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 non-capricious 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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