greatest number. The next phase—the next great mission of our educational system—should be to introduce more extensively into our system of mass education the opportunities and means for differentiation in order to permit the fullest encouragement and development of our high talent.

"We need to fight the mucker pose that it is smart to be anti-intellectual. We must set greater store by intellectual achievement and the senses of the firstrate in all education."

Rickover stresses importance of factual knowledge. "We should not have to support schools if we want no more than "adjustment" of children to life as it is. A child is being properly educated only when he is learning to become independent of his parents. We have schools because we know that in today's world everyone is daily called upon to make decisions for which he needs a background of general knowledge, not obtainable merely by "learning through living." To acquire such knowledge, fact upon fact, takes time and effort. If we try to spare our children mental effort and to protect them against disappointments or personal failures through flunking exams, we send them ill prepared into a competitive world. The degree of ignorance which a democracy can tolerate varies in inverse ratio to the advance of the nation toward higher cultural and scientific levels.

"Our elementary and secondary education must, thus, provide first, for the average and below-average student, a sufficiently broad terminal education to fit him into a modern technological society; and second, for the talented student, it must provide a solid underpinning for subsequent professional education. Neither of these two objectives is achieved in the majority of American public school systems. Unlike all other Western countries of similar civilization, we lack a national standard for curricula, for school-leaving examinations, for diplomas, or for teacher qualifications. There is a wide variety in the school systems of different states, even for different cities in the same state."

## **Radiation Hazards Program**

A program at New York University—Bellevue Medical Center concerned with hazards of radiation as they are to be found in the environment has been made possible through a \$500,000 grant from the Rockefeller Foundation. The grant, for use during the 10-year period beginning January 1958, will provide salaries for additional staff required for development of a program of both research and teaching within a new unit.

The unit's work will be directed by Norton Nelson, head of the center's Institute of Industrial Medicine and professor and chairman of the department of industrial medicine in N.Y.U. Post-Graduate Medical School. An important contribution to the effectiveness of this program will come from the recently established arrangement between the Institute of Industrial Medicine and the U.S. Atomic Energy Commission's Health and Safety Laboratory which provides a basis for cooperative research and teaching between the two units. The Health and Safety Laboratory is under the direction of S. Allan Lough. Members of the Health Safety Laboratory have for a number of years served on the faculty of the institute.

## Grants, Fellowships, and Awards

Botany. The Committee on the Darbaker Prize of the Botanical Society of America will accept nominations for an award to be announced at the annual meeting of the society in 1958. Under the terms of the bequest, the award is to be made for meritorious work in the study of algae. Nonmembers of the society are eligible. The committee will base its judgment primarily on the papers published by the nominee during the last two full calendar years previous to the closing date for nominations. At present, the award will be limited to residents of North America. Only papers published in the English language will be considered. Nominations for the 1958 award, accompanied by a statement of the merits of the case and by reprints of the publications supporting the candidacy, should be received before 1 May by the chairman of the committee, George F. Papenfuss, University of California, Berkeley.

Cardiological Reporting. The American Heart Association has announced the opening of the sixth annual competition for the Howard W. Blakeslee Awards for outstanding reporting in the field of heart and blood vessel diseases. The association's Awards Committee will make its selections from among newspaper and magazine articles, books, radio and television programs, and films published or produced between 1 March 1957 and 28 February 1958. The deadline for entries is 1 May. The awards which carry an honorarium of \$500 each, will be presented in the fall. Entry blanks and rules folders may be obtained from local Heart Associations or from the American Heart Association, 44 E. 23 St., New York 10, N.Y.

Earth Sciences. The Earth Sciences Program of the National Science Foundation is now receiving proposals for research grants that will be made in October 1958. The deadline for the receipt of proposals for work to begin in the fall or early winter is 15 May. There are

no formal application blanks, but a foundation pamphlet describes the method of making application and outlines the information needed in a proposal. This pamphlet may be obtained by writing to the National Science Foundation, Washington 25, D.C. Attention: Earth Sciences Program.

## Use of Satellites for Research in Life Sciences

Methods by which artificial earth satellites can be used to further basic research in the life sciences will be the subject of a symposium, 14–17 May, to be sponsored jointly by the National Academy of Sciences, the American Institute of Biological Sciences, and the National Science Foundation. Attendance at the symposium, which will probably take place in Washington, D.C., will be by invitation only; invitations will be sent to about 200 biologists, biochemists, biophysicists, psychologists, medical scientists, and others. About 30 papers will be presented.

A steering committee—composed of representatives of the three sponsoring organizations and of appropriate scientific disciplines—has announced three main objectives: (i) to exchange information concerning the technical feasibility and scientific importance of various experiments with living organisms in the satellite environment; (ii) to discuss methods and techniques for conducting such experiments, including associated laboratory work; and (iii) to stimulate thinking that will lead to a sound program of research in the life sciences through the use of earth satellites.

## Geology Neglected?

The American Geological Institute has released a statement entitled "Government Weakness Apparent in Mineral Security Area" that includes the following comments:

"The American Geological Institute is deeply concerned over the current neglect by the Federal Government of problems relating to our national mineral security. Minerals and the mineral fuels are the raw material base on which our great scientific and technologic advances have been founded. In our current zest to conquer space, the government is unfortunately showing little concern over a strong mineral research policy to match growth and needs of science and technology.

"Dr. Robert C. Stephenson, Executive Director of the American Geological Institute, a federation of fourteen scientific societies in the area of the geological sciences, representing over 30,000 geoscientists, has recently, by letter, brought