

EDUCATION

Revise Role of Teacher

The science teacher's most important role, says a leading anthropologist, is to interest the student in the process of scientific investigation.

► STUDENTS who seem to be potential scientists should be given an opportunity to work with scientists.

The entire role of the science teacher needs to be reconsidered, Dr. Margaret Mead, world-famous author and anthropologist, told the educators meeting in Denver, Colo., for the Sixth Annual Convention of the National Science Teachers Association.

The science teacher today is expected to be a model of two kinds of people simultaneously: a scientist concerned with research and a teacher concerned with teaching, Dr. Mead said. But boys, who are believed to be the appropriate sex from which scientists and engineers will come, tend to identify themselves with male teachers. This tends to overstress the identification factor.

The appropriate role of the science teacher is to interest a student, not in being a scientist by identification, but in the process of scientific investigation, Dr. Mead declared.

Male teachers who prefer to teach other subjects, but have been induced to teach science, must be rescued. There should be a reinforcing of those women good in mathematics and physics, who have been diverted from science teaching because they are females.

"The most frequent negative comment from students, 'I am not interested in science' is found to mean 'this is something which I can do nothing with.' Boredom, apathy and active rejection follow an inability to do, use, and make sense of something in a culture where learning is by doing."

Outlining the plan being developed by Watson Davis of SCIENCE SERVICE for a science youth information service to put the isolated, gifted child in touch with working scientists in his area, through the mechanism of committees of regional science fairs, Dr. Mead expressed the opinion that this plan "combines all the advantages of our large population and mass communications with the need for face-to-face apprenticeship relationships between present and future scientists."

Students react strongly against a disliked science teacher.

They take a good teacher for granted, Dr. Mead said.

Increasing the recognition and respect accorded the science teacher is empty exhortation unless it is accompanied by a widening of his role in the eyes of his students, the students' parents, and the scientific leaders in the community.

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TRANSISTOR-AMPLIFIER — J. F. Dewald of Bell Telephone Laboratories examines a laboratory model of his invention, the new transistor amplifier that uses an electrolyte-semiconductor interface.

NUTRITION

Americans Change Taste For Vegetables

► AMERICAN TASTE for television and pizza is causing changes in the vegetable market, the U. S. Department of Agriculture has reported.

Prepared frozen dinners and pot pies have accounted for a good share of the frozen peas consumption, which rose from 6% to 31% since 1941. The increased popularity of Italian-style dishes such as pizza and spaghetti has caused a 159% increase in tomato pulp, puree and sauce consumption.

These two, peas and tomatoes, are also representative of changes taking place with many other vegetables: Consumer preference for frozen and canned vegetables has grown at the expense of the fresh vegetable market.

In addition to changes in packaging, the average American's taste in vegetables is changing. More corn, lettuce, cucumbers, lima beans, garlic, broccoli, carrots and Brussels sprouts are being eaten today than 10 or 15 years ago.

However, less cauliflower, egg plant, spinach, onions, cabbage, asparagus and artichokes, are eaten. Beets, snap beans, peppers, peas, celery and kale seem to be holding their own on the consumer's vegetable list.

The switch from fresh to processed vegetables is also causing a shift in the location of production. California now produces 40% of the national output of tomatoes, while the West as a whole has increased its share of U. S. production from 26% to 37%. States that produced mostly for the fresh market during the prewar period have sharply decreased production where they were unable to shift to production for canning or freezing.

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AERONAUTICS

Plan New Space Agency

► THE FEDERAL research organization in aeronautics, in existence since World War I as the National Advisory Committee for Aeronautics (NACA), is either in danger of becoming a victim of the present "space" furore, or it will become the nucleus of a new major expanded research effort of great promise.

President Eisenhower in recommending to Congress the establishment of a National Aeronautics and Space Agency, which would absorb the NACA, contemplates changing the organizational method that has proved successful over 43 years in keeping America at the forefront of aeronautical research.

Leading authorities, by virtue of position in the Government or because of scientific and technical eminence, constitute the NACA and serve without compensation. The NACA has a competent technical staff and three extensive research laboratories in Virginia, California and Ohio, with additional test stations.

The new Eisenhower proposal, following the March 26 "Introduction to Outer Space" report of the President's Science Advisory

Committee, is viewed as a step to soft pedal wild-eyed military aspects of outer space. While the organizational set-up would be changed, the competence and skill of the NACA would be augmented and applied to new problems.

The NACA in a report issued in January listed as major research fields: space mechanics, space environment, energy resources, propulsion systems, vehicle configuration and structure, materials, launch, rendezvous, re-entry and recovery, communication, navigation and guidance, space biology, flight simulation and measurement and observation techniques.

Expanded facilities and staff, a greatly expanded contract research program and new laboratories also were proposed. (See SNL, Jan. 11, p. 22.)

The new agency proposed would seem to make possible the realization of such plans. In addition to accelerating research, the new agency would also make some person or group responsible for performance in the space field as well as the advance of aeronautics.

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