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Five Mistaken Approaches to Education

The field of education is being inundated by the written and spoken word. Speeches, articles, books, conferences, television interviews, and true confessions have come pouring out, indicating the grave shortcomings in what is (or is not) being done in our schools and what should (or should not) be done to remedy them. Educational reformers have become pop celebrities with a ready market for their polemics. Even scholarly academics have roused themselves to add their observations and analyses. Those of us interested in education and concerned for its improvement stand on the brink of this rising flood of verbiage and scarcely know where to plunge in. We urgently need some kind of signposts to warn us of the shallow and rocky, steer us through the deep and murky, guide us into (or against) the mainstream and eventually get us onto solid ground.

My hope in this paper is to provide such guidance by identifying five mistaken approaches to education. These are commonly made mistakes in argumentation or outlook involving faulty pre-suppositions, fallacious reasoning, or questionable inferences. I do not pretend that there are only five kinds of mistakes made, nor do I claim that everyone who deals with educational problems necessarily takes an erroneous approach. I do contend that the five mistaken approaches are depressingly prevalent and that by distinguishing them we can better evaluate what is being said. If doing so will facilitate our analysis of what needs to be done in education, I shall be content.

i — new dawnism

The first and most commonly made error of educational reformers is the attitude of "New Dawnism." The label I borrow from John Kenneth Galbraith who used it in a television interview to characterize the naive optimism of many liberals in the early days of the Kennedy administration. They were convinced, he said, that only a few changes were needed to set things right and make the whole political operation function smoothly. Once these key decisions were made, all our troubles would be over and a new day would dawn. Given the correct analysis, the problems and their solution would turn out to be quite simple.

It is not difficult to detect the same kind of yearning for the dawning of a new day in education. All of us want schools to be better for our children and are eager to know how to proceed. Enter the reformer with his package of simple solutions. "Simply do (or don't do) X," we are told and all our troubles will be over. Filling in the blank we can posit technology, for example, as the new simple solution. George Leonard, for one, argues that "the new technology brings us new modes of change." Computers, mass media, new psychological techniques, all give us the means to make education truly ecstatic. We only need the courage, imagination, and money to make use of what we have already developed. Much of the recent literature on computer-assisted instruction supports this view that we are close to solving basic problems in education, by a more efficacious use of new technology.²

What I find lacking in such approaches is an appreciation of some of the complexities involved in the learning process. For example, assuming we can develop efficient, mass-produced systems for learning, what do we want to be learnt? What do students need to know? Leonard speaks of making students more responsive to life and hence more responsible. Computer experts talk of freeing the teacher from drill and routine testing, thus clearing the way for more personal, creative teaching. Few delve into the problem of the content of learning and what our priorities are to be.³

Another problematic aspect of learning is that of motivation. Why should the student learn what we want him or her to learn? How best do we motivate such learning? Studies on behavior modification and learning reinforcement come to grips with this problem, but have not clearly solved it.⁴ How does one bring about intrinsic motivation and make it last?⁵ Finally, what do we presuppose about the child? Is he by nature ready and willing to learn? If so, what should we do? A. S. Neill argued (not unlike Rousseau before him) that we should do nothing directly to force the child to learn anything. His opponents feel he has missed the whole point concerning what civilization is all about and that he fails to recognize the need of human nature for discipline and reform.⁶

Besides these difficulties, there are questions about needs and interests, levels of ability, individual rights and social responsibilities, and many others that should temper the optimistic spirit of the reformers. I realize that raising questions is easier than answering them and that one cannot wait until he has considered every possible difficulty before making his own proposals. Yet it behooves those making proposals to recognize the hard questions and avoid promoting an attitude of "New Dawnism" to the effect that our problems can be solved by one sort of change. The mistake here is, I think, that of raising our expectations so high that they are bound to be disappointed. One need only review the literature from a few years ago on teaching machines to be reminded of this.

ii — either/or

If "New Dawnism" describes the unguarded optimism of many educational reformers, the "Either/Or" approach can be detected in the way they set forth their arguments. John Dewey spent most of his life combating what he called the setting up of irreconcilable dualisms which forced us to choose either one or the other. In The Child and the Curriculum' (written in 1902), Dewey chastises those who argued for child-centered approaches to education ("I teach the child, not the subject" or vice-versa). He claimed that such hard and fast positions led only to "a maze of inconsistent compromise" with one side in vogue at one time, only to be usurped by the other later on. The answer lay in rejecting the dualism and refusing to be limited by an "either/or" type of choice. Dewey saw the child and the curriculum as limits defining the process of growth and he maintained that this process of growth involved growth of experience and into experience. Consequently, he depicted the curriculum as part of the environment the child interacts with in developing his own potential.

I am as interested in the mistaken approach here as in Dewey's answer to it. It is the approach which suggests that we must accept a proposal because of the undesirability of the (only) alternative. This is often the way reformers present their case and it affects their opponents' response to the proposals. Consider the *Hall-Dennis Report* which wants to replace the "lock-step structure" of the past with "a child-centered continuous programme of learning by discovery..."⁸ James Daly sees this as "an assault on civilization as we know it" and replies that the young need "someone to guide their groping reactions toward something like the mature habits of thought which adults have discovered and applied over the centuries."⁹ My way out of the embroglio is to follow Dewey and suggest that both are right: the child *and* the curriculum are important. The mistake lies in portraying the situation as if we had to choose one *or* the other.¹⁰

One can draw up a list of such supposed dualisms in education placing free learning, noble savage, feeling, wants, interests, self-fulfilment on one side and structured learning, discipline, needs, objective criteria, and social responsibilities on the other side. Then it would be a simple task to line up defenders of one view or the other. What distresses me is the fact that each side claims to be in sole possession of the truth. Without ignoring real differences, we can see that most such problems are due to the setting up of the question in an "either/or" framework. As I tell my students, when someone presents you with a dilemma and demands that you choose one of the two alternatives, your first reaction should be to look more closely to see whether or not there might not be a third or fourth possibility. Most of the time there is and this enables us to get on to a more realistic solution of the problem at hand.

iii — preposterism

Another error common to educational thought and action is what Jacques Barzun has called "Preposterism." This is the fallacy of putting the first last and the last first.¹¹ Barzun finds it especially rampant at the University level, where we "require" an original piece of research before we certify a college teacher. As Barzun puts it: "... consider the assumption behind the highest degree: it is noticed that trained minds who investigate a subject and write a book about it sometimes make a contribution to knowledge. Valuing knowledge, we *preposterize* [his italics] the idea and say to every intending college teacher: you shall write a book and it shall be a contribution to knowledge" (p. 221). Anyone who has sat on a thesis committee knows how preposterous such a requirement is.

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The same impetus to do first what should only be done last is present in many radical proposals for change. I find it underlying the radical alternatives to schooling set forth by Ivan Illich.¹² Illich wants to do away with "funnels" of education (i.e. learning by means of the "hidden curriculum" in schools) and replace them with "learning webs." He finds that our schools are manipulative institutions that do not teach. He wants to do away with them (to de-school society) and create "convivial" channels for learning that are self-activating and self-limiting.

As I have noted elsewhere,¹³ his alternatives to schooling all presuppose that the individual learner already possesses the capability of making intelligent choices that it should be the job of schools to provide. That is to say, he wants to do first what should be done last; i.e. to increase the accessibility of things, models, peers, and educated elders (p. 76) before equipping the young with the means to appreciate and make use of such learning resources. Without some prior mastery of language, some knowledge of mathematics and science, an awareness of one's cultural milieu, and other such primary components of learning, it does not seem possible to me that Illich's alternatives could be meaningfully made use of. Illich's new channels of learning should follow, not replace, schooling as we know it. By no means do I imply by this a satisfaction with the status quo or a rejection of Illich's strong criticisms of it. I only argue that he has things the wrong way round and that he is committing the fallacy of "preposterism."

The same kind of thinking permeates the Draft Report of the Commission on Post-Secondary Education in Ontario.¹⁴ It eagerly embraces Illich's notion of accessibility and tries to "emphasize the importance of the individual in education: the individual must be central" (p. 10). Not only should we make all our educational resources available to each individual, but "he must have the opportunity and the responsibility to decide what educational experience is best for him" (p. 11). It is the underlying presumption that everyone is born with the ability to make such choices that disturbs me. I find it another instance of "preposterism" to put forward a range of educational alternatives first, without having faced the prior problem of how to equip individuals to make intelligent use of them.

iv — the fallacy of misplaced concreteness

A fourth mistake often found in educational writings is one that Whitehead claimed to find in most kinds of theoretical analysis. He called it, "The Fallacy of Misplaced Concreteness" which consists in "the accidental error of mistaking the abstract for the concrete."¹⁵ He gives examples from the history of philosophy where thinkers puzzled over abstract notions like "substance" and "quality" for so long that they began to treat them as concrete entities in themselves. Having abstracted these concepts from the "blooming, buzzing confusion" of sense experience, we tend to deal with them as if they themselves were what we saw, heard, touched, and tasted. We talk of knowing substances and their qualities, rather than brown oblong tables or bright yellow flowers.

By far the most common instance of this fallacy in education lies in our treatment of the "I.Q.". What began as a score indicating the results of a test made up of a selected number of relatively abstract problems, soon became a kind of shorthand for "intelligence" and then a handy means to categorize children according to their mental ability. Experiments by Rosenthal have shown us that expectations based on too firm an adherence to hypothetical constructs like I.Q. can lead us astray.¹⁶ In a recent address, Dr. D. H. Stott made the same point:

Educational researchers continue to treat the I.Q. as a variable— "holding intelligence constant" as they put it—or relating this or that phenomenon to "intelligence" as if it were a unitary factor—not realizing that in a child's problem-solving behaviour, such as it is sampled in an intelligence test, there are condensed years of experience and behaviour, and of organizing them into rules for action. Mental growth involves the whole of a child's personality. There is nothing left to relate intelligence to. Hold intelligence constant and you have lost the child.¹⁷

Neil Postman has neatly demonstrated how a change in emphasis or interpretation of key educational concepts can lead to a dramatic change in what we try to do.¹⁸ More importantly, the work done by Jensen and the controversy it has generated have indicated the ramifications of identifying "intelligence" or "mental ability" with I.Q. scores.¹⁹ Abstraction is a twoedged sword. Isolating general characteristics from particulars enables us to deal with many things at once. Yet by forgetting the particular variations abstracted, we may fall into the trap (as does Jensen, I think) of not knowing what concrete reality we are dealing with. Putting this another way, I.Q. scores are one useful tool among others in the complex task of trying to help students learn. They should not be stuck away in a drawer to be ignored,²⁰ but neither should they replace personal observation and understanding of an individual's needs and abilities. In more philosophical terminology, abstract concepts may be a necessary condition for analyzing educational problems, but they are not a sufficient condition; i.e. we need them, but we also need more than just such a generalized approach. To misplace concreteness (or mistake the abstract for the concrete) is undesirable in any type of thought, but perhaps even more so when we are dealing with the teaching of human beings.

v ---- the naturalistic fallacy

Having made our way this far, we come to the last of our signposts, another fallacy "discovered" by philosophers, the "Naturalistic Fallacy." G. E. Moore described this as the mistake of assuming that what is the case suffices to tell us what ought to be the case.²¹ Attempting to generate an "ought" (normative judgment) from an "is" (description of the facts) is the way this fallacy is usually explained. R. F. Dearden²² lists many examples from educational works which "try to infer judgments of value from empirical facts" (p. 34). For example, he chides growth theorists for supposing that merely telling us how development proceeds is the same as establishing how it ought to proceed. To quote Dearden:

The growth ideology is constantly involved in a fallacious presentation of its guiding values as somehow arising out of processes, and hence as being quasi-biological dictates. The fallacy may be that of supposing observation of the *actual* [his italics] course of growth to show how it *ought* to go, or it may be that of simply equating in meaning what is actually wanted, or now felt to be interesting, with what is really desirable or really needed. Sometimes, of course, the same thing will answer to both descriptions, but not always, and the wedge can be forced by asking for the criterion for ruling out some things as "stunting growth," or some felt interests as being undesirable (pp. 45-6).

Dewey's struggles with the example of the burglar³³ are a prime example of the difficulty in sorting out the differences between facts and values. Although he had to admit that the experience of the burglar could be described as involving growth, he ruled it out as being educative and postulated that some experiences were mis-educative because they lacked the continuity and interaction necessary for desirable learning. These criteria might be applied to the facts but they are not established by them. A factual account of experience might provide the information needed for us to make a judgment as to its educative value, but it is not a substitute for such a judgment. In short, empirical data do not of themselves resolve disputes about values. We are still faced with the problems of what ought to be taught and learnt. Such problems do not, as I have indicated, admit of simple solutions.

conclusion

We began by looking for some means of making our way through the morass of educational theories and proposals and identified five commonly made mistakes:

- "New Dawnism" the belief that one change or technique will solve all our problems;
- 2. "Either/Or" the setting up of irreconcilable dualisms;
- 3. "Preposterism" putting the last first and the first last;
- 4. "The Fallacy of Misplaced Concreteness" mistaking the abstract concept for the concrete reality; and
- 5. "The Naturalistic Fallacy" trying to generate what ought to be done from an empirical description of what is the case.

The reader has my blessing to add to the list as he probes more deeply into the literature. My object has been to provide warning signals so that we can begin to listen more judiciously and read more critically. Such an adroit handling of the written and spoken word is but the first step towards true understanding and improvement in education. But in these hectic times, a first step may be the most necessary one of all.

footnotes

- 1. George Leonard, *Education and Ecstacy*, New York: Dell Publishing Co., 1968, p. 218.
- 2. A good recent summary of this position is to be found in D. Alpert and D. L. Bitzer, "Advances in Computer-based Education," Science, Vol. 167 (March 20, 1970), pp. 1582-1590. A Canadian example is Bernard Trotter, Television and Technology in University Teaching (A report to the Committee on University Affairs and the Committee of Presidents of Universities of Ontario, Toronto, 1970). A more sanguine treatment of the new technology is that of A. G. Oettinger, Run, Computer, Run, Cambridge: Harvard University Press, 1969.
- 3. Two exceptions to this general lack of concern for the content of the

curriculum are: R. F. Dearden, The Philosophy of Primary Education, London: Routledge and Kegan Paul Ltd., 1968 and Joseph J. Schwab, College Curriculum and Student Protest, Chicago: University of Chicago Press, 1969.

- For example, "Learning Theory and the Teacher: IV. The Reinforcement Principle," Memo to the Faculty From the Center for Research on Learning and Teaching, University of Michigan, No. 48, April, p. 192.
- cf. J. S. Bruner, On Knowing: Essays for the Left Hand, Cambridge, Mass.: Belknap Press, 1964 and E. L. Deci, "The Effects of Externally Mediated Rewards on Intrinsic Motivation," Journal of Personality and Social Psychology, vol. 18, 1971, pp. 105-115.
- Compare, A. S. Neill, Summerhill, New York: Hart Publishing Co., 1960 and Max Rafferty in Summerhill: For and Against, New York: Hart Publishing Co., 1970, pp. 11-25.
- 7. John Dewey, The Child and the Curriculum, Chicago: University of Chicago Press, 1902.
- Living and Learning (The Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, Toronto, 1968), pp. 15, 175—commonly referred to as the Hall-Dennis Report.
- 9. James Daly, Education or Molasses? A Critical Look at the Hall-Dennis Report, Ancaster, Cromlech Press, 1969, pp. 1, 54.
- 10. cf. my review of Daly in Dialogue, (June, 1971), pp. 386-389.
- 11. Jacques Barzun, *The American University*, New York: Harper & Row, Colophon Edition, 1970, p. 221.
- 12. Ivan Illich, Deschooling Society, New York: Harper & Row, 1971.
- 13. cf. my review of Illich in McGill Journal of Education (Fall, 1972), pp. 211-213.
- 14. Draft Report of the Commission on Post-Secondary Education in Ontario, Toronto: 1971.
- 15. Alfred North Whitehead, Science and the Modern World, New York: Mentor Books, 1948, p. 52.
- R. Rosenthal and L. Jacobson, "Teachers' Expectancies: Determinance of Pupils' I.Q. Gains," *Psychological Reports*, vol. 19 (1966), no. 1.
- 17. Quoting from the manuscript for a banquet address to the Annual Conference of the Ontario Educational Research Council, Toronto, December 8, 1972, p. 4.
- Neil Postman, "Telling it Like it Ain't: An Examination of the Language of Education," Alternatives in Education, Bruce Rusk, ed., Toronto: Ontario Institute for Studies in Education, 1971, pp. 13-28.
- 19. Arthur R. Jensen, "How Much Can We Boost I.Q. and Scholastic Achievement?" Harvard Educational Review, vol. 39 (Winter, 1969), pp. 1-123. Discussion of Jensen's article can be found in the Spring, 1969 issue and his reply in the Summer, 1969 issue.
- 20. A suggestion made by Herbert Kohl in *The Open Classroom*, New York: A New York Review Book, 1969.
- 21. G. E. Moore, *Principia Ethica*, London: Cambridge University Press, 1903.
- 22. cf. note 3.
- 23. John Dewey, Experience and Education, New York: Collier Books, 1963 p. 36 ff.