

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board

1978: RICHARD E. BALZHISER, JAMES F. CROW, HANS LANDSBERG, EDWARD NEY, FRANK W. PUTNAM, MAXINE SINGER, PAUL E. WAGGONER, F. KARL WILLENBROCK

1979: E. PETER GEIDUSCHEK, WARD GOODENOUGH, N. BRUCE HANNAY, MARTIN J. KLEIN, FRANKLIN A. LONG, NEAL E. MILLER, JEFFREY J. WINE

Publisher

WILLIAM D. CAREY

Editor

PHILIP H. ABELSON

Editorial Staff

Managing Editor
ROBERT V. ORMES
Assistant Managing Editor
JOHN E. RINGLE

Business Manager
HANS NUSSBAUM
Production Editor
ELLEN E. MURPHY

News and Comment: BARBARA J. CULLITON, *Editor*; LUTHER J. CARTER, CONSTANCE HOLDEN, DEBORAH SHAPLEY, R. JEFFREY SMITH, NICHOLAS WADE, JOHN WALSH. *Editorial Assistant*, SCHERRAINE MACK

Research News: ALLEN L. HAMMOND, *Editor*; RICHARD A. KERR, GINA BARI KOLATA, JEAN L. MARX, THOMAS H. MAUGH II, WILLIAM D. METZ, ARTHUR L. ROBINSON. *Editorial Assistant*, FANNIE GROOM

Associate Editors: ELEANORE BUTZ, MARY DORFMAN, SYLVIA EBERHART, JUDITH GOTTLIEB

Assistant Editors: CAITILIN GORDON, RUTH KULSTAD, LOIS SCHMITT, DIANE TURKIN

Book Reviews: KATHERINE LIVINGSTON, *Editor*; LINDA HEISERMAN, JANET KEGG

Letters: CHRISTINE KARLIK

Copy Editors: ISABELLA BOULDIN, OLIVER HEATWOLE

Production: NANCY HARTNAGEL, JOHN BAKER; YA LI SWIGART, ELEANOR WARNER; JEAN ROCKWOOD, LEAH RYAN, SHARON RYAN

Covers, Reprints, and Permissions: GRAYCE FINGER, *Editor*; CORRINE HARRIS, MARGARET LLOYD

Guide to Scientific Instruments: RICHARD SOMMER

Assistant to the Editors: RICHARD SEMIKLOSE

Membership Recruitment: GWENDOLYN HUDDLE

Member and Subscription Records: ANN RAGLAND

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Area code 202. General Editorial Office, 467-4350; Book Reviews, 467-4367; Guide to Scientific Instruments, 467-4480; News and Comment, 467-4430; Reprints and Permissions, 467-4483; Research News, 467-4321; Cable: *Advances*, Washington. For "Instructions for Contributors," write the editorial office or see page xv, *Science*, 30 September 1977.

BUSINESS CORRESPONDENCE: Area Code 202. Business Office, 467-4411; Circulation, 467-4417.

Advertising Representatives

Director: EARL J. SCHERAGO

Production Manager: MARGARET STERLING

Advertising Sales Manager: RICHARD L. CHARLES

Marketing Manager: HERBERT L. BURKLUND

Sales: NEW YORK, N.Y. 10036: Steve Hamburger, 1515 Broadway (212-730-1050); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, ILL. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-DE-7-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772); DORSET, VT. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581)

ADVERTISING CORRESPONDENCE: Tenth floor, 1515 Broadway, New York, N.Y. 10036. Phone: 212-730-1050.

Pedagogical Plainmen

Truman Lee Kelley once labeled as "pedagogical plainmen" those teachers and administrators who were so obsessed with norms and averages that they busily shoveled off peaks of excellence to make plains of uniformity. The plainmen are still at work, trying now to reduce differences among colleges and universities to achieve a homogenized postsecondary system of education. Worthy objectives lie behind some of their efforts; college is not solely for the smartest, and special help is needed to overcome early disadvantages. Yet if the plainmen succeed too well they will weaken the whole educational system. In intellectual affairs, as in athletics, a setter of high standards can improve the performance of all the rest. Why was it, Kevles* has asked, that in the late 1800's geology in the United States so exceeded physics in quality and usefulness? His answer: high standards set by the U.S. Geological Survey toned up geology throughout the land, while physics had no such standard setter. The Westinghouse Science Talent Search, the portable fellowships of the National Science Foundation, and other rigorously selective programs have encouraged nonwinners as well as winners; how often one hears a comment such as "I didn't win, but I sure learned a lot in trying."

But high standards are now called undemocratic and harmful. Thus some universities increase salaries across the board instead of on a merit basis; published ratings of the quality of graduate programs are disparaged; we are warned not to list universities in order of their research funds or the number of degrees conferred but to stick to a bland alphabetical listing; *elite* has become a dirty word; *higher education* has given way to *postsecondary education*; and *university* can now mean a large college.

Traditionally, colleges and universities of high quality have been valued both for themselves and as standard setters that contribute to the whole far out of proportion to their small number. This principle is still valid, but stating it is not enough, for resources are now often allocated on specific, segmental grounds, not on general principles. Federal funds have swung far in the direction of noncompetitive grants to students, while competitive support has dwindled. Peer review is accused of cronyism despite much evidence of its effectiveness in identifying research of quality. State legislatures find it easier to allocate funds to universities, colleges, and 2-year colleges by a numerical formula than to support each on the basis of its own distinctive requirements.

Champions of elite institutions are needed on all these and similar fronts. Fortunately, there is a currently popular concept that can reinforce their arguments: the values of diversity. We need different types of colleges, different kinds of achievement, different leagues of competition, and different types of rewards—all worthy of respect and support, but as diverse members of a larger community, neither to be treated alike nor to be expected to approach uniformity. Even within this diversity of institutions, however, champions of selective high quality will be needed to combat the plainmen. They will be accused of making self-serving arguments, and will be called elitists. So be it.

Their arguments will be self-serving, but they will be nation-serving as well, as is the advocacy of high standards in other realms. And of course they will be elitists, in the older meaning of the word. That is the point, for what the plainmen do not understand is that although their plains are sometimes shadowed, they are also nourished by the peaks.—DAEL WOLFLE, *University of Washington, Seattle 98195*

*Daniel J. Kevles, in *Nineteenth-Century American Science: A Reappraisal*, George H. Daniels, Ed. (Northwestern Univ. Press, Evanston, Ill., 1972), p. 142.