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Manpower and Education

The shortage of educated manpower has been a matter of increasing concern to industrialists, educators, scientists, and government officials. This concern will undoubtedly continue; for our more and more elaborate technology demands that an increasing proportion of the people should become educated to their maximum capacity.

Recently the Subcommittee on Research and Development of the Joint Committee on Atomic Energy held hearings on the shortage of scientific and engineering manpower and has since reported some of its findings and recommendations. The subcommittee wisely recognized that the shortage of scientists and engineers is only a part of the problem and that an over-all increase in the number of trained people in all fields would be in the national interest. A recurrent theme in the hearings and one that is emphasized in the report is that the quality and quantity of instruction in mathematics in our high schools is of such fundamental and general importance that vigorous action should be taken to improve mathematics teaching and to strengthen the place of mathematics in the curriculum [see *Science* 123, 965 (1 June 1956)].

The subcommittee proposed that a remedial program should have the following requirements: early identification of able students and the provision of courses that would engage their interest and stimulate their minds; encouragement of able students to continue education beyond high school; removal of economic barriers to education; improvement of the supply of high-school and college teachers; better use of available talent in industry, defense, and education; improvement of in-service training in industry.

Numerous recommendations were made on how these requirements might be met. Among them were better pay for high-school teachers; an educational reserve made up in part of properly qualified men and women from industry who would be released at full pay for high-school teaching and in part by people recruited from the ranks of the retired; and federal support for scholarship programs.

These are clearly preliminary recommendations. At this stage of the consideration little effort has been made to criticize them, to appraise their possible effectiveness, and to fit them into a suitable pattern. Nor have the hearings brought out as yet any careful appraisal of the educational role of the Federal Government in relation to that of state and local governments.

Nevertheless, it is good that the hearings have been held and the recommendations put forward, for these activities mark the first steps in the fact-finding procedure that Congress normally uses as a basis for legislation.

—G. DUS.