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JAMES S. COLEMAN AND ERNEST Q. CAMPBELL, CAROL J. HOBSON, JAMES McPARTLAND, ALEXANDER M. MOOD, FREDERICK D. WEINFELD, ROBERT L. YORK. *Equality of Educational Opportunity*. Washington, D. C.: U. S. Government Printing Office, 1966. v, 737 pp. $4.25. (Supplemental Appendix, vii, 548 pp. $3.00.

The Civil Rights Act of 1964 directed the Commissioner of Education to survey inequalities in educational opportunities for major racial, ethnic, and religious groups in the United States. Several studies were subsequently initiated by the National Center for Educational Statistics of the United States Office of Education under the general direction of Alexander M. Mood, Assistant Commissioner of Education. Outside consultants and contractors were employed to conduct the studies. James S. Coleman, Johns Hopkins University, had major responsibility for the design, administration, and analysis of the national survey of the public schools. Ernest Q. Campbell, Vanderbilt University, shared these responsibilities and was in charge of the college surveys. Other sociologists with major roles in work briefly reported in this volume include Charles Nam, Lewis Rhodes, and Robert Herriott of Florida State University, who were responsible for a study of nonenrollment, and Raymond W. Mack, Northwestern University, who directed a team of sociologists in a series of case studies of the education of minorities in ten cities. G. W. Foster, University of Wisconsin, directed a group of lawyers in case studies of the legal and political problems of *de facto* segregation in seven cities. In addition, many members of the professional staff of the Office of Education participated in important ways in the various studies. The present volume is largely devoted to the results of the nationwide survey. Although briefer summaries of several of the other studies are also included here, it is intended that fuller reports be published independently in the future. This review will be restricted to the national survey.

The principal findings presented in this volume are based on responses from nearly 600,000 students in grades 1, 3, 6, 9, 12, along with their teachers, principals, and superintendents in a two-stage probability sample (stratified by counties and by metropolitan-nonmetropolitan areas) of the nation's public schools. The students answered questionnaires about their home backgrounds and their educational aspirations; they took tests of ability and educational achievement. Questionnaires were administered to teachers to obtain information on their backgrounds, training, attitudes, and verbal abilities. Principals and superintendents supplied detailed information about school facilities, curricula, supervision and administration, as well as information on their own background and training. The Educational Testing Service of Princeton, New Jersey, provided published tests and administered both the tests and the special questionnaires developed by the survey staff. E.T.S. also did the computer analysis, according to the specifications of the staff.

The survey provides information on four important matters:

1. *The extent to which racial and ethnic groups are segregated in the public schools.* Data are presented in great detail, using ratio-estimation procedures, showing the percentage of white, Negro, and students of other ethnic minorities attending schools of differing racial composition for the nation as a whole and for major regions by metropolitan and nonmetropolitan areas. The evidence is unequivocal. A decade after the Supreme Court's famous desegregation decision, the vast majority—about 80 percent—of all white children attend schools that are from 90 to 100 percent white. For Negro students, about 65 percent attend schools in which over 90 percent of the students are Negro. In the South and Southwest, almost all students attend schools that are 100 percent segregated, but segregation is also the norm in northern and western cities or, for that matter, wherever the proportion of Negroes is high in the population.

Mexican Americans, American Indians, Puerto Ricans, and Oriental Americans are also segregated, but not to the extent of Negroes and whites. Teachers, too, are segregated; Negro students nationally attend schools which are predominantly taught by Negro teachers—over 60 per cent of their teachers are Negro—while white students attend schools which average 97 percent white teachers. In those schools in which the races of pupils and teachers are not matched, white teachers teach Negro children, but Negro teachers rarely teach white children. Thus, if the Supreme Court was right in its

1954 decision that separate schools for Negro and white children are *inherently* unequal, American public education still remains largely unequal in most regions of the country.

2. *Whether schools offer equal educational environments (opportunities) in terms of their facilities, their programs, their principals and teachers, and their student bodies.* Perhaps the most surprising finding of this section of the report is that, *on the average,* no very large differences are found between the schools attended by various ethnic and racial groups on a variety of objective indicators of school quality, dealing with buildings, equipment, special purpose rooms, class size, teachers' qualifications, textbooks, library, free lunch, school psychologists and nurses, art and music instruction, curriculums offered, programs for exceptional children and for pupil evaluation and placement, and extracurricular programs. This is not to say that there is no definite pattern of differences on these indicators. There is some evidence to support the assertion that it is in the most academically related areas that the schools attended by minority pupils show the greatest differences. But even these differences are not as great as most observers would have expected. In fact, differences tend to be larger between regions of the country than between racial and ethnic groups.

Thus, when the characteristics of teachers of the average white student are compared with those of teachers of the average Negro student, it appears that there are no large and consistent differences in their professional qualifications as indicated by degrees, majors, teaching experience and similar measures, although the teachers of the Negro children score lower on tests of verbal competence and the difference is greatest in the South. Numerous other characteristics and attitudes of teachers and principals of white and Negro children were compared, but again the differences did not particularly favor one group over another.

The one school environment factor on which the minority group student is consistently disadvantaged is in the social, economic, and psychological characteristics of his fellow students. On the average, he attends a school in which he is exposed primarily to other minority children; most of the students in his school come from homes of relatively low educational and economic level; fewer of his classmates are enrolled in the college preparatory curriculums; a smaller proportion of his fellow students will actually go to college; fewer will finish high school; fewer will maintain high academic averages in high school; and fewer will be optimistic about their life chances. In other words, the average Negro student is not only likely to be burdened with the social, economic, and psychological handicaps of his own home background, but he also attends a school primarily composed of students with similar handicaps—students whose academic conduct and achievements are less likely to help or challenge him to his best academic performance. But again on the average, the differences in the school environments of the Negro and white children are not massive as measured by the indicators employed in this survey.

3. *The extent to which various racial and ethnic groups perform differently on various standardized tests of achievement.* The students were tested for verbal ability, nonverbal ability, reading comprehension, mathematics achievement, and general information in other subject matter areas. For the most part, the analysis focuses on the results for verbal ability, but the pattern is about the same on all tests. The results at twelfth grade show sharp differences among racial and ethnic groups and regional differences for whites and Negroes on all tests. The same findings generally hold for the lower grade levels. The white students obtained the highest average scores followed by Oriental Americans, American Indians, Mexican Americans, Puerto Ricans, and Negroes. Negro average scores were about one standard deviation below those of whites. This means that about 85 percent of the Negro scores were below the white average. The lowest scores were consistently for those in the nonmetropolitan South. The highest scores were for students in the metropolitan North. Both whites and Negroes do better in the North and West than in the South and Southwest, but regional variation is much greater for Negroes than for whites. Metropolitan students on the average score significantly higher than nonmetropolitan students, whatever the region.

4. *The extent to which differences in the average achievement scores of racial and ethnic groups are the result of family and school influences.* As was indicated above, the amount of educational disadvantage as measured by test performance is large—particularly for Negroes. Moreover, evidence is presented to show that in those areas of the nation where the initial disadvantage is greatest, particularly the nonmetropolitan South and Southwest, the amount of disadvantage increases as the child goes from grades 1 to 12. A similar decrease does not take place for Negro students from the metropolitan Northeast; Negro averages are about 1.1 standard deviations below whites at all grades tested. The evidence for the South and

Southwest would seem to indicate that it is in those areas of the country where school resources are least that the educational disadvantage is greatest to begin with and continues to grow. Thus, it would appear that in the South and Southwest, school effects are greater than in the North where they appear to be negligible.

The principal evidence on school effects comes from a regression analysis designed to allocate the variance among students in test scores into variance due to differences in schools (between-school variance) and variance due to differences among students within schools (within-school variance). In brief, the strategy was to assign to schools, as an upper limit, that portion of the variance in test performance that was found between schools—from 10 and 20 percent for whites and Negroes—and to argue that the remaining explained variance is assignable to differences between students within schools. Then if between-school differences in test scores were due to the differential influence of schools, the between-school variance should become proportionally larger at each higher grade level owing to the fact the students have been exposed longer to the effects of the school. The evidence is that the between-school variance increases only slightly, if at all, from grade to grade, which of course suggests that school effects are probably small.

Other analyses indicated that family background is of great importance to achievement, and this relationship does not decrease over the years of school. Only a small amount of between-school variance in achievement is independently accounted for by variation in school facilities, equipment, or staff—over and above that accounted for by the family background characteristics of the students. The social composition of the student body is more highly related to achievement than any other factor, but, of course, the composition of the school reflects in large measure the family backgrounds of the students. Based on all of the evidence from such regression analyses, the authors offer the following concluding statement on school effects:

> Taking all these results together, one implication stands out above all: That schools bring little influence to bear on a child's achievement that is independent of his background and general social context; and that this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school. For equality of educational opportunity through the schools must imply a strong effect of schools that is independent of the child's immediate social environment, and that strong independent effect is not present in American schools.

Sociologists are likely to be quite surprised and disappointed that school context appears to have so little influence on educational performance, particularly in light of recent emphasis on the influence of social contexts on aspirations and achievements. [See the recent controversy over an article by Sewell and Armer in which similar results were presented, *American Sociological Review*, 31 (October, 1966), 698–712.] Actually, the amount of variance due to school effects is doubtless overstated by the results of the analysis because of failure to separate school effects from those due to community and neighborhood.

Some sociologists will be quick to point out that inappropriate variables were selected as indicators of school contexts. However, one would be hard pressed to suggest a better selection of *objective* variables dealing with the physical facilities of schools, the various aspects of school curricula and programs, or the qualifications of teachers and principals, than those employed in this study. In the area of social psychological variables, it would be possible to come up with a wider selection of questions to serve as indicators of the value climates of schools. But, even granting this, with so little variance to be accounted for by between-school differences, one wonders if greater ingenuity would have been worth the effort.

Others will note that there is probably a good deal of measurement error both in the independent and dependent variables which could only reduce the amount of explained variance. Many questions could doubtless be improved. The achievement tests, while quite appropriate, were abbreviated for the purposes of the survey at some unknown costs in reliability and validity. Because the testing was extensive and doubtless fatiguing, many questions were probably unanswered or answered carelessly. The argument gains credibility in that only approximately 40 percent of the variance in achievement of white and Negro children at grades 6, 9, and 12 can be explained by all eight family background characteristics, three attitude variables, and a host of school variables (measured as well as unmeasured). One must admit the possibility that other candidate variables in these domains would help to increase the explained variance or that variables from other domains would prove to be more powerful than those used in this study. One can but wonder also if the correlations are not reduced by the failure to obtain cooperation from 30 percent of the schools included in the sample design. Since it is known that non-cooperation was greatest in big city school systems of the North and South, one wonders how much bias

this introduced into estimates based on the sample. Without detailed information on these cities and the manner in which the resulting sampling errors were estimated, one cannot help but ask whether their omission could have reduced between-school differences and, for that matter, whether the sample was adequate for regional and national estimates. The brief discussion in the methodological appendix, which indicates that no great bias was introduced by the exclusion of the schools that refused to cooperate, is not particularly convincing.

Moreover, that the analysis does not permit the determination of school effects on students with similar as well as different background characteristics within schools is likely to mask whatever contribution individual schools may be making to the development of the potential abilities of the less fortunate. One of the limitations of a regression strategy is that it is not possible to discern any subpopulations for which the school effects may be considerably greater than the average indicated by the analysis as a whole.

Perhaps the most tragic faults of the survey were due to administrative decisions apparently made by the Office of Education—decisions which probably seemed expedient at the time but greatly reduce the current and future usefulness of the research data. Thus, neither school systems nor students were identified so that neither schools, classrooms, principals, teachers, nor students can be selected for further intensive analysis. For example, schools in which there is a particularly strong or weak contextual effect cannot be further studied in order to seek out the possible sources of such effects. But more importantly, the decision not to tag children means that no true longitudinal study building upon these data will ever be possible. This is unfortunate because it is precisely this kind of information which is so badly needed for determining the future effects of current educational inequalities.

On this point, it should also be said that, even though the authors state that regression analysis of cross-sectional data does not furnish a solid basis for causal inferences, their emphasis at several points (see the paragraph quoted above) will lead many to conclude that the study shows unequivocally that schools have little effect on children's performance. Actually, the effects of schools and of other variables should be determined at least by longitudinal studies and at best by well-designed experiments in which students are assigned to schools at random or, if this is not possible—as it probably is not—there should be prior careful assessments of ability, family background, and other potentially confounding variables so that their effects can be controlled or appraised statistically. *Ex-post facto* control of cross-sectional data is a weak substitute for longitudinal or experimental analysis.

One also wonders why the Office of Education was less bold than their Congressional mandate directed. Why did they not include religion in their analysis? And could the Office of Education not have used greater pressure on the recalcitrant school systems to obtain their cooperation in a study which Congress had directed them to undertake? There were doubtless good reasons for the administrative decisions taken, but a frank discussion of them would help social scientists to better understand the problems involved in government-sponsored studies of this kind.

Further, one wonders why the implications of a study of this magnitude were not pointed out by the authors of the report. Was it because the Office of Education felt that implications which might be critical of the present organization and practices of our nation's schools should not be stressed in a government report? Was it because the researchers do not trust their own findings—particularly those regarding school effects? Or was it because the authors truly feel that Congress, legislatures, school boards, and school administrators should figure out the implications of the research and then let these implications guide their policies? If this is true, it strikes the present reviewer that this is going too far in the pursuit of scientific detachment.

Certainly it could be argued, on the basis of the evidence presented in this report, that some rather massive restructuring of our educational system is needed. As a minimum, it would seem that no great increase in achievement can be expected from *only* providing better school buildings and equipment or shifting Negro students from segregated to less segregated schools unless special and powerful programs directed at overcoming educational deficits are also instituted. This is not to deny that desegregation may improve the average test scores of Negro and other minority group students: the survey presents evidence that those Negro students who first entered desegregated schools in the early grades generally obtain slightly higher average test scores than those who entered in the higher grades. Moreover, it is likely that the academic performance of particular Negro students may benefit (or suffer) as a result of desegregation, depending on the conditions, including the degree of segregation, in a given school. Nor is it to assert that there are no other benefits to both minority and ma-

jority group students which flow from school desegregation. Rather, it is to argue that desegregation alone is likely to be too little and too late to overcome the handicaps with which most Negro children are burdened by the time they enter school. I would suggest that preschool programs of much greater scope and intensity than any yet undertaken will be necessary if early cognitive deficits are to be prevented or remedied.

I would further argue that the results of the study suggest that there is great need for emphasis on bold new experimental programs of educational innovation and experiment, especially in the early grades, to improve not only the educational capacities of the disadvantaged child, but also to stimulate, and once stimulated, to maintain his motivation through appropriate rewards and expanded opportunities for educational achievement. The importance of this is seen in the survey results indicating that Negro and other disadvantaged children tend to have a pessimistic view of their ability to control their fate and that this attitude is strongly associated with their poor academic performance. My suggestions would probably demand great structural and curricular changes in our nation's school systems—as well as a massive infusion of money. But even if we were to embark on such a program, it would be an empty and useless gesture unless accompanied by genuine improvements in opportunities for entry into the mainstream of American occupational life on the basis of merit rather than racial, ethnic, or socioeconomic status.

And yet this review should not end on a critical note because, despite its limitations, the report is a signal accomplishment in the annals of American social science. It is carefully and competently done, and it provides the largest body of well-organized and usable data on American public education ever assembled. That such a monumental effort could have been planned and executed with such a high level of technical competence in such a short time is a great tribute to the superior skills and professional competence of James S. Coleman and his co-workers. It is at the same time a brilliant demonstration that American social science now has the professional competence and technical apparatus to collect on short notice vast amounts of basic data on important national problems and to analyze and present these in an intelligent and useful manner.

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The research team which planned and conducted the survey that has culminated in this report to Congress is to be highly commended for executing a complex and important study. The methods appear efficient and statistically sound. However, it appears that minimal time was devoted to writing the report, since portions of the text are confusing and difficult to understand. Part of this confusion rests on a false assumption concerning the statistical sophistication of potential readers and users of the report. It is assumed that readers will have an understanding of elementary statistical estimation and inference procedures. This is not unreasonable, but it is unreasonable to expect this understanding to extend to advanced survey sampling and estimation procedures and to some of the more sophisticated elements of weighted regression and analysis of variance. Unfortunately, this knowledge is required to read the report with sufficient understanding. The authors should have presented detailed discussions of these methods as well as more adequate information on their particular deployment. But while this is a criticism of the report, it should not be construed as a criticism of the study. The statisticians involved have outstanding credentials and reputations. One would hardly have expected serious methodological errors to have escaped detection.

The tabular presentation of data is equal to the fine standards that have come to be associated with U. S. Government Reports and Studies. The graphical presentations are also excellent. Figures 3.11.1 to 3.11.31 are exceptionally well designed. These graphs concisely illustrate the variability in school achievement that exists between and within subpopulations of the study. Traditional presentations of frequency data would have resulted in pages and pages of undecipherable histograms or relative frequency polygons. As most readers have an intuitive understanding of percentile scores, graphic representations of the 10th, 25th, 50th, 75th, and 90th percentiles facilitate quick visual impressions of the major differences in achievement that exist between populations.

Most of the analysis of school achievement has been restricted to a discussion of differences in verbal achievement scores across geographic areas and minority groups. In some respects, this analysis is not necessarily the most meaningful. Other analyses based on different partitioning criteria may be of greater educational or social significance. For example, the Appendix states that the primary sampling units drawn into the survey were further stratified into 4 strata on the basis of the percentage of nonwhite enrollment. Presentation of percent-

ages, averages, standard deviations, or percentile scores for these strata would be informative. Finer comparisons of whites and nonwhites in the same schools could be made on the basis of this school sub-classification. Furthermore, 1960 Census data was used in the sampling and design of the survey. Yet no cross-tabulations involving census data appear in the report.

Many potential cross-tabulations have been indirectly investigated by means of the regression analysis that was used for the analysis of the achievement data. Its use in demonstrating that the largest part of the between-school variability in achievement could be mainly attributed to variations in family backgrounds prior to school entrance was ingenious and to the point. But while the regression analysis used to estimate the variance components is esthetically pleasing, elegant, concise, and informative, it is not without faults since it can conceal as well as reveal information. It describes only part of the total picture. Although estimating the strength of a statistical relationship is important, the determination of the relationship itself is of significant value, whether the relationship be defined by a regression equation, by averages, or by percentages in a multi-dimensional table. The two estimation procedures complement each other; they do not serve as substitutes. It is for this reason that more cross-tabulations of data such as those presented throughout Chapters 2, 4, 5, and 6 would have been desirable.

Brevity in the text causes some difficulty in understanding the discussion on the percentage of total variance in individual verbal achievement scores that exists between schools. From the text, it appears that the variance percentages were determined by an unweighted analysis of variance on all of the scores of the children in the various subpopulations. But later in the same chapter, these percentages seem to have been estimated from the elaborate, weighted regression analysis based upon a sampling of 1,000 students from each of the subpopulations. The resolution of this apparent inconsistency appears only as a footnote to Table 3.2A.1. Such an important explanation should be in the text itself.

Moreover, textual brevity can result in misinterpretation of some of the most provocative findings summarized in Figures 3.121, 3.122, and 3.123. This disturbing set of graphs demonstrates that the mean achievement for Negroes is about one standard deviation below that of whites at each grade level of the study. Furthermore, the increase in the variability of scores with an increase in grade level suggests that differences in scores on one test at one grade level do not have the same meaning as the corresponding differences in scores on a test at another level. As a result, the interpretations based upon the horizontal projection of the Negro average to the white empirical regression curve seem questionable. Since different test items were used to construct tests for each of the 3 grades, the interpretation based upon the treatment of 3 different tests as though they were one test also seems suspect. Actually, the interpretations in the text are justified, since the tests have been *linked;* individual scores have been transformed to a comon scale by a special procedure developed by the Educational Testing Service. But this procedure is not described in the report. Since comprehension of these graphs depends upon an understanding of the technique and since most readers are unfamiliar with it, a description in the text is crucial (or at least reference should be made to the appropriate test manuals).

One final comment on this set of graphs seems in order. In the report it is stated that 73.1 percent of the Negro population aged 16 and 17 were enrolled in schools in 1960. Since dropouts tend to be students with school achievement problems, many potential low achievers were not enrolled at the time of the 12th grade testing. Their inclusion would have lowered the Negro average. Beyond this, note that 30 percent of the schools selected for the survey did not participate. Although it is stated that this lack of participation has not biased the results significantly, one might suspect that non-participating schools were predominately upper- or middle-class white schools with an over-representation of high-achieving students. If so, their inclusion would have increased the white average. Consequently, the differences shown in these graphs probably are underestimates of the true population differences.

From available information, it is clear that the survey has been well designed and executed. The analysis is statistically sound but not always appropriate in the sense that many important educational relationships are not examined. The problem of non-participation and the implications it has for estimation and inference procedures are not satisfactorily handled. Even carefully controlled studies are suspect if the non-response rate is high. Finally, the present inadequacies of the statement of procedures could be remedied by a subsequent technical report, spelling out the methods in greater detail and justifying their use.

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This is at once an admirable yet pedestrian, a thoughtful yet thoughtless study. It is admirable in its extensive scope and scale; not since Myrdal's classic, *An American Dilemma,* has the plight of minorities in our nation been so thoroughly documented. It is pedestrian in the unselected nature of many of the materials that are included. Its thoughtful quality is revealed by the ingenuity of the statistical analyses and modes of data presentation, by the generation of new insights, and by the interpretation of some of the results so as to maximize their relevance for policy development. However, its thoughtlessness is a function of a certain degree of mindless empiricism and often patent lack of "acquaintance with" the objects of study; these lead to instances of naive operationalism and a tendency to swallow factitious and blatantly nonsensical results all too gullibly. Parenthetically, the report raises serious questions concerning the limitations of survey techniques generally and the role and responsibility of professional sociologists in research sponsored and directed by the government.

The survey aims at nothing less than a comprehensive documentation of the degree to which public education at all levels in the United States and its territories involves minority group segregation and unequal educational opportunities, as measured by indicators of the major dimensions of the learning situation: physical facilities, programs, and the characteristics and attitudes of staff and student body. More significantly, there are considered attempts to index the results of public education by means of student test scores of abilities at various grade levels and to use regression analysis for a comparative assessment of the impact of the various dimensions of the learning environment, both individually and collectively, on minority and majority group students. Additional phases of the survey deal with the description and evaluation of future teachers of minority group pupils, higher education, nonenrollment, and attempts at school integration in selected local communities. Briefer studies consider Project Headstart, the disadvantages associated with foreign language in the home, guidance counselors, and vocational education.

The published report, which includes a summary and nine technical appendices, consists of over 700 pages and includes more than 500 individual tables and figures. Almost 20,000 teachers participated in administering the various tests and schedules, and more than 600,000 instruments were returned and processed. The scale of the research operation is further indicated by the nearly 100 individuals who played roles in the design, data collection, and/or analysis phases of the study. In addition to staff members of the U. S. Office of Education's National Center for Educational Statistics, there was help from the Educational Testing Service and the Bureau of the Census as well as representative experts from thirteen major universities, seven large public school systems, one national foundation, and nine of the most prominent Civil Rights groups (ranging from the Urban League to C.O.R.E.). Indeed, the sheer administrative triumphs of Professor Coleman, who was responsible for the elementary and secondary school surveys, and of Professor Campbell, who was responsible for the college survey, border on the magnificent.

As might be expected, the answers to the leading questions ring empirically clear: most American young people, at all levels, receive their education in segregated schools, and Negro Americans suffer the most in this respect. The physical facilities, educational programs, staff members, and fellow students are all of poorer quality for the typical minority group pupil compared to what is available to students of the white "majority." Correlatively, the test-score performance of the various minority group students—the study differentiates among Puerto Ricans, Indian-Americans, Mexican-Americans, Oriental-Americans, and Negroes—are typically lower than those of the majority group pupils. Moreover, minority group students are not only behind when they start their schooling but they typically fall further behind as they progress from grade to grade. Parenthetically, since all of these data are broken down by regions and by metropolitan-non-metropolitan status, they thoroughly document the infamously poor quality of public education in the South for students of all races and at all levels.

The most relevant and unique findings of the survey derive from the relationships between learning situation factors and student achievement. The data suggest: (1) that the achievement of minority group pupils is more "sensitive" to differences in the quality of the learning environment than is the achievement of the white majority; (2) that variations in school facilities and academic programs account for less of the variation in achievement than teacher quality; (3) that differences in educational background and the aspirations of fellow students are even more strongly related to variance in the achievement of minority group students; and (4) that student attitudes and motivations, especially those which theoretically involve a sense of control over the environment, showed the strongest relationship to achievement. These salient clues have discouraging implications, as the concluding section of the

survey of elementary and secondary school education makes clear:

> "That schools bring little influence to bear on a child's achievement that is independent of his background and general social context; and that this very lack of an independent effect means that inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school. For equality of educational opportunity through the schools must imply a strong effect of schools that is independent of the child's immediate social environment, and that strong independent effect is not present in American schools." (p. 325)

In numerous respects, this is the most circumspect part of the research. The most important factors are controlled; the proper caveats are noted; and the correlative qualifications of the conclusions are made clear. At the same time, there remain limitations which the analysts often forget in their interpretive zeal. For example, there is little or no explicit appreciation of the possibility that ego-involved survey questions might produce "normative" answers. This may be a considerable factor in the finding that Negro teachers report reading more professional educational journals than white majority teachers, or in the replies of minority group students that their parents are highly interested in their education. Indeed, the tenuous linkages that often inform the analysis—from pupil reports of parental characteristics, to parental characteristics, to abstract conceptuations of "orientation to the school systems as a means of social mobility"—suggest the sometimes uninhibited enthusiasm of the researchers. More restraint is called for when using the shot-gun, face-sheet approach to data collection, an approach that often produces differences so small as to be inconsequential or in directions that defy cogent interpretation and suggest sheer factitiousness.

Other major aspects of the survey such as the inquiries into the future teachers of minority group students and into higher education evidence still more naive operationalism and inadequate acquaintance with the phenomena at hand. Predictably, the results are less significant and less relevant. For example, to use "belonging to a club for future teachers" as the criterion of a significant career commitment on the part of high school students is risky indeed; it is not surprising that little comes from comparisons with high school students who do not belong to such clubs. The pedestrian level achieved in this part of the survey is exemplified by the following insightful gem: "College recruiters affect the racial mix of their colleges by the selection of high schools they visit; Negro colleges, for example, visit high schools that have Negro students in them." (p. 365)

Since the inquiry into higher education admittedly involved no new data specifically secured for this purpose, this section communicates the greatest aroma of "processed reality." Approximately half of all Negro college students attend schools in the South (where the majority of the predominantly Negro colleges are located), but this crucial fact is seldom noted in the discussions of the regional breakdowns of the data. The analysis employs six class intervals according to the percentage of Negro enrollment; this may be rationalized on abstract methodological grounds, but it clearly introduces a nonsense motif on even commonsense theoretical grounds. Nor is the reader given any insight into the empirical ranges of the distributions, which are reported only in terms of percentages by quartiles. Here again the gross character of the data, especially where institutional egos are involved (e.g., the ratio of students to faculty), is unappreciated by the analysts who persist in taking the data at their face value and who produce nothing that is not already known concerning the plight of the predominantly Negro institutions of higher education and their clients.

Space prevents a detailed consideration of the other, briefer studies, but there are problems here as well. They are plagued by the assumptions that the facts speak for themselves. One in particular assumes that its report on the experiences of a few selected communities in school integration has considerable relevance for other communities, an assumption that is especially dubious because the naive discussions of these experiences detract rather than add to the significance and scientific status of the entire survey. To take seriously a "voluntary" integration operation aimed at "token" school integration in Mississippi and to baldly state, "All confess astonishment at the lack of difficulty," (p. 469) verges on the realm of idiocy at best and professional irresponsibility at worst. And yet in productions of this sort, where whole monographs are summarized in several paragraphs by hired editors, it is sometimes difficult to know what to attribute to scholarship and what to attribute to expediency. This raises the abiding issue in such efforts: the responsibilities of the professional investigators versus the bureaucratic clients.

Returning to the main study, it may be true that the reach of the survey as a technique should exceed its grasp, but the availability of the computer is no excuse for exceeding the bounds of scientific propriety. Given the pressing political significance of the subject

matter at stake in the research, the patent unwillingness of the authors to limit their inquiry to those matters which can be most effectively studied by such a methodology (and, among these matters, to practice a more pointed selection) simply increases the risk of blunting the impact of the more salient and valid findings. And this risk has been considerably increased by the almost irresponsible lack of selectivity in the publication of the results. The seemingly tortured concern to find and employ synonyms for the state and process of segregation (e.g., "assortive process," "race matching," "race sorting," "polarized distribution," etc.), while a minor matter, hardly adds to the meaning and significance of the results for the audience to which the report is formally addressed.

To be sure, Commissioner Howe explicitly notes that the report does not include any policy recommendations and that "in the months ahead," the U.S. Office of Education plans to use its own staff and other consultants (profits without honor?) "to determine how it can use the results of the survey to enhance the educational opportunities of all citizens of the United States." (p. iv) But despite the many admirable qualities of the survey, one is reminded of Ruth Glass's cogent remark on Charles Booth's lengthy classic (seventeen volumes) on poverty in London in the latter part of the 19th century: it "was more admired than read." One hopes for a better fate for the present effort, yet its current publication form augurs ill.

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