Some Clarity on Inequality

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Christopher Jencks has written a stimulating report on the massive data analysis he and his Harvard colleagues have been engaged in since 1966, when the Coleman Report came out. He says: (1) "Equality of opportunity" is an ill-conceived diversion from the true egalitarian goal of sharing wealth more fairly. (2) Differences among schools are not responsible for differences in adult success; reducing the differences among schools with respect to class size, per pupil expenditure, proportion of white children, or any other variable will not do much toward reducing inequities in the eventual income, prestige, or satisfaction of the adults those schools produce. (3) Both the set of decisions about how to provide schools and the set of decisions about how to reduce inequalities in family income present urgent social issues; in both cases devising solutions is a great deal easier than the task of convincing people, politically, that they want solutions. (4) Most important, the decisions about schools cannot and should not be made in the hope of solving any of society's other problems. These arguments are sensible. Like all useful conclusions they are consistent with the data but go beyond it. Jencks writes beautifully and persuasively, and the book should be read by everyone concerned with policies for education and manpower.

Some early reviewers of this book (even before its publication) attacked its author for his willingness to generalize from limited data, for his political bias, and for the unacceptability of his conclusions. These particular criticisms are unjustified. In addition to writing clearly, Jencks writes responsibly. If his conclusions are misleadingly excerpted and summarized in the press it is despite his persistent efforts to make his position clear, to qualify his generalizations, and to escape misinterpretation. His political bias is stated explicitly throughout the book: he wants to bulldoze the left tail of the income distribution curve so that each family earns at least half the national average. He has some utopian ideas about this as well as some empirical observations; contrary to the fears of

several critics, no reader will confuse the speculations with the facts.

This review will attempt to clarify, first, what Jencks says and some of the dangers of overinterpreting his conclusions; second, some weaknesses in his argument; and third, some meaningful implications for policy and future research.

What Are Schools For?

Jencks concludes that manipulating educational resources is a poor way to achieve the goal of reducing economic inequality; he suggests that manipulating wages and social conditions might be a better way. There is a converse to this argument: if schools are a poor means to reduce inequality, the reduction of inequality is a poor goal for schools. Jencks clearly favors massive tax support for education (though he would like the tax burden shifted to those who benefit most), but this expenditure should be regarded as basic nutrition rather than medication for America's social ills.

Jencks hamstrings the knee-jerk liberal. There was nothing wrong with such liberal movements of the 1960s as desegregation and compensatory education, he says, except that we were acting out moral fantasies in schools because we could not live up to them in the real world of our communities and corporations. Desegregation may be a moral necessity, and compensatory education may be a way of providing preschool to children who otherwise could not afford it. But as antidotes to the injustices of capitalism they will not work. The effects of schooling are simply determined by too complex a set of interacting, counteracting, and often confounded variables. The only strong predictor of occupational and economic success is the number of years an individual remains in school. Yet as much as schools vary district by district and state by state, in the money they spend and in their socioeconomic composition, they hardly vary at all in the number of years of education the average pupil gets, in the number of high school dropouts, even in the number who go on to college. The amount of money a school spends and the way it spends its money have no relation to the only variable found to predict adult success. Does this mean that the money should not be spent, or that better ways to spend it should not be sought? Not at all: it means that we have to decide

what schools are for, before and beyond egalitarianism. Then we can begin, on the one hand, to make better decisions about education, and on the other hand to find better instruments of economic justice.

The research analyzed by Jencks's group is survey research, mainly the hastily gathered Coleman data supplemented by other less extensive, fairly recent studies in the United States and Britain. The survey method is inherently incapable of answering questions like "Can education be effective?" "Can compensatory education work?" And "Can schooling guarantee a child at least a subsistence earning power, without lowering the productivity of other workers?" At best the method can only substitute "Did" for "Can" in these questions, and even when it identifies dozens of variables it can only report the functional relationships among a few, "all other things being equal." This is not the same as discovering what the effects might be were other factors controlled experimentally.

The book tells us a great deal about the relation among variables in education as practiced in the 1950s and 1960s, economic and social conditions being what they were. But the data themselves say little about causation (even when A was prior to B their correlation may be due to the common effect of an unmeasured variable C) and nothing about implementation (even when A and B are highly correlated, changing A may have no effect on B). Obviously, however, a social scientist conducts such research in the hope of making educated guesses about causation and implementation. In this he must be educated by his judgment as well as by his data. The judgment of a socialist or an egalitarian is different from that of a liberal or a laissez-faire capitalist. There is no such thing as presenting scientific results without prejudice, and what passes as objectivity in a given age is usually no more than a subjectivity which happens to agree with the dominant ideology. Jencks stands out first because his politics make many readers uncomfortable - and one suspects this facilitates their misquoting his argument - and second because he is unusually honest and circumspect about the values guiding his interpretation of his results.

Where Does He Go Wrong?

The text is divided into three parts: a highly readable report

and discussion; detailed, occasionally difficult notes at the end of each chapter; and three instructive appendices on the methods of analysis used. This structure makes the argument accessible to readers who may not be prepared to judge the methodology. But it has the disadvantage that these readers may make assumptions which sophisticated researchers, including the author himself, would not make. If the reader assumes that variables which were correlated in these data will always be so, or that uncorrelated variables will never have important relationships, he will miss the heart of the matter. Jencks underestimates the number of readers who will go astray; he does an inadequate job of emphasizing one major limitation.

We have only examined the effects of resource differences among existing public schools. This tells us that if schools continue to use their resources as they now do, giving them more resources will not change children's test scores. If schools used their resources differently, however, additional resources might conceivably have larger payoffs. . . . There is no way of testing this theory except by experimentation. Past history is discouraging, but the future is not always a rerun of the past. [P. 97]

If in this instance Jencks fails to undermine a misleading assumption, elsewhere he makes the mistake of attacking assumptions few people really hold. The notion that schools exist to reduce inequality is one example. Who would have claimed that? Perhaps the impetus behind compensatory education programs had to do with reducing poverty, at least in part. But schools exist, as Jencks says himself, as part of our culturally accepted routine for middle childhood and adolescent experience. Periodically a social movement will stress education as the instrumentality of change; but not everyone believes in that function of schools. Jencks's conclusions are iconoclastic only for those who do.

A related limitation involves Jencks's willingness to rely on achievement test scores as the sole criteria for success of a school, or of a practical approach such as desegregation. Although he admits in his four-page chapter 4 that "cognitive skills are not the only outcome of schooling" (p. 131), and "we also assume that staying in school has a modest effect on many of the noncognitive traits that employers value" (p. 134), his plea of ignorance about the nonacademic outcomes of education is confined to this paren-

thetical treatment. It is less disturbing that he has nothing to say about "noncognitive traits" (better described as social and personal skills) than that in the rest of the book he forgets there is anything that should be said. Here, for example, are two of his conclusions about desegregation:

- 3. While desegregation would almost certainly reduce the overall amount of variation in test scores, the reduction would probably be quite small. Most cognitive inequality is within racial groups, within economic groups, and within schools. Desegrégation will not affect these disparities much.
- 4. Finally, the case for or against desegregation should not be argued in terms of academic achievement. If we want a segregated society, we should have segregated schools. If we want a desegregated society, we should have desegregated schools. [P. 106]

These conclusions are supported by the data and need to be acknowledged by educators. Yet it is disturbing that policy should have to ride either on "academic achievement" or on absolute morality. Jencks does not recognize that the "noncognitive" case for desegregation lends itself to scientific analysis, not just to majority preferences. Despite occasional protestations to the contrary, the brunt of his analysis treats school as an input-output system: dollars and test scores in, test scores and dollars out. One loses the sense that school is where children detach themselves from parental expectations; test the family's value system against the broader shared values of society; fight; watch polliwogs and caterpillars metamorphose; suffer and survive disappointment; fall in love; share group paranoia; shoot heroin and contract venereal disease. The title and subtitle promise more than this book delivers.

Looking only at his analysis of education's effect on cognitive skills, we again find Jencks debunking a myth in which no one had a strong belief anyway: the notion that schooling affects children's relative mental growth. There is an implication of surprise that IQ scores remain stable and that achievement scores are predicted by them better than by school variables. Yet IQ tests have been constructed systematically to yield stable scores relatively unaffected by experience. The use of IQ data to support assertions about the nature of mental growth is a hoax, and the use of IQ tests to sort children into educational streams is paradoxical. If the streams are

supposed to maximize intellectual growth, students should not be assigned to different environments on the basis of scores which predict stable differences in achievement under similar environmental conditions.

Iencks himself does not subscribe to the hoax; but with all the unnecessary debunking of nonmyths it is disappointing that he leaves this myth alone. His own understanding of the nature of the tests, and of such controversies as the one over heritability and race, is perfect: "While we will use the terms 'basic cognitive skills,' or simply 'cognitive skills,' to designate whatever it is that standardized tests measure, we will not assume that these tests measure either vocational competence or what most people call 'intelligence'" (p. 53). "The heritability of I.Q. for the general population thus tells us almost nothing about the likely cause of the difference between subpopulations" (p. 68). Unfortunately these cautions are difficult for laymen and many scientists to accept. So, too, with the crucial distinction between aptitude and achievement: "When everyone is equally well prepared, achievement tests become aptitude tests. When people are unequally prepared, aptitude tests become achievement tests" (p. 56). Yet the analysis lumps all kinds of test scores together, accepts the myth that a score obtained at a particular time measures some permanent attribute of the individual, and gives credibility to the aptitude-testing establishment. Probably the reason for this acceptance is that without these test scores there would be almost no data to analyze; but the compromise is a major setback for the movement against the IQ hoax.

The weakest treatment in Jencks's book has to do with streaming. His estimate of the number of students whose college or noncollege fate depends arbitrarily upon which high school stream they enter is roughly 12 percent, or more than half a million per year. Still the fates of the large majority are predicted by their aptitude scores, family affluence, and aspirations rather than by their experience in the college or vocational track. Two things are wrong with this analysis. First, the dozens of studies of tracking (most looking at academic achievement alone) do not include a single proper experiment, a longitudinal test of the fates of students randomly placed in high and low streams. The selffulfilling prophecy certainly does not account for the whole Reappraisal

difference between high-stream and low-stream students' achievement—the former are on the average smarter than the latter—but it probably contributes to the maintenance of the gap. The Plowden and Barker Lunn studies in England, reanalyzed by Jencks's collaborator, Henry Acland, show only that the gap does not widen appreciably; it requires an experiment to test whether streaming keeps the gap from narrowing. Second, the important issue is not final achievement but the effect tracking must have upon the stability of aptitude test scores (and thus their continued use) and upon the rigidity of class-sanctioned aspirations.

In addition to attacking unheld assumptions and failing to attack widespread ones, Jencks occasionally buys a bigger myth about the effects of curriculum upon learning than many less radical analysts would accept. He says, in passing, that of course "more students learn French in schools that teach French than in schools that do not" (p. 132), and "Attending school increases most cognitive skills" (p. 146). Such remarks are either false or trivial. The appalling fact is that no child acquires usable French in any American school—and very few acquire literate English.

In the inevitable complexity of the argument, despite an admirable job of picking apart many interrelated variables, Jencks's own avowed economic and social goals get lost. He would like to raise the income of the poorest Americans to at least half the national average, and he would like to raise the cognitive skills of all Americans to enable us to work productively and live satisfying lives. In the end, however, he can only talk about "reducing the variance" in income and achievement? Will that make us richer or smarter?

How Can We Go Right?

Despite its shortcomings this book makes a significant contribution toward pointing us back in the right direction. For policy makers, it is a stern reminder that schools have functions of their own and that we must find more direct means of limiting the unequal distribution of wealth, perhaps the only optimistic interpretation that can be placed on the Supreme Court's recent San Antonio v. Rodriguez decision. Jencks contrasts a reasonable set of convictions about man and society with a discouraging set of

findings about indirect, oversimplified intervention. One wonders whether the same conclusions could not have been reached ten years earlier. But who would have risked quelling the tide of money then? Now there is less to lose. Jencks's comment about the heritability controversy embodies a painful truth that should be engraved upon the desk of every policy maker: "Academic opinion has vacillated from one side to the other, according to the political mood of the times" (p. 64).

For researchers the book has two principal implications. The first is that we have to conduct controlled experiments to assess the effects of educational practice; surveys can do no more than suggest the most likely hypotheses to test. The second implication is that there are dozens of major variables affecting school achievement, and they interact in complex ways. This increases the need for experimentation: correlational data are inadequate to predict the results of simultaneous change along several variables, especially when any of those changes is massive enough to move the system beyond the range of variation present in the population surveyed.

For the interested citizen, the book will be stimulating beyond what it has to say about social science and public policy. It is a fascinating encyclopedia of annotated nontrivial statistics. These are not just raw survey data but carefully estimated parameters, with Jencks's comments on their reliability and with appendices to show how they were derived. Where else can we discover that blacks in 1961 earned only 63 percent as much as white workers matched for occupational status and level of education? Or that women employed full time in 1968 had to have one year of graduate school in order to earn as much as the average male high school dropout? This is the stuff of every page, and there is nothing wrong with going beyond it to speculate about causes and how to produce change—so long as the reader keeps in mind that "the future is not always a rerun of the past."

1. Christopher Jencks et al., Inequality: A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, 1972).

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