EDUCATION

# Survey of Course Trends

➤ IN A NATIONWIDE survey of the 1958 high school graduating classes, the first of its kind, statistics were gathered to show what the students studied.

Able students, upper five per cent in ability, earned between 11¼ to 15 academic credits while the typical medium or below average student earned only 8 to 11 credits. The curriculums of the upper ability group included more math and science.

Within the upper 25 per cent, only 60 per cent of the students were headed for college. Although many of these were in college curriculums preparing for college, they showed a tendency to avoid advanced academic courses. Only 38 per cent completed more than three credits in the social sciences, 31 per cent more than three credits in mathematics, 20 per cent more than three credits in science and 40 per cent more than two credits in foreign languages.

In most groups of different abilities the

girls took more courses and made higher grades. However, in the upper five per cent ability group the boys showed a higher proportion taking heavier course-work, graduating with an average of 17½ credits.

Schools which had higher enrollments were able to adjust curriculums with abilities so that pupils graduating from these schools earned an average of one more credit than did those from smaller schools.

The survey, conducted by the U.S. Office of Education of the Department of Health, Education and Welfare, collected information concerning 5,647 students from 898 schools. In making the survey only transcripts which recorded four years of credit and had reliable mental test scores were used. The schools represented a scientific sampling of numbers of pupils enrolled and of areas across the country.

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GENERAL SCIENCE

## **News From Science Clubs**

➤ PROGRAMS and activities of science clubs reported to Science Clubs of America are as follows:

AMHERST COUNTY HIGH SCHOOL SCIENCE CLUB is observing Science Youth Month by presenting a week-long series of Nike Ajax and Nike Hercules demonstrations, in cooperation with the U. S. Army. Six demonstrations each day, and four each evening are planned from Oct. 22 to 28. Science clubs are invited, and arrangements can be made by contacting the president, Carroll Freeman, at the school in Amherst, Va.

The members of the ARCHBISHOP MOLLOY SCIENCE CLUB, Archbishop Molloy High School, Jamaica, N. Y., give demonstrations, arrange for speakers and conduct scientific tours for students in science classes. The club serves as host to the student body for several science feature films during the school year.

The most effective program of the MATH AND SCIENCE CLUB, Nightingale Junior High School, Los Angeles, Calif., is an annual Mathematics Field Day.

SCIENCE INVESTIGATÓRS of the Esperanza Junior High School, Great Mills, Md., publishes a Science Newspaper for students in the school.

The members of the CHEMISTRY CLUB of the W. A. Porter C. I. School, Scarborough, Ontario, Canada, do chemistry projects, take field trips to industries and research laboratories, and give talks followed by discussions at their meeting.

The S.H.S. SCIENCE CLUB, Sierra High School, Whittier, Calif., publishes The Sierra High School Science Journal in cooperation with the Science, Basic Subjects, Industrial Arts, Business Education and the Art Departments of their school.

The most successful activities of the AIEA

SCIENCE CLUB, Aiea Elementary and Intermediate School, Aiea, Hawaii, are science fairs and camps.

The members of the CENTRAL SCI-ENCE CLUB, Annamalai University, Annamalainager, S. India, are busy improving apparatus and publishing a club magazine.

Affiliate your club with SCA and send reports on your activities to Science Clubs of America, 1719 N Street, N.W., Washington 6 D. C.

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GENERAL SCIENCE

## Technical Recreation For Kindergarteners

➤ KINDERGARTENERS to eight-year-olds learn to solder wires, wind coils and build their own radio sets in the Technical Recreation Program at North Wildwood, N. J.

The program was designed for older students, but the younger children were so anxious to participate that they were reluctantly admitted, William A. Taylor, who instigated the technical recreation activities, told Science Service.

Now firmly entrenched in the "tech rec" room, the youngsters are proving their ability to grasp scientific principles. Their scientific interest and prowess amaze their elders and their accomplishments often encourage older siblings.

Nearby churches took note of the success of the technical recreation program, and added science activities to the Bible school curriculum. The result: a tripled enrollment in two years' time.

Small children and things scientific seem to be an effective combination, whatever the circumstances.

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EDUCATION

#### Kindergarten Children Need More Challenges

➤ CHILDREN attending kindergarten are ready for more intellectual challenges than is now given them, an educational study has shown.

Contrary to the widely held belief of educators and parents, children three to five years of age are ready for intellectual experiences. Kindergarten groups and nursery schools in most cases, however, stress social development and fun instead.

The study was described in a report published by Columbia University's Bureau of Publications of Teachers College. Dr. Kenneth D. Wann, professor of education and specialist in early childhood education at Columbia University Teachers College, headed the study.

Three hundred children from five New York schools were observed directly and anecdotal information was also collected. The children came from all levels of society.

The researchers concluded that through conversations at home as well as new toys, television, books and magazines, children are exposed much earlier than in the past to a broad range of facts. They found the children not only could collect and remember information, but that they were able to relate and understand many of the ideas.

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GENERAL SCIENCE

### New Guide for Science Clubs

► HOW TO HELP budding scientists is told in the new Science Clubs of America Sponsor Handbook issued by SCIENCE SERVICE.

Ideas are presented for science club or class projects, science fair exhibits, research reports and challenging hobbies. Because science interest is becoming more prevalent among the six- to 12-year-olds, specific material has been included to help teachers and club sponsors in their work with this age group. Graphs and illustrations are used liberally. These include "Elements of Experimentation for High School Students" by Dr. Saul B. Saila and Raymond A. Shappy and "Extracurricular Science Activities and the School Program" by Richard S. Peterson.

Details of organizing and conducting science clubs, fairs and other science competitions and activities are augmented by reports of special studies.

A favorite feature which has been updated to meet current needs is a section on college scholarships, advice on financing college and a list of other information sources.

Although the Science Clubs of America Sponsor Handbook has been specially prepared for sponsors of affiliated clubs who receive it without charge, parents and other interested individuals and organizations may obtain it for \$1.00 postpaid from Science Service, 1719 N Street, N.W., Washington 6, D. C.

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