

highly motivated to pursue higher education but who rank slightly below the top decile on the usual measures of college aptitude. Scholarship funds for the large number of potential drop-outs among the "second best" are in short supply.

Further research is also required. What impact, if any, does a national scholarship competition have upon students who compete but fail to win recognition? Are these students stimulated to develop their talents, or are they diverted into occupations less commensurate with their ability level? How can we devise better methods for identifying the potential drop-out while he is still in high school? What resources can be marshaled to lessen the talent loss arising from parental attitudes and cultural deficits? (8).

References and Notes

1. R. E. Ifert, *Coll. and Univ.* 31, 435 (1956).
2. Educational Testing Service, *Background Factors Relating to College Plans and College Enrollment among Public High School Students* (Educational Testing Service, Princeton, N.J., 1957).
3. In this paper the term *drop-out* generally refers to a high-school graduate who does not enroll in college. In the discussion of drop-outs among participants in the Merit program, the term refers to high-school graduates who failed to enroll in an accredited college in the quarter or semester *immediately* following graduation from high school, or to students who enrolled but withdrew before completing a full quarter or semester.
4. J. L. Holland and J. M. Stalnaker, *J. Higher Educ.* 28, 361 (1957).
5. The top-ranking 5 percent of the senior class in each participating high school was tested without charge. Further, the second annual program allowed additional seniors to take the qualifying test by paying a fee of \$1; this provision in part accounts for a threefold increase in the number of participants in the second year. Since an estimated 88 percent of the 1956 senior population attended one of the 10,388 high schools in the first year's program, it is estimated that a minimum of nine out of every ten senior students were screened in the 1957 talent search.
6. The ability levels of 241 students were difficult to estimate (because of incomplete aptitude test scores or follow-up test performance incommensurate with performance on the initial test); these students were not surveyed and are not considered a part of the top 15,000 students referred to.
7. W. G. Mollenkopf and R. E. Dear, *An Analysis of Factors Affecting Financial Aid-Offers and Awards* (Educational Testing Service, Princeton, N.J., 1957).
8. I am indebted to John M. Stalnaker, John L. Holland and Laura Kent for their critical reading of the manuscript. This study was partially supported by research grants from the National Science Foundation and the Old Dominion Foundation.
9. L. M. Terman and M. H. Oden, *The Gifted Child Grows Up* (Stanford Univ. Press, Stanford, Calif., 1957).
10. L. I. Phearman, *J. Educ. Psychol.* 40, 405 (1949).
11. D. Wolfe, *America's Resources of Specialized Talent* (Harper, New York, 1954).
12. M. Corcoran and R. J. Keller, *College Attendance of Minnesota High School Seniors* (Bureau of Institutional Research, Univ. of Minnesota, 1957).
13. C. C. Cole, Jr., *Encouraging Scientific Talent* (College Entrance Examination Board, New York, 1956), p. 83.

News of Science

NASA Absorbs NACA

On 30 September the personnel, facilities, and research activities of the 43-year-old National Advisory Committee for Aeronautics were incorporated into the National Aeronautics and Space Administration. With this action, NASA is effectively "in business."

The action came nearly a month sooner than the statutory requirement that the transfer, by proclamation in the Federal Register, be made not later than 90 days after the date of enactment of the Space Act (President Eisenhower signed it 20 July). T. Keith Glennan, administrator of NASA, said he would soon announce details of the NASA organizational structure.

The three main NACA laboratories will be renamed in the change-over to NASA. The Langley Aeronautical Laboratory at Langley Field, Va., will be renamed the Langley Research Center. The name of Ames Aeronautical Laboratory, Moffett Field, Calif., will be changed to Ames Research Center, and the Lewis Flight Propulsion Laboratory, in Cleveland, Ohio, to the Lewis Research Center. No change of name is

pending for the High Speed Flight Station, Edwards, Calif.; Pilotless Aircraft Research Station, Wallops Island, Va., or the Plum Brook Research Reactor Facility, Sandusky, Ohio. NASA took over NACA headquarters in Washington.

Cooperative Education

The first nationwide study of cooperative education in American colleges and universities has been announced by Ralph W. Tyler, chairman of the Study Committee on Cooperative Education, and director of the Center for Advanced Study in the Behavioral Sciences, Palo Alto, Calif. The project is supported by a grant of \$95,000 from the Fund for the Advancement of Education, a subsidiary of the Ford Foundation.

Approximately 60 colleges and universities now have programs of cooperative education for some or all of their students. Under the cooperative plan, students alternate periods of work in school and in industry as a regular part of their degree programs.

The cooperative plan was inaugurated

in 1906 at the University of Cincinnati by the late Herman Schneider, dean of engineering. It has become a well-established type of engineering education and has been adopted in programs of business administration, education, science, and the liberal arts. Much of the growth of the plan has come since World War II.

The principal aim of the new study is to examine the educational merits of the work-study plan for college students. The investigation group hopes to learn something about the kinds of young people attracted to cooperative programs rather than to traditional programs, something about the kinds of students for whom the cooperative experience is particularly meaningful, and something about the outcome in terms of readiness for permanent employment and readiness for effective participation in civic and community affairs.

The study also proposes to examine the economic values of cooperative education for students and for institutions operating the plan, and to examine the role of industry and business. Results of the study will be useful to officials of higher education, parents, high-school guidance counsellors, and industry.

Charles F. Kettering, inventor and former director of research for General Motors, serves as honorary chairman of the Study of Cooperative Education. The professional staff of the study lists James W. Wilson, coordinator of educational research at the Rochester Institute of Technology, as executive director and Edward H. Lyons, Industrial Coordinator at the University of Detroit, as associate director.