

## GENERAL SCIENCE

# STS Honors Announced

► THE MOST TALENTED high school science students in the 1965 graduating classes have been announced by SCIENCE SERVICE.

The 300 students in towns and villages scattered from Alaska to Florida have received letters of congratulations accompanying the news that they have won a place in the Honors Group of the 24th Science Talent Search for the Westinghouse Science Scholarships and Awards.

The Search is conducted annually by Science Clubs of America, a SCIENCE SERVICE activity.

A total of 2,939 students completed all entry requirements before the deadline at midnight, Dec. 27, and thus were qualified for judging in the Science Talent Search. Just over 10% of these entrants were selected as members of the Honors Group. Entry blanks were initially sent 22,692 students.

The 300 students receiving honors are 15 to 18 years old and go to school in 174 communities in 38 states and the District of Columbia. Their principals rank them very high in their graduating classes, with 72% of the boys and 86% of the girls in the top 5%; 26% of the boys and 50% of the girls rank first in their classes.

The outstanding student-scientists include 77 girls and 223 boys, with the ratio of girls among the members of the Honors Group determined each year by the percentage of girls among those completing entries. All of the group will be recommended for admission and scholarship awards to the nation's colleges and universities.

On Jan. 27, 40 members of the Honors Group were announced as the top winners of the 24th Science Talent Search. They have been invited to attend the five-day Science Talent Institute, to be held in Washington, D. C., Feb. 24 through March 1, during which they will be judged for \$34,250 in Westinghouse Science Scholarships and Awards.

These scholarships and the operation of the Search are supported by the Westinghouse Educational Foundation of the Westinghouse Electric Corporation.

Many of the Honors Group will receive further recognition in state Science Talent Searches conducted on a local level as part of the national Search.

Already at work on a great assortment of new ideas, these novice scientists may be very accurate prophets of the world of the future.

The project papers they submitted as part of the entrance requirements of the stiff Science Talent Search competition are dramatic evidence of the scope and depth of their interest and ability.

Career preferences of the group cover the entire range of science from aeronautical engineering to zoology. First choice of the group is medical science, chosen by 41 of the 300 Honors Group members. One of these plans to be a veterinarian and another aspires to a dental career. A close second is physics, with 39. Education ranks next, with 38 planning to teach at high school or college level.

Biochemistry is next with 28, and chemistry follows closely with 27 selecting that field. Mathematics claims 26, with engineering and biology following with 20 and 19. The remainder are scattered in almost every scientific field.

Only four are "undecided," while 11 plan non-science careers. These include the ministry, politics and one novelist.

These young scientists have been active in extracurricular activities. Interest in science has been expanded by 267 of the 300 through science club activities, and 236 through science fair participation.

For a free copy of the honors list of the Science Talent Search, send a self-addressed, 10¢ stamped long envelope to SCIENCE SERVICE, 1719 N St., N.W., Washington, D. C. 20036.

• Science News Letter, 87:70 January 30, 1965

## EDUCATION

# More Education Needed

► PUBLIC TWO-YEAR junior colleges are seen necessary if we are to keep up with the social changes wrought by automation.

Dr. Virgil M. Rogers, director of the Project on the Educational Implications of Automation, reported to the National Association of Secondary-School Principals in Washington, D.C. The Project is sponsored by the National Education Association.

Increasing automation, he said, has made "good education" urgent.

"The sign of a good education is not the mere acquisition of facts," he said, "but the ability to proceed independently, to look up things in the library, to investigate problems and formulate answers—in short, educating the student to educate himself."

There no longer is time in the first 12

grades to give students this education and also train them for specific jobs, he said. That is one reason public junior colleges are needed.

The "community college" would also be used to give college preparation for students who did badly in some fields in high school, to bring adults up to date with new areas of knowledge and to provide special courses fitting the community's needs.

As technical advances make more and more skills suddenly obsolete it is vital that the worker be flexible enough to acquire new skills, Dr. Rogers said.

"In many business courses the student is taught, by rote, how to change typewriter ribbons on one or more models," he said. "As inventions are constantly being updated

and changed, would it not be more beneficial to teach the student how to read and understand instruction manuals and the purpose behind them?

"Provisions should be made for easy transfer from one curriculum to another, with a minimum of effort or loss of time and credit. No pupil would be under pressure to make vocational choices before he is mature enough to understand the problem."

Automation is shrinking the number of working hours and years. Increased leisure time calls for more education, in purely cultural matters.

The overriding problem, Dr. Rogers said, is that not enough money is spent for building new schools and staffing them with competent teachers and counselors.

"Today there is reason to believe that the educated are getting more education," he said, "and that the ignorant are losing further ground in the competitive struggle for work, the enjoyment of leisure and the good things of life."

• Science News Letter, 87:70 January 30, 1965

## DENTISTRY

## Some Wind Instruments May Improve Bite

► A FAULTY BITE may be corrected by playing certain wind instruments, an Israeli physician reported.

Writing in Dental Abstracts, Dr. S. Seidner of Tel Aviv pointed out that children with protruding upper teeth who play the bugle may aid their orthodontic treatment. Similarly, children with protruding lower teeth may be helped by playing a recorder.

Certain types of malocclusions, or faulty bites, even contribute to better playing ability, the doctor noted. For example, many musicians with a protruding lower jaw are especially well equipped to play the oboe or bassoon.

• Science News Letter, 87:70 January 30, 1965

## SOCIOLOGY

## Special Training Sought To Surmount Cultural Lag

► EQUAL education for every American youngster will not take the place of a good cultural background.

Instead, a group of international scholars meeting at the University of Chicago, with the support of the Office of Education, U.S. Department of Health, Education and Welfare, has recommended a system of compensatory education to help socially deprived students compensate for the cultural gap.

The program envisioned would be carried out at both national and community levels, as well as by individual school systems, and would include work-study programs, special types of nursery school-kindergartens and youth groups that provide opportunities for social relations, community service and the development of values.

Stressing the importance of intervention at as early an age as possible, the report points out that it is the responsibility of the school to take over when adequate learning does not take place in the home.

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