Recruitment Through Education and Experience

THE increasingly acute problem of recruitment of scientists, especially for service in government laboratories and in endowed and educational institutions, requires an active program for its effective solution. These institutions, handicapped in competing for new scientists because of limitations imposed by regulations or restricted incomes, are forced to offer other inducements for employment and to play an increasingly stronger role in encouraging qualified undergraduates and high school students to choose a career in science.

The National Bureau of Standards, through its Personnel Division and Educational Committee, has, over a period of years, endeavored to offset the low salary disadvantages of government employment by offering special training and educational opportunities. The student trainee program is initiated by announcements, followed by direct contacts with teachers and students. Selected groups of high school graduates and college students are brought in to work as technical aides for the summer period. Not all these trainees will return to the bureau for permanent employment upon completion of their college education, but it is felt that they will serve as emissaries to present the advantages of employment at the bureau, and that they may stimulate interest in science among their high school and undergraduate associates who are qualified.

In the summer of 1952 the bureau had 160 student trainees from more than 100 colleges and universities, including 15 Westinghouse Scholarship and National Science Fair winners.

The established pattern of advanced education in this country now embraces a widely accepted concept of dual employment and education. Most educators agree that a longer period of graduate study, combined with practical work in the field of the major study, leads to better training. Sponsored research has shifted the emphasis in many universities from teaching to research projects, and institutions that are primarily engaged in research, such as government laboratories, have long recognized the possibility of attracting and holding younger personnel by offering educational opportunities along with employment. In keeping with the concept that advanced education should be in the field of employment, instruction is usually limited to the laboratory's field of cognizance.

The Graduate School of the National Bureau of Standards has pioneered in providing courses for graduate and advanced undergraduates in physical science. In the 44 years that the Graduate School has served bureau personnel, more than 7000 students have been registered, and more than 150 have obtained Ph.D. degrees through course work that has been accepted by their universities in partial fulfillment of requirements. Other government institutions, such as the Department of Agriculture and the large Navy laboratories, have established similar educational programs. In many cases the educational work is carried on by cooperative arrangements with nearby universities, and in all cases the degrees are obtained from universities, which accredit such work or courses and determine the academic requirements that can be met through cooperation with these nonacademic institutions.

Although graduates of these joint programs may leave the cooperating agency after attainment of their academic degree, some remain to lead and direct work, and those who leave form a supporting "alumni" in industrial and educational organizations to promote cooperation and good will.

Recruitment of graduates may be indirectly accomplished through the employment of university professors who, in the capacity of consultants, not only bring new ideas into research and development programs, but transmit to their students a knowledge and appreciation of the opportunities for employment at the laboratory.

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