NSF Issues New Education Survey

The National Science Foundation last week published the most comprehensive collection of statistics yet available on U.S. financial assistance to institutions of higher learning. Contained in a volume titled Federal Support to Universities and Colleges, Fiscal Years 1963-66 (NSF Publication 67-14),* the 137-page report specifies, by institution, state, and region, which ones are getting how much from the agencies that provide the bulk of federal support for academic activities. It also identifies significant trends and provides correlations of various data, such as the input of federal funds in relation to the institutions' output of graduate degree holders. For examining the financial basics of the federal relationship with higher education, the report takes its place at once as the most useful document available. Prepared by NSF, on the basis of data collected by the Federal Interagency Committee on Academic Science and Engineering, it represents a maturing of statistical services that has long been sought by virtually everyone concerned with federal support of higher education.

Among the most significant findings in the report were the following:

• Between 1963 and 1966, total expenditures on higher education in the U.S., from all sources, rose from approximately \$11 billion a year to \$15.2 billion; during this same period the federal contribution rose from \$1.4 billion to \$3 billion. (The figures are for on-campus activities and do not pertain to the contract research centers which a relatively few universities operate for federal agencies.)

• Support of "academic science" (defined as "obligations for research and development, R & D plant and other activities such as education in the sciences") accounted for the lion's share of federal support to colleges and universities. Thus, within the total of federal support during the period under study, federal expenditures for academic science rose from \$1.3 billion to \$2.2 billion.

• In the later years covered by the study, however, the most rapid growth was in support outside the sciences; in the nonscience areas the totals rose from \$85 million in 1963 to \$847 million in 1966.

• The major portion of the nonscience growth emanates from the construction and development programs administered by the U.S. Office of Education. OE's contributions rose from \$67.3 million to \$944.8 million over the 4-year period. Within the OE totals, funds for academic science rose from \$26.6 million to \$274 million.

• The number of institutions receiving federal support rose from 840 in 1963 to 2050 in 1966; the latter total represents four-fifths of the nation's institutions of higher learning. (The marked increase in the number of recipients of U.S. funds in large part reflects the growth of OE programs for the rapidly expanding system of junior and community colleges.)

• Institutions receiving \$10 million or more rose from 40 in 1963 to 79 in 1966. One hundred institutions received 85.4 percent of total federal educational expenditures in 1963; by 1966 the share of the top 100 had dropped to 70.4 percent, and the list contained ten newcomers: University of Louisville, University of Connecticut, New York Medical College, Loyola University (Illinois), University of Massachusetts, University of Denver, Rice University, University of California at Santa Barbara, Southern Illinois University, and University of Alaska.

• Finally, in 1966 the top ten in total receipts of federal funds for oncampus activities were as follows: University of Michigan, \$66.2 million; MIT, \$63.2 million; Stanford, \$60.6 million; Columbia, \$60 million; University of Illinois, \$58.4 million; Harvard, \$54 million; UCLA, \$51.2 million; UC, Berkeley, \$50.3 million; Chicago, \$45.2 million; and Ohio State, \$39 million.—D.S.G.

* Copies of the report are available for 70 cents from the U.S. Government Printing Office, Washington, D.C. 20402. The report was prepared for the White House Office of Science and Technology under the general direction of Charles E. Falk, NSF planning director; the data was processed by the Office of Data Management, headed by Richard Mayer, and the analysis of data and preparation of the report were handled by the Office of Economic and Manpower Studies, headed by H. E. Riley.

financial difficulties of the organization. The old five-man commission displayed little energy and, as compared with the Common Market commission, commanded little prestige.

Under the new regime, most of Euratom's functions will be directed by one of the commissioners, Fritz Helwig, although control of some functions, such as health physics and social affairs, will be placed elsewhere. Helwig, it appears, will to some degree be expected to assume the role of "general manager."

It is too early to tell how the new dispensation will work. The old administrative substructure is still functioning, and results of a study on a new organization are due in a month or so. The word is already out, however, that the number of directors-general—top administrators below the commissioners —will be sharply reduced, probably from the present 40 to 22. The general expectation is that the new commission will be much tougher, and the hope is that, for Euratom, it will be more effective.

The big question hanging over Euratom, however, is the one of its role. The original idea was that Euratom would do on a collective basis for the Six what the nations couldn't do individually in the field of atomic energy. In the mid-1950's none of the Six had a major national atomic energy program. It was a period of enthusiasm for European integration, and Euratom, as a vehicle for cooperation in developing the peaceful uses of the atom, raised great hopes.

In general, Euratom has not succeeded brilliantly where commercial considerations came into play. Commercial interests have come to be identified with national interests. Euratom has lacked a constituency; industry has its own interests to consider, and Euratom appears as a rival to the national programs of the most active governments. In commercially nonsensitive areas—the biology research program and the thermonuclear fusion research program, for example—Euratom, it is generally agreed, has been more successful.

Much of the controversy and much of the interest has naturally centered on fast breeder reactors, in which Euratom has invested a heavy dose of R & D funds. Expectations for the breeder reactors' becoming the powergenerating stars of the 1970's are high, and so, therefore, are the stakes. It is not surprising that it has been national attitudes toward the fast-reactor "pro-