school years.

DATA ON the 320 finalists at this year's National Science Fair re-emphasizes the importance of providing opportunities to discover the exciting possibilities of science during the elementary grades and junior high school.

According to a report released by SCIENCE SERVICE, which conducts the Fair through its Science Clubs of America, 56% of these 227 boys and 93 girls were interested in science by the time they were 10½ years old. Another 26% became science-minded during the junior high school years of 7th, 8th and 9th grade. Nearly half of this junior high enthusiasm bloomed among 13-year-olds, or the 7th grade level.

Teachers at nearly every grade level, science courses, laboratory experiences, demonstrations, and appealingly written textbooks captured the initial interest of 30% of these students. The influence of parents and other family members and the atmosphere of their homes were credited for their enthusiasm by 21%. Others mentioned such catalysts as their own curiosity and drive, scientific equipment, reading material, science clubs and fairs, scientists and summer jobs in science, educational films and television programs, etc.

Asked to describe the source of the ideas that inspired the outstanding projects that won these high school sophomores, juniors, and seniors the privilege of competing at the national level, 35% said they found their ideas in magazines, journals, books, research papers and news stories. Personal experiences, observations, hobbies, experiments, and individual study yielded inter-

esting project subjects for 28%. About 14% found stimulating questions at school and 11% at science fairs, Junior Academy of Science and science club meetings, from scientists and scientific laboratories.

Nearly all, 97.5%, of these young people are looking forward to careers in a great variety of scientific specialties, with about 21% planning work in the medical sciences, 19% in engineering and electronics, 15% in the biological sciences, 13% in physics, 7.5% in teaching (many more include teaching as part of their futures), about 6% in chemistry, and so forth.

Almost 56% of the fathers of the finalists continued their education beyond high school, earning 37 BS degrees, 13 BA's, 11 MS's, eight MA's, nine MD's, 16 LIB's, 17 PhD's, one DSc, one DrIng, etc.

More than 51% of their mothers attended college, earning eight RN degrees, 31 BS's, 40 BA's, six MA's, three MS's, one MD, one LLB, etc. About 30% of the mothers are employed.

More than a hundred different periodicals, both general science magazines, such as SCIENCE NEWS LETTER, and highly specialized journals, were named by the finalists in answer to a question concerning the scientific publications which they regularly read. Only 31 of the students do not consistently read one or several such publications.

About a fourth of these potential scientists have scientists in their family backgrounds, either in their immediate families or among their relatives. Alexander Graham Bell was the great-grandfather of

one finalist and Sir Arthur S. Eddington, famous English astronomer, was the cousin of another.

It is estimated that more than 45,000 students and adults visited the Tenth Annual National Science Fair in Hartford, May 6 to 9, to study the projects exhibited by the 320 finalists representing 168 areas, regional, state, and nation-wide fairs in the United States, Japan, Germany, Canada and Puerto Rico. It is believed that well over 600,000 projects were shown in the local and school fairs that preceded the larger fairs affiliated with the National Science Fair.

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