Fairs: National-Local

Science Fairs show graphically and effectively the magnitude of creativeness and scientific enterprise of which young scientists are capable.

THE NATIONAL SCIENCE FAIR-INTERNATIONAL has developed to its present size and scope from a beginning of 13 affiliated area fairs in 1950. Even more spectacular is the expansion of the science fair program at local and regional levels. Feeding these, or operating independently, are school fairs which are so numerous that it is difficult to keep track of them.

A science fair is a collection of exhibits, each of which is designed to show a biological, chemical, physical or technical principle, a laboratory or other procedure, an industrial development, or an orderly collection of anything which can be fitted into the broad concept of any branch of any pure or applied science.

Every year millions of people see science exhibits shown by students at science fairs leading to the national fair.

One reason for this growing student interest in science and technology during the past decade is the exciting advance which science has made and is projecting.

Coupled with this is the awareness of educators, from kindergarten through university, that genuine interest in science is sparked at a very early age, often before the first year of school.

Scientific and technical societies, cognizant of the tremendous shortage of skilled scientists and technicians, are encouraging science fair programs for the purpose of recognizing potentials early and because

Gail M. Houston, 17, a 14th NSF-I First Award winner from Sylacauga, Ala. Project: Rous Sarcoma.

through them additional motivation becomes more easily possible.

Civic and social groups find that science fairs supply an outlet for constructive creativity of youngsters. The fairs provide a purposeful use for funds accumulated in educational and other accounts.

Newspapers sense the rich educational service which fairs give to the community. They often sponsor the program and take over, or assist, in the promotion, arrange-

ments and financing.

Industry sees the science fair as an exemplification of the American way of free enterprise. It lends technical experts to the cause and helps to finance it.

Educationally Valuable

The whole science program is educationally sound. It allows the student to select freely the project upon which he plans to work. Automatically he leads himself through a study of the bedrock principles of his chosen topic, thus acquiring a basic, fundamental understanding of the facts and techniques involved. All elements of a stiff competition are present to urge the student to do his best, thus reflecting honors on himself, sponsors, school, city and state.

Educators and newsmen cooperating in the program of the National Science Fair-International are partial to bringing the fair to a different city each year. This makes it possible for a finalist, who returns to the fair each year he is eligible, to visit three different cities, meet the outstanding scientists in each and visit them in their laboratories. Similar cultural values automatically extends to the accompanying educators and press representatives.

How to Conduct a Science Fair

The science club sponsor or teacher, or group of sponsors or teachers, first should get permission from the principal or board of education for holding a science fair to which the public will be invited.

The fair may be designed for operation in one school, or each school of a group of schools can schedule the event to occur substantially at the same time. The best exhibits may then be presented finally at a centralized place.

Additional information on conducting and organizing a science fair will be sent without charge or obligation to anyone requesting it. Write to Science Service, 1719 N Street, N.W., Washington, D. C. 20036.

School, Area or Regional Fairs

The simplest fair is an exhibition of science projects held in the school itself. There are shown all the experiments, collections and displays that have been worked out by students either in class or as extracurricular science club activities. These fairs often are a feature of a meeting or a show-

ing to which the public is invited.

Regional science fairs may have several hundred exhibits, viewed by thousands of people who visit an exhibition hall which may be a school or college gymnasium, an armory, a museum or other such area. Some science fairs, even in large cities, accept the maximum number of exhibits the hall will allow. In other cases, the city or area fair receives only an allotted number of exhibits from each school, which holds its own elimination first.

Regional and school science fairs generally use the rules of the national fair or adapt them to fit various local situations.

National Science Fair-International

From regional or state fairs the best exhibits made by individual students (not groups) are selected for entry into the annual National Science Fair-International.

The rules of the national fair specify that to be eligible boys and girls must be students in the last three years of public, private, parochial or other secondary schools, and must have been selected for highest honors in a regional fair affiliated with the

national organization.

Each affiliated fair is entitled to send two finalists, their exhibits and adult escort to the national fair, paying their expenses and undertaking responsibility for them.

All exhibits must be individual projects

and must be limited in size to 48 inches from side to side and 30 inches from front to back. Identical repetition of a project exhibited by the student at a previous year's science fair disqualifies the finalist. However, the project may cover the same field of investigation when a substantial amount of new work has been done.

Exhibits must be durable and safely designed and constructed, using approved switches and cords for 110-volt operation. No dangerous chemicals, open flames, explosives or live poisonous reptiles may be exhibited. Live animals must be properly and humanely cared for, and any experimental work that has been done with them must conform with National Science Fair-International regulations for such experiments. Plants must pass federal and state quarantine regulations.

Judging is based on creative ability, scientific thought, thoroughness, skill, clarity and dramatic value of each exhibit. Scientists designated by Science Service judge the contest and the decision of these judges is final in all cases.

For National Science Fair-International Awards, the projects of boy and girl finalists are judged separately. First, second, third and fourth place awards are made in a number of scientific categories designated as

Special awards also are made at the National Science Fair-International by many national organizations, armed forces and federal agencies.

The National Association of Secondary-School Principals has placed the National Science Fair-International on the Approved List of National Contests and Activities for 1963-64.