

Letters

Racial Differences:

Dilemma of College Admissions

Nelson's account of the report "State Universities and Black Americans" (6 June, p. 1155), as well as recent events at my own university, have produced in me strong feelings of pessimism about the future. Intelligent, well-meaning men are drawing conclusions and taking actions that may produce more harm than benefit.

In the general population Negroes have a distribution of intelligence, or readiness to do college work, that has a mean approximately one standard deviation below the Caucasian mean. Standard deviations are about equal. In the ability area in which the highest 25 percent of Caucasians are found, which is the area from which the more distinguished state universities draw their students, only about 5 percent of the Negroes have a competitive ability level.

The emotional response to this is that the tests are "culturally bound" and do not evaluate Negroes "fairly." The data are remarkably consistent, however, in showing that these tests are equally accurate predictors of academic performance for both races during at least the first year in a standard curriculum.

Although the facts are clear, there is no established scientific explanation. While genetic differences between the races cannot be ruled out, they are certainly smaller than present measured differences and, on the basis of present data, could even be in the reverse direction. There seem to be biological differences leading to intellectual deficit, however, that have been attributed to the prenatal environment. There are also important deficiencies in the home and neighborhood. Whatever the explanation, Negroes show the same relative deficit at the time they finish high school that they do in the first grade. (My units of measurement are standard deviation units based upon 1st and 12th grade distributions. Grade placement units show

an increasing deficit, but these units become smaller as the amount of education increases.) Under these circumstances it is understandable that the deficit is not readily overcome. The "laying on of hands" by a distinguished faculty is not sufficient.

When the above ratio of 5 to 1 is corrected for the proportion of Negroes in the population, there is only about one Negro to every 30 Caucasians on a nationwide basis who is in the top 25 percent of our population. In order to obtain more than a token number of Negro undergraduates, admissions standards have to be substantially lowered. When this is coupled with the present severe competition for qualified Negroes, and a crash recruitment program, student quality may deteriorate substantially. The result this past academic year on this campus was a difference between the means of the two races that was 2.4 times the standard deviation of the Caucasian distribution.

A difference between the means of the races of one standard deviation is difficult to deal with if the goal is something like 15 percent Negro admissions. As the difference increases, difficulties multiply. There will be an intolerable level of dropping of Negro students on academic grounds during the first year unless there is massive intervention. A desirable form of intervention is to establish special sections and special remedial courses. An undesirable form is for the faculty to assign grades in regular racially mixed classes on the basis of skin color rather than on performance. In the present emotional climate, if more desirable forms of intervention are not sufficiently massive, this second type becomes inevitable.

There is another effect of bringing in Negro students who are far below their fellow students in readiness to do academic work. A group of young people who are newly imbued with pride in race are placed in a situation in which they are, by and large, obviously inferior.

A scientist qualifies this inferiority by adding "at their present stage of development," but this is slight consolation to the student involved. The causal chain from frustration to aggression is well established. A large ability difference as a source of aggression cannot be ignored. The universities are damned if they don't admit more Negroes, but they are also damned in another sense if they do.

LLOYD G. HUMPHREYS

*Department of Psychology,
University of Illinois,
Urbana 61801*

Our Quality of Life

Arouses Student Skeptics

I don't disagree with the general thrust of Feeney's remarks (Letters, 8 Aug.), but suggest that an emphasis on the social responsibilities of science in teaching might be added to his list of strategies for those of us who are in a position to undertake them. Many scientists are also educators and this role puts some of them into daily contact with students. It is possible to interpret this role as simply requiring the scientist to transmit information in a lucid and comprehensible way to a group of more or less passive consumers, with the efficiency of the transmission being monitored by occasional examinations. Unfortunately, this is a very common attitude.

Our students are also concerned about the social responsibilities of the sciences and technology and respond to discussions of such things with a fervor which is astonishing. They are quite skeptical about our quality of life—a quality which they associate with the influence of science and technology. Last year we presented a series of talks to our graduate students in biology on such matters as pollution, the population explosion, chemical and biological warfare, and the recent explosive increase in venereal disease. The imagination and concern of some of our undergraduates who attended these presentations led to their developing and implementing a course called "Population: The Vital Revolution." They prepared an outline of topics they wanted discussed and invited selected faculty on our campus and elsewhere to participate as lecturers and discussants. The course was first offered in January and was repeated in April; registration

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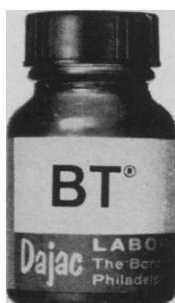
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closed early both times. It will be offered again this fall. The intensity of student interest and the effectiveness with which they have sought out and used faculty resources available to them is most impressive. The result of their activity has been to transform the consciousness of the campus with respect to the implications of population growth.

One's estimate of the probability of producing any lasting effect through teaching can vary a good bit and mine is not very optimistic. However, I think it is necessary to behave as if it were greater than zero. Certainly it is greater than the probability of significantly influencing the action of such groups as the Chamber of Commerce, city councils, or the State Lands Commission, at least in southern California.

GROVER C. STEPHENS
*Department of Organismic Biology,
University of California,
Irvine 92664*

NIH: Ethics of Budget Cutting and Retrenchment

For many years the National Institutes of Health have provided training grants to departments in a large number of universities to support graduate students in the natural and medical sciences. These programs were adopted to decentralize procedures for awarding fellowships to students so as to reduce the need for direct evaluation of applicants by NIH panels and committees. The training grants also aided in the advance of knowledge in the health sciences and have materially contributed to meeting the nation's needs for an increased number of scientists.

The custom of awarding training grants to universities instead of awarding fellowships directly to students has resulted in a transfer of fiscal responsibility. In selecting students and awarding stipends under training grants the universities have had to make a commitment to support the student for the entire period leading to the Ph.D. degree—generally 4 to 6 years. Training grants have generally been awarded for 5 years with a complete review during the fourth year. By this time, however, a university would have continuing commitments to students already admitted, ranging from 1 to 3 years beyond the expiration of the grant and, if letters of acceptance had already

been sent to students admitting them in the fifth year of the grant, its responsibility to them could extend for as long as 4 years beyond the termination of the training grant.

During the current period of retrenchment and budget cuts, many training grants have not been renewed and others have been approved for renewal but have not been funded. This is placing an undue and unfair burden on the universities to provide stipends for the substantial numbers of students to whom they have made continuing commitments. In accepting the principles of the training grant programs, the universities filled their pipelines with graduate students and had to make commitments in good faith extending beyond the period of the grant. The National Institutes of Health are ethically and morally responsible and probably could be held legally responsible for continuing stipends to graduate students already appointed until they complete their degrees.

ELVIN A. KABAT
*Department of Microbiology,
Columbia University,
630 West 168 Street,
New York 10032*

Is the AAAS Council Facing Its Responsibilities?

The Council of the AAAS is composed of about 550 delegates from the affiliated societies, the sections, and the state academies. It meets once each year, usually performs routine business, hears committee reports, and adjourns in less than a day. Councillors are asked to come from throughout the nation during the holiday season for such sessions, and frequently the attendance is poor.

This dismal state of the Council operations is in particular contrast to its possibilities. At a time when science is harassed by government and public agencies, the Council could be a major force for defending and encouraging science and its applications for improving human welfare. No other body in existence has such major possibilities. Why are its potentialities virtually untapped?

The main reason is that it is not well organized. About 10 years ago, a major reorganization was attempted, and the basic power of the Council as the governing body of the AAAS was restored.