Advanced Degrees: Discrimination Wanes as a Barrier to Negro Grad Students; Other Hurdles Remain

Professional and graduate education is a springboard to accomplishment, status, and affluence in American society, and it is generally recognized that Negroes are underrepresented among candidates for advanced degrees.

Although the civil rights offensive of recent months is on a broader scale than any that have gone before, graduate education seems to remain a quiet front. One explanation appears to be that the direct-action techniques now widely employed by the civil-rights movement—sit-ins, demonstrations, boycotts, and even court action—are not very effective in this special area. For graduate education is one of those difficult second-stage problems in which nondiscrimination does not guarantee equal opportunity. Universities and foundations, which together form an active arm of the public conscience, are somewhat tardily acknowledging this problem and coming to grips with it.

One real difficulty facing those who would attack the problem is that, in overall terms, Negroes who pursue or complete advanced degrees are statistically invisible. After World War II almost all integrated universities by law or on principle stopped recording the race, color, and religion of applicants and students, and most went to the length of barring photographs. Ironically, then, exclusion of what was regarded in the past as stigmatizing information has made the task of finding out the details of the problem more difficult for those who want to help.

A majority of Negro college students attend the so-called Negro colleges in the Southern and Border states, and some rough totals are available for enrollments of both undergraduate and graduate students in these schools.

A recent survey reported in the current issue of *The Crisis*, published by the National Association for the Advancement of Colored People, puts the total enrollment for some threescore institutions with a predominance of Negro students at 69,407, with 5522 of these students in graduate and professional schools. In the 1962–63 school year these institutions awarded 6974 bachelor's degrees and 398 master's degrees.

No similar figures are available for Ph.D. students, but these institutions, with a few exceptions, notably Howard University in Washington, D.C., do not award doctorates.

At present, many Negroes pursuing advanced degrees, particularly in the sciences, attend integrated institutions, primarily in the North, and these students are uncounted, if not uncountable.

The solidest available figures indicative of the differential in formal educational attainment between whites and Negroes are probably those included in a recent Office of Education report, which states that although 11 percent of the total population is Negro, only about 3.5 percent of professional workers are Negroes.

While Negroes still face *de jure* segregation in the South and *de facto* segregation in the North in public education, the conflict over desegregation in education seems to have moved away from professional and graduate schools, where, in fact, the opening skirmishes of the legal contest occurred. Well before the school segregation decision of 1954, Negroes successfully sought admission to professional and graduate schools in a period when the provision of "separate but equal" facilities for Negroes was regarded as the criterion of equal protection under the law.

In 1938 in Missouri, for example, a state which had no law school for Negroes, the court found that Negroes were not being afforded equal protection by being given scholarships to attend law school outside the state.

Then in 1950, in federal cases involving the University of Texas Law School and the University of Oklahoma graduate school, the court, as Jack Greenberg says in his book *Race Relations and American Law*, "while neither rejecting nor considering the question of separate-but-equal's validity, measured factors which make it impossible for a colored school to equal a white one: tradition, prestige, and the opportunity to associate in school with members of the dominant (white) group. Considered too were the tangibles of wealth, size, and facilities, in which Negro higher education also was patently inferior but in which, perhaps, theoretical equality could be achieved. This, however, was an inconsequential part of the decision. Thereafter, no colored higher institution could legally 'equal' a white one, and in fact, no such case since then has found equality. This balancing of impalpable, though meaningful, qualities was a forecast of the *School Segregation* decision of 1954."

In the Southern and Border states, even before the tempo of desegregation increased, there seems to have been less resistance to the admission of Negro students at the professional and graduate level than at lower levels, apparently because the applicants were older, relatively well educated, and much fewer in number.

In recent years, an awareness has been growing that the flow of Negroes into professional and graduate education is limited not so much by the old written or unwritten laws of racial discrimination as by the scarcity of qualified Negro applicants.

This shortage should be no surprise in view of comparative educational statistics for whites and non-whites in America. An Office of Education study shows that of our adults 25 years old and older, 22.1 percent of non-whites have completed less than 5 years of school as compared with only 6.2 percent of whites.

About 60 percent of non-whites become school dropouts, while the figure for whites is around 30 percent.

About 12 percent of young white adults in the 25- to 29-year age group have completed college, while only 5.4 percent in the non-white population has done so.

The disadvantageous position of Negroes, as compared to whites, that is reflected in this higher rate of educational attrition is reflected uniformly in the economic indices. Family income for Negroes, for example, has fallen consistently below that of whites by a third or more. And the typical pattern of Negro emigration from South to North, from rural slum to urban slum, has made it difficult to break down the wall of poverty and cultural deprivation which surrounds so many Negroes.

North or South, public education for a majority of Negroes has not been of the kind that put them on the high-road leading to the professional or graduate school. In the North, until very recently, the average Negro went to a school in a system where little thought was given to the realities of his background or his future. He was given either a diluted form of the standard academic curriculum or vocational training ill suited to the job opportunities open to him. In the South, where inadequate resources were strained

even more greatly by a dual system of segregated schools, Negro children for generations were taught by poorly trained teachers, with inadequate books and equipment, in run-down schools. In many Negro high schools, especially in the Southern and Border states, the doctrines of Booker T. Washington, which emphasized the development of manual skills, shaped and still shape the goals and the prospects of Negro students.

The problem of quality naturally extends to the Negro colleges and universities, concentrated in the Southern and Border states, where a majority of Negro college students go. In quality, these institutions run a wide gamut, but judged by such conventional criteria as faculty degrees and teaching loads, libraries and laboratories, average standards appear to have been low. Many of these colleges pitch their courses at the high school and vocational school level because of the deficiencies in the educational background of their students. There is no question that they perform a valuable service, but the graduates of such institutions cannot compete on equal terms with graduates of the best Negro colleges and the better of the integrated institutions in the competition for openings in graduate school.

Until now, the Negro who aspires to graduate education has been given little special help by the federal agencies involved in supporting education and research programs. Federal fellowships, by law, are awarded on the basis of competition, and research assistantships are, naturally, assigned by the institutions that hold federal research grants.

Some leverage for desegregation has been exerted through the National Science Foundation's summer science and mathematics institutes for teachers, and through its academic-year institutes for faculty. Institutions which operate these programs must agree not to discriminate on the basis of race, color, or religion in judging applicants, and NSF officials note "some success in opening institutions."

The section of the National Defense Education Act on foreign-language institutes contains a similar antidiscrimination provision, but the sections on graduate fellowship and undergraduate loan programs do not.

Passage of a civil rights measure prohibiting federal support to institutions which practice segregation would certainly give federal education and university research programs greater impact on segregation in higher education. But the effect of such legislation is somewhat difficult to assess because segregation has woven such a tangled legal web. Many institutions which are technically desegregated still discourage enrollment by Negroes in substantial numbers. The universities of Alabama and Mississippi, for example, are ranked as desegregated schools. Many Negro colleges which receive state support cleave to the status quo because of the danger of fund-cutting retaliation by the state legislature and, in some cases, even of prosecution of college officials. It is ironic that, in a number of southern states, legislatures have been more generous to Negro institutions as desegregation pressures built up, and that these institutions have been able to hire better-trained faculty and provide better facilities than ever before.

Finance a Factor

While it seems generally agreed that a major cause of the scarcity of qualified Negro candidates is the weakness of the Negro colleges and the public schools from which they draw their students, another difficulty which affects Negroes with potential for graduate training is economic.

According to Richard L. Plaut, who runs the pioneering National Scholarship Service and Fund for Negroes, which locates promising Negro students in Southern high schools and helps them to find places and scholarships in integrated colleges and universities, the biggest discouraging factor of all for Negro students qualified for graduate school is finances.

It appears, however, that opportunities for qualified Negroes are increasing, partly because of the general expansion of federal fellowship and research programs. Harold E. Finley, professor of zoology at Howard University, notes that in the sciences, universities in the Midwest and California have enrolled a big share of Negro graduate students, probably because of lower costs and because these institutions have been generally more hospitable to Negroes. Finley also noted that in recent years, as the search for promising candidates for graduate training has grown more competitive and race relations have altered, universities in the Border states have been glad to take Negroes who are good prospects.

About the private universities, where expense has been a strong factor, it seems difficult to generalize. Harvard, over the years, according to observers, has encouraged a modest but steady flow of Negroes through its professional and graduate schools. Another Ivy League university has a curiously mixed reputation. Its law school has been hospitable to Negroes but the university is said to have few Negroes in its graduate schools and to have granted only one Ph.D. to a Negro in the 1950's. Though the statement is impossible to verify, it is said of many schools that more Africans than American Negroes are enrolled.

However, while the number of Negroes studying for advanced degrees is increasing, the gap between Negroes and whites shows little sign of closing, and the differences in the numbers of whites and Negroes in the professions and in higher-level specialized occupations will consequently remain great, with accompanying differences in opportunity, income, and status.

Recently, a number of steps have been taken which are designed to narrow the gap.

One major foundation-supported national fellowship program, for example, is providing a pre-graduate school year at Columbia for Negro students with high potential who have won fellowships but need further work before they begin graduate study.

It is generally acknowledged, however, that it takes not 7 or 8 years of college and graduate study to make a physicist but the first 20 or 25 years of a person's life, and that a high-calibre graduate student represents a complicated equation involving background, education, motivation, and money. These complexities are now being taken into consideration by those concerned with problems of education and manpower in the universities and in government.

For the last 2 weeks, for example, a meeting sponsored by three agencies in the Department of Health, Education, and Welfare has been in progress at Endicott House in Dedham, Massachusetts, devoted to the "Difficult 30 Percent." The educators, researchers, and government officials at the conference are surveying the interlocking problems of school dropouts, heavy unemployment among unskilled youth as a by-product of automation, and juvenile delinquency. Negroes figure prominently, but by no means exclusively, in this cycle of waste which carries over from generation to generation. Other minorities and many whites share with Negroes what in many respects is a social and economic

class problem rather than a race problem.

One participant in the conference is Jerrold T. Zacharias, professor of physics at M.I.T. and a prime mover in the project for reform of the high school physics curriculum. Zacharias is known to be concerned with the long-term problem of developing engineers and scientists in greater numbers from among the underprivileged and to be interested in work to develop teaching materials for elementary and secondary schools to overcome fundamental problems of communication and perception which handicap youngsters from limited backgrounds.

There also seem to be signs of a reappraisal of the historic policy on admission in the best graduate schools, which might be described as one of exacting impartiality. There is no inclination to lower standards in order to admit Negroes, but there is apparently a growing feeling that the universities have a responsibility to help more Negroes to qualify.

The American Council on Education will sponsor a meeting, on 18 and 19 October, of presidents of Negro and integrated institutions, which is to be devoted to the problems of the Negro in higher education. One purpose of the meeting is simply to gather information, which, as everybody says, is sadly lacking. A side effect may well be the strengthening of a working relationship between Negro and white college presidents, who, observers say, have formed two distinct groups whose relations in the past have been friendly but remote.

On the agenda for discussion are such proposals as those for making fellowships and assistantships more readily available to promising Negroes and a program of faculty exchanges between Negro and integrated colleges.

Underlying these developments is a feeling, now being manifested in many areas of American life, that special efforts should be made in behalf of Negroes to compensate for discrimination and neglect in the past.

While the problem has been on the conscience of the universities and foundations and there have been projects in their files for some time, a sense of urgency has precipitated major action only recently. And there is no question that this sense of urgency which has penetrated the cloisters of graduate education has been inspired by events on the campus of Ol' Miss and on the streets of Birmingham and points north.—JOHN WALSH

Krebiozen: FDA, NIH Still on Trail of Anticancer Drug; and Congress on Trail of Agencies

The race to see whether the controversial anticancer drug Krebiozen would be tested before it was banned or banned before it was tested drew to a close about 2 months ago. On 7 June, Stevan Durovic, Krebiozen's discoverer and chief sponsor, filed an application for continued distribution of Krebiozen as an experimental drug. Five weeks later, on 12 July, he suddenly withdrew the application. Durovic's action was mainly a matter of beating the Food and Drug Administration to the draw. As in the Old West, the FDA had signaled its opponent, in a variety of ways, that it was already reaching for the gun, and that rejection of the application was imminent. Durovic merely fired first.

Withdrawal of the application automatically made Krebiozen's distribution in interstate commerce illegal. The drug has been banned, and it has not yet been given the government-sponsored test which its supporters have long been seeking. But although the threatened ban was the focus of greatest tension when the 12-year controversy raged into the open again in early June, the ban itself has done little to resolve the principal issues involved. Krebiozen continues to receive a good deal of attention from the Food and Drug Administration, from the National Institutes of Health, and from Congress (*Science*, 21 June, 28 June, 5 July).

Even the 125 or so cancer patients who are currently taking Krebiozen and believe themselves dependent on it, who have formed emergency Krebiozen committees throughout the country, and who have three times solemnly demonstrated before the White House begging for a Presidential dispensation to forestall a cutoff of the drug, seem in the main to have circumvented the ban in a variety of ways. Some patients had a 1- or 2-month supply of Krebiozen on hand when the ban took effect; others have moved to Illinois where the drug is produced, to receive it without violation of the ban on interstate distribution.

One of the Krebiozen patients, George Friedman, whose wife Laine was a key organizer of the Krebiozen supporters, moved to Illinois and died shortly afterward—a victim, the drug's supporters say, of overexcitement and fear. Friedman had been on Krebiozen for 2½ years (and was on it when he died), after having been given a few months to live by his New York doctors. An ugly note was the refusal of the New York *Times* to print a death notice which requested that contributions be sent to the Krebiozen Research Foundation. The *Times* later retracted, after a Boston columnist had picked up the story. Up until now, no other deaths among Krebiozen patients have been reported.

Illinois, however, is the last fortress of the patients, and an action taken by Illinois Governor Otto Kerner shortly after the interstate ban went into effect has them understandably nervous. A law already on the books in that state permits it to reject any

FDA Finding

Last weekend the Food and Drug Administration issued a report stating that samples of Krebiozen provided by Stevan Durovic had been identified as the amino acid derivative creatine, which is available from meat in the ordinary diet. The report noted that the "chemical was tested sometime ago against animal tumors in the routine cancer chemotherapy screening program of the National Cancer Institute" and "was found to be ineffective even in very high doses."

In Chicago, Andrew Ivy, who is a chief advocate of thorough testing of Krebiozen on human cancer patients, was reported to have said that Krebiozen is not creatine and to have called the government findings ridiculous.

According to FDA, the identification was made on the basis of an infrared spectrogram supplied by Durovic, infrared spectrograms made by the National Cancer Institute from small samples of Krebiozen provided by Durovic in September 1961, and analyses of a small vial of material furnished by Durovic in July. Scientists and technicians from other federal agencies and universities were called in to work with FDA staff members on the analyses, using infrared spectrophotometry, x-ray diffraction, and crystallographic and mass spectrographic techniques.

According to the FDA statement, the agency is "continuing its investigations of all the facts regarding 'Krebiozen.'"