1 The Need for Educational Redesign

A visitor from a planet whose inhabitants were all incorrigibly rational would no doubt find in our educational system much cause for wonder. It is not that we are unaware of the inefficiency of that system. Rather, the cause for wonder would be the method with which we seek to come to grips with that inefficiency. Over and over again, we have recourse to remediation rather than to redesign. And when the remediation turns out to be inefficient, compensatory approaches proliferate in an effort to remedy the ineffectual remediation. The fundamental source of the system's failure to distribute education effectively —the faultiness of its basic design—remains unexamined, and increasingly vast sums are poured into efforts to compensate for the inefficiency of the system, into attempts to compensate for the inefficiency of the compensatory efforts, and so on and on in the direction of futility.

If the educational process were to be redesigned, what criteria could be used to determine that the new design would be of optimum serviceability? We would say that the overall objective of such redesign would be an educational system of maximum intrinsic value (as contrasted with a system whose values are purely instrumental and extrinsic), maximum meaningfulness and rationality, and maximum methodological unity and consistency. In the remainder of this chapter, we will endeavor to spell out the reasons for suggesting such criteria, and some of the ways in which they can be met.

Educational Dysfunction

Whatever the deficiencies of an educational system may be, it is apparent that they most cruelly and harshly affect precisely those portions of the population that are already educationally disadvantaged. The system thus affects the student population differentially, so that there is significant student vulnerability to systematic dysfunction. It would seem that students vary greatly in their susceptibility to the harmfulness of ineffectual educational processes, just as the population at large is differentially susceptible to outbreaks of influenza, and just as tendencies toward suicide are differentially distributed through-

out the society. Some cultural groups are not much harmed by inadequate public education, and many of their members may succeed in spite of it; the system can thus not take credit for their success. Other cultural groups may succumb to miseducation very readily, and the system bears some responsibility for their failure. In any event, consideration of the factors to be taken into account in redesigning education must involve the dysfunctions of the educational process that make compensatory education seem necessary. An analysis of those dysfunctions and their consequences that makes use of the epidemeological metaphor holds more promise than taking as a starting point allegations of differences in cognitive capacities based upon ethnic or sociocultural differences.

The theory implicit in current practice with respect to compensatory education is that the most extreme and obnoxious symptoms of an inadequate educational system may be remedied or redressed by means of a countervailing educational thrust that would make up for ground lost, and would bring the lagging population up to a par with the remainder of those undergoing educational processing. Unfortunately, the methods employed in compensatory education generally turn out to be much the same as those in the existing system itself. With no clear understanding of the causes of the miseducation now prevalent, compensatory education as currently practiced tends to be preoccupied with little more than the alleviation of symptoms.

It would hardly be correct to imply that the system is without its critics. But although they are numerous, they are generally unconstructive. They are content to carp, but see no way to correct. Apologists for the system, on the other hand, point an accusing finger at cultural or at socio-economic conditions as the true causes of miseducation. Since there are few signs that our society is planning any major improvement in such socio-economic conditions, such apologists imply that no major amelioration can be expected with respect to the education of those in the society who are economically disadvantaged.

Failure of Remedial Approaches

So from both sides come counsels of despair. Hence, too, the desperateness of the remedial approaches. Each is touted too much, oversold, and overly relied upon: classroom walls are put in and taken out; technological innovations are introduced or discontinued; parents are involved or not involved; teachers are paid more or exhorted more; teacher aides are brought into the classroom; the list stretches on and on. One cannot help feeling that, even if all these remedial approaches were to work, they are like so many Band-Aids: fine for superficial abrasions, but risky if the real problem is an underlying internal injury.

We begin, therefore, with a different premise from the prevalent one. We begin by assuming that the only way to make compensatory education work is not to approach it as a merely compensatory device at all, but to design it so as to promise educational excellence for all young people. Just as there is no field called "compensatory medicine," there should be no such field as compensatory education. Just as the intensive care facilities available in hospitals to those who are seriously ill are the model of lesser facilities elsewhere for those whose medical needs are less severe, so the care and attention we give to the educational development of the disadvantaged or highly vulnerable members of our society should be a model of excellence, representing the best in services available to all. There is no effective strategy for compensatory education that is not at the same time an effective strategy for all education.

What is clear is that education must reconstruct itself so that the socio-economic conditions can never be the excuse for purely educational deficiencies. It must reconstruct itself so that diversity of cultural conditions will be regarded as an opportunity for the system to give proof of its excellence, rather than as an excuse for its collapse. It must reconstruct itself so that no significant fraction of those affected by it should ever be able to say, "It failed to help me discover the full range of options that were open to me." Or, "I grew. But I would have grown anyway. It failed to increase my capacity for growth by synchronizing my abilities so that they would reinforce each other rather than cancel each other out." Or, "When I entered the educational system, I brought curiosity and imagination and creativity with me. Thanks to the system, I have left all these behind."

One should expect neither too much nor too little of educational redesign. One should not expect it to be followed by drastic social changes, but one should at least be able to expect it to work, in the sense of producing measurable educational improvement. It would be inconsistent to deplore the measurable deficiencies of the existing system, while not requiring alternative approaches to justify themselves in ways that are publicly verifiable.

Meeting Expectations

But what expectations can be attributed to the children who attend the schools and to the parents of those children? Children frequently complain that their courses lack relevance, interest, and meaning; it is to this interpretation, at any rate, that their remarks most readily lend themselves. Parents can be equally succinct: schools exist to "make kids learn." Of course, what the parents and the children are saying amounts, in practice, to the same thing, since, if the educational process had relevance, interest, and meaning for the children, there would be no need to *make* them learn.

Learn what? We are often told that what is to be learned consists in the essentials of the heritage of Western civilization. That education should, in fact, be limited to an initiation of children into the cultural traditions of their society is hardly self-evident, although it would be difficult to show that it should be any less than such an introduction. Children are in no position to gauge the importance of cultural transmission to their society; they can only assess its meaningfulness to them. They are capable of being quite unenthusiastic about those aspects of Western or any other civilization for which many people now dead and some now living have felt great respect. Seldom are they interested enough or critical enough to ask why we revere a great many of the deeds of people of the past, whereas the same deeds performed today would be considered the height of barbarism. Children take our word for it that we revere what we say we revere, and have too little self-assurance to wonder if we might be incorrect. When they do protest (more often by what they fail to do rather than by what they do or say) that they fail to see what all this means, we soothe them with the remark that "it will all make sense eventually," and for yet a little while longer they may go along, their hands in ours, hoping it might be so.

Would children be wrong to expect that the entire educational process—as a whole at every stage, and in its development from stage to stage—be meaningful? If the school cannot help children to discover the significance of their experiences, if that is not its function at all, then there may be no alternative but to turn the educational system over to those who can most craftily engineer the children's consent to being manipulated into a state of mindless beatitude.

If, on the other hand, it is meaning for which children thirst and have a right to expect from the educational process, then this enlightens us about the legitimate incentives that might be employed in motivating them. Their self-interest demands profits in the form of meanings; no person in business expects to persist in a chronically unprofitable enterprise. But now we are compelled to acknowledge that the school must be defined by the nature of education, and not education by the nature of the school. Instead of insisting that education is a special form of experience that only the schools can provide, we should say that anything that helps us to discover meaning in life is educational, and the schools are educational only insofar as they do facilitate such discovery.

Discovery

Emphasis upon the term *discovery* is hardly coincidental. Information may be transmitted, doctrines may be indoctrinated, feelings may be shared—but

meanings must be *discovered*. One cannot "give" another person meanings. One can write a book that other people may read, but the meanings the readers come up with eventually are those which they take from the book, not necessarily those put into it by the author. (The writers of textbooks often assume that the meaningfulness for them of the subjects with which they deal is automatically conveyed to their readers, when in fact the text as a delivery system transmits little that is retained.)

You attend a discussion, are provoked and excited by it, participate by making several comments, then later, when asked about the event, proceed to sum it up by recounting your own comments. As a comprehensive and objective account of the discussion in its entirety, your report must be considered one-sided. But what you may be trying to suggest is that you did take the entire discussion into account; your own remarks represent, to you, your appraisal of the gist of the event, and your pronouncement upon it. It is, after all, a very human experience that all of us have had—after a general discussion, reflecting particularly upon our own remarks. But those remarks embody the meanings of the event that we made ours, meanings that we do not consider merely "subjective," for they did not merely issue from us (or from our "minds"), but were, from the entire dialogue.

So it is with children. The meanings they hunger for cannot be dispensed to them the way wafers are dealt out to communicants at a mass; they must seek them out for themselves, by their own involvement in dialogue and inquiry. Nor is that the end of the matter, for meanings, once found, must be cared for and nurtured, as one might care for one's house plants, pets, or other living and precious treasures. But the children who cannot make sense of their own experience, who find the world alien, fragmentary, and baffling, are likely to cast about for shortcuts to total experiences, and eventually may experiment with drugs or succumb to psychoses. Possibly we could teach children before they reach out for such desperate remedies by helping them find the meanings so lacking in their lives.

Frustration

If those researchers who conduct experiments aimed at producing frustration in animals were asked to organize an educational process along the same lines, it is likely that they would insist that all subjects be taught as discrete entities, not even remotely connected with one another, so that children, with their needs for wholeness and completeness, would have to perform the heroic feat of synthesis all by themselves; their frustration would be guaranteed. But then, what difference is there between such a hypothetical system and the one

that presently exists? Is there any persuasive reason why education cannot be a process that moves from whole to part, from general to specialized, from the comprehensive to the specific, rather than the other way around?

Like everyone else children crave a life of rich and significant experiences. They want not merely to have and to share, but to have and share meaningfully; not merely to like and love, but to like and love meaningfully; children want to learn, but to learn meaningfully. We see them glued to the television set, and we ascribe this behavior to a love of thrill and excitement, preferring not to note that, whatever else popular entertainment may be, it is at least presented in the form of dramatic wholes, not in the form of inscrutably estranged fragments. These meanings may often be superficial, but they are better than no meanings at all. But this is simply another instance of adult imperception of or misinterpretation of childhood experience, like seeing children as whimsical and capricious rather than experimental, as rash rather than adventurous, as irresolute and indecisive rather than tentative, as illogical rather than as sensitive to conflicts and ambiguities, as irrational rather than as resolute in protecting their own integrity.

Meaningful Experiences

Once it is acknowledged that, as far as children themselves are concerned, no educational plan will be worthy of the name unless it results in meaningful school and after-school experiences, we can feel some confidence in having arrived at one of the significant criteria for the evaluation of an educational design. It has already been indicated that meanings emerge from the perception of part-whole relationships as well as of means-end relationships. To present something part by part while merely promising eventually to provide the whole that would give each part its meaning is to build an educational system upon the model of a jigsaw puzzle—which is to say that it is great, but just for those few people who happen to like jigsaw puzzles. To specify the ends of an educational design without specifying the means by which they are to be attained is to have concocted something that is quite pointless. Yet again, to specify both ends and means, but to be unaware of the unintended consequences likely to emerge from the use of such means must be considered irresponsible, for the implementation of such a plan may generate meanings, as perceived by those affected by it, quite incompatible with the intended meanings.

Part-whole relationships—such as the meaning of a particular play in a game to the game as a whole, or the meaning of a word in a sentence, or the meaning of an episode in a movie, are meaning-laden relationships. Since the meaning is acquired concomitantly with the perception of the relationship,