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SCIENCE, founded in 1880, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of 3 March 1879.

SCIENCE is indexed in the *Reader's Guide to Periodical Literature* and in the *Industrial Arts Index*.

All correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors.

Change of address: The notification should reach us 4 weeks in advance. If possible, please furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including zone numbers, if any.

Annual subscriptions: \$7.50; foreign postage, \$1; Canadian postage, 50¢. Single copies, 25¢. Special rates to members of the AAAS. Cable address: Advancesci, Washington.

The AAAS also publishes THE SCIENTIFIC MONTHLY.



Distribution of Talent

Recent studies of the Soviet educational system indicate that great emphasis is placed on science and engineering. Students are carefully selected for progression to the next higher level; science and mathematics make up a sizable portion of elementary- and secondary-school curricula; a relatively large fraction of the educational effort at the collegiate level is directed toward the production of scientists and engineers.

In contrast, schools in the United States give mathematics and science less emphasis at elementary and secondary levels and are more permissive in allowing students to choose the fields in which they will specialize and to remain in or drop out of school as they wish.

The net result is that the annual number of graduates in science and engineering has become greater and is increasing more rapidly in the Soviet Union than in the United States. The implications for scientific, technologic, and military progress in the two countries have been much discussed.

Most persons acquainted with the situation agree that the fraction of the nation's talent devoted to scientific pursuits should be increased. There is not such great agreement on proper methods of achieving the desired increase. Few are the extremists who would abrogate the traditional freedom of individual choice, and few are the opposite extremists who would do nothing. Probably the range of choice of greatest concern is the extent to which the persuasive power of the Federal Government and the large foundations should be differentially used to increase the number of science students.

When industrial production and military strength depend as greatly as they do on science and engineering, it would be easy indeed to be stampeded into adopting measures designed to strengthen science at the expense of other areas of human endeavor. So far the temptation has been resisted; several important policy decisions have reflected a continuing belief in the desirability of maintaining maximum freedom of individual choice at collegiate and higher levels. The student deferment policy of the Selective Service System uses quality, rather than field of interest, as the determining factor in deciding which students are qualified to remain in college or university. The Merit Scholarship Program begun this year under Ford Foundation auspices puts no restrictions on the fields in which scholarship winners can study. The staff of the National Science Foundation has spent many an hour in thoughtful discussion of whether it would be socially desirable to exercise the foundation's authority to offer undergraduate scholarships in the sciences when similar offers are not available in other fields, and so far has not taken that step.

Underlying all of these courses of action is the assumption that it is better to educate all young men and women of high ability than it is to pick out those who are interested in a particular area. The record is far from perfect in achieving this ideal, for many persons of high ability do not continue their education to the level that would enable them—and society—to make the most of their talents. In the long run it seems likely that science will profit at least as much from increasing the over-all number of students of high ability as it would from a more narrowly conceived effort, and that society as a whole will profit more.—D.W.