The Teaching Societies

EVERY scientist teaches some of the time and many teach all the time. Indeed, the fruits of research are in large part the end product of a teaching process. When it is good, science can flourish; when it falters, there is a waste of resources, human and material.

In all the learned societies and sections that comprise our Association there is growing concern with problems of teaching—not in the narrow pedagogical sense, but in the sense of broad educational policy. The painful shortage of men and women with talent for research makes necessary a broadening of the base from which this talent can be drawn, and better means for its early identification and development. If college students show woeful lack of preparation in fundamentals of mathematics and science, the remedy can only be found in the curriculum of the schools. When support for research comes too slowly and too reluctantly from Congress, it must be that our people are scientifically illiterate and that they are so, in part, because science plays too small a role in general education. And—who are the teachers of science? How were they recruited, selected, trained, and certified for their jobs? Scientists cannot afford to leave these matters to others. Annoyance with, and sharp criticism of, the educationists" have not and will not bring improvement. Neglect can only strengthen the iron curtain between the science specialist and the science educator.

During the past ten years, the AAAS has fostered the growing interest in teaching problems through its Cooperative Committee on the Teaching of Science and Mathematics (*Science*, **111**, 197 [1950]). Seventeen national scientific and science teaching societies are cooperating through their 17 representatives in a continuous study of vital issues in science education. Through conferences, symposia, and published investigations, the committee calls attention to problems and helps to solve them. The recent annual meetings of the AAAS show increasing participation by school and college science teachers.

In about a month, Congress will arrive at monumental decisions with reference to our manpower. Now that all have spoken and all points of view have been expressed, it is clear that no one has challenged the wisdom of the Cleveland AAAS resolution. Ways are sure to be found for making "maximum use in the present emergency of the scientific and technical skill possessed by our trained personnel" and for insuring "an adequate continuing supply of such trained personnel."

Regardless of the specific provisions in the new Selective Service law, there are important and definite implications ahead for teachers of science. For the high schools, it will be more important than ever before to differentiate between college-bound and non-college-bound students. If, through intensification though not curtailment of studies, young people can reach college six months or a year sooner than normal, valuable time will be saved for additional college training. The non-college-bound students will also need special consideration, though not acceleration, in terms of general and vocational education in science. In the colleges, the courses in science and mathematics for freshmen and sophomores will need review and modification. New problems in personnel guidance will arise at both high-school and college levels. The need for science teaching apparatus and, above all, the need for adequate pre- and in-service teacher training programs will become paramount. And an adjunct to the work in all schools and colleges will be the responsibility we must all assume in civil defense.

The Cooperative Committee plans to devote itself to science teaching problems as they crystallize out of the national emergency.

MORRIS MEISTER
Chairman, AAAS Cooperative Committee

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