## Letters

## How Can We Intervene "Massively"?

In his letter (10 Oct.) about the perils of admitting to a college or university students who are greatly underqualified for it academically, measurement specialist Lloyd G. Humphreys of the University of Illinois stresses that "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." He is referring to a situation where "this past academic year on this campus [there] was a difference between the means of the two races that was 2.4 times the standard deviation of the Caucasian distribution." In studying various remedial, tutoring, and coaching programs for many years, I have found no evidence that anyone knows how to leap an academic-readiness gap nearly that large.

Especially, the developed verbal and mathematical abilities represented by college-entrance examinations such as the Scholastic Aptitude Test seem highly resistant to accelerated growth at high school and college levels. One hears many anecdotes about academic miracles, but upon closer examination they almost always prove to be unsubstantiated or highly atypical.

The old rule of guidance and admissions that a student is well advised to attend a college where he is not almost hopelessly outclassed academically holds for blacks as well as for others. Many colleges and universities exist which are easier than those in the Big Ten, for example. It is cruel psychologically, dangerous racially, costly economically, and unproductive educationally to set up quotas of blacks for selective colleges and universities, however humanitarian that might seem. Most academically quite underqualified students can be got through to degrees there only if easier curricula are developed specially for them, and that needlessly and probably inefficiently duplicates resources already available in state colleges, many private institutions, and open-door community colleges.

I share Humphreys' "strong feelings of pessimism about the future" of selective colleges and universities that vigorously recruit students not academically prepared to succeed in their programs. In my opinion, the admissions procedure itself should be essentially colorblind, but the facilitation of admitted students should not. Why are otherwise rational college administrators and faculty members "drawing conclusions and taking actions that may [I would say, 'almost certainly will'] produce more harm than benefit"?

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Humphreys' letter concerning the implications of racial differences in intelligence for college admissions stimulates us to report an analysis done by William L. Tetlow, Jr., of the academic performance of 243 black students at Cornell University who were admitted under a special program (COSEP). Students in the COSEP program included some who were in a good competitive position for college scholarships in terms of entrance standards (SAT and high school class ranking) but it included many (23 percent) who were judged to be very high risk (below the 5th percentile for Cornell entering students).

The statement of Humphreys that is at issue is: "The data are remarkably consistent 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."

First it is reassuring to note that the 243 COSEP students, all of whom take standard college programs, closely match the total class of 1964 which had been studied for attrition. Two-thirds of both groups were on schedule in terms of graduation and about 80 percent could be expected to graduate eventually. But one striking finding among the COSEP students is that the

high-risk group were doing better academically than some of the lower-risk groups among the COSEP students. A 90 percent graduation rate could be expected among the 56 COSEP students who were high risk.

Data more directly relevant to Humphreys' statement comes from an analysis of the relationship between first semester grade point average and the various predictors used in admission. Whereas for the entire class the multiple correlation involving SAT-Verbal, SAT-Math, and high school rank was .59 with grade point average, for the COSEP male students it was .33 and for females .25.

These findings do not support Humphreys' pessimism about the achievements of black students with below-average test scores. It is important to indicate that the Cornell admission policy under COSEP is not open admission. The entering students with very low SAT scores and grade point averages were selected for evidence of environmental circumstances that might account for the low scores and evidence from high school counselors and others indicating high motivation for achievement in college.

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The thrust of Humphreys' important remarks on racial differences remind us of a whole cluster of academic delusions about grades.

Since "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," and since this comes to represent a greater grade-placement deficit in later years of school which "is not readily overcome [because] the 'laying on of hands' by a distinguished faculty is not sufficient," colleges face a dilemma in admitting more than token numbers of Negroes. We discover that university faculty are more willing to "assign grades in regular racially mixed classes on the basis of skin color rather than performance" than they are to invest enough of their own resources "to establish special sections and special remedial courses."

This is obviously true, and obviously a problem. Yet, I am struck that after conceding that what intelligence tests do is predict college (or at least fresh-

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man) grades, Humphreys, along with most of us, feels that we are derelict if we fail in our grading policy to ensure that grades predict intelligence test scores.

While I feel that Astin (16 Aug. 1968, p. 661) and others have by far overstated their case that colleges do not change students, it is certainly true that college grades are poor predictors of anything in postcollegiate biographies. If, indeed, dispensers of college grades are already exploring the temptation of compensatory discrimination in favor of black skins, it seems likely that others in positions to control these same students' subsequent fates will also do that during the coming generation. If so, skin color would seem a valid component of a measure designed to predict success-certainly one which would not decrease the worth of the predictor.

If we are to feel some sober moral responsibility for giving grades in an noncapricious manner, I would hope we are reflecting something other than duty to the self-fulfilling prophecy that IQ and GPA, *because they are so designed*, account for about a third of one anothers' variance though nothing else.

It seems odd to me that many psychometricians routinely add IQ points to the scores of the elderly, on the grounds (i) that doing so keeps IQ constant over the course of a lifetime; and (ii) that for cultural reasons, the increased wisdom, experience, and social prestige of the old somehow "count for" the same thing which is lessened by diminished organic capacity. If black students in white classes are to be given higher grades for the "same performance," then all we have to do is add 10 or 15 points to the measured IQ of all black students, and we will not only have avoided discrediting intelligence tests, but improved both measures as predictors.

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. . . Studies have repeatedly shown that black people do not have inferior intelligence. What white researchers have shown is that the IQ as contrasted with intelligence is one standard deviation below the Caucasian mean. There is a clear and definite difference between intelligence per se and the concept of the intelligence quotient, or IQ. The latter is measured or relative intelligence, not absolute, and contains considerable error in measurement, where-

as the former indicates the extent to which an individual is able to understand and adapt to his environment. Humphreys should clearly understand that black people do not show a "distribution of intelligence" below that distribution of the Caucasian population. What they show is the result of culturally biased and unfair tests which do not represent the black population.

If black students score lower on tests than white students, this score does not mean they are actually intellectually inferior; all it means is that on that test they were inferior. In a recent study in San Francisco, 100 minority-group postal employees were hired. At the end of 1 year they were all given "outstanding" ratings based on job performance. They were administered the usual screening test at the end of the 1-year period; they all failed. The Post Office did not "lower" standards to hire these people-they simply used different criteria in hiring them and based their judgment on actual accomplishment rather than test-measured achievement. Standards do not have to be lowered in order to admit black students, especially when there is no genetic difference between the intelligence of the two groups, but new criteria for selection and admission to undergraduate programs must be used. Present criteria for admission or readiness to do college work are patently unfair.

The Association of Black Psychologists in concert with the Black Students Psychological Association, goes on record as censoring Humphreys for his letter on racial differences.

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## Space Ride on Saturn V

The commentary on post-Apollo plans for NASA by Luther Carter (5 Sept., p. 987) contains one rather gross error. The space shuttle for near future plans is not a spacecraft that sits on top of Saturn V as a recoverable upper stage. The shuttle concept comprises a "nested" aeroplanes pair; that is, one rides piggyback on the other. They are launched vertically, but soon pitch over presenting the piggyback configuration. Both are manned, very high velocity aeroplanes with a separation occurring at about 150,000 feet. The smaller, upper stage then continues to orbit with its (intended) 50,000-pound payload

while the lower stage is flown back to its launch base. The concept calls for full recovery of both vehicles. It is expected that some heat shield refurbishment will be necessary. That cost is not yet determined but under \$1 million is a current target for such refurbishment.

The views of G. J. F. MacDonald and B. Murray are offered as evidence that man's role in space is very limited and that automated spacecraft are the answer to investigations of the planets. While I agree that unmanned spacecraft are, at least in this era, a desirable prerequisite to manned planetary expeditions, I have yet to see an unmanned spacecraft designed to perform the functions of correlation, judgment, perception, reasoning, and reprogramming at that last moment when objects appear at our landing sites which would destroy us in a landing. The dexterity of the human hand and the pattern recognition of the human eye are quite beyond machinery presently or soon to be available. Man could collect more data and information in one day on a planet then all the unmanned spacecraft directed at any one of them.

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## **Economics of Sea-Level Canal**

Like many other articles concentrating on the technologic or biologic aspects of a sea-level canal through Central America, the recent study by Robert W. Topp (26 Sept., p. 1324) makes the assumption that "the dominant problems at present are problems of politics..." This is simply not the case; the dominant, or at least the prior, problems stem from economics, not politics.

The proponents of a new canal have yet to provide the kind of benefit-cost analysis that might show whether the costs of a new canal would be justified by the additional carrying capacity. While it is true that some ships are too big to use the present canal, this does not prove that a new canal should be built. Indeed, since these ships were built with full knowledge of canal capacity, it may indicate instead that shortened travel times are not worth much to the shippers.

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