This document begins by considering the controversy over just how to define philosophy of education, and how to establish its legitimate domain and the range of its inquiries. The issue is a question of whether educational philosophy is to be conceived as a practical discipline, or as a theoretical discipline. The document continues by discussing other questions and problems in the philosophy of education. Following a preface and a bibliography of the author, the document is divided into the following chapters: (1) "Defining Philosophy of Education"; (2) "Non-partisan Educational Theory"; (3) "The Function of the Formal School"; (4) "Educational Aims"; (5) "Education as Cultivation of Mind"; (6) "Mind and Educational Process"; (7) "Equality, Status, and Society"; (8) "The Curriculum, Confidence, and Tension"; (9) "Experiencing Value"; and (10) "Reasons for Learning." (Contains 27 references.) (BT)
PHILOSOPHY OF PUBLIC EDUCATION
by
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This document is the manuscript of a book that was completed by Professor Foster McMurray of the Department of Educational Policy Studies at the University of Illinois at Urbana-Champaign in the 1980s.

Professor McMurray was born in Philadelphia on August 10, 1914, graduated from Lancaster (Pennsylvania) High School in 1932, received a Bachelor's degree from Millersville State Teachers College in Pennsylvania in 1938, received a doctor's degree in philosophy of education from Teachers College Columbia University in 1949, and is currently retired from the faculty of the University of Illinois at Urbana-Champaign.

Back in the late 1960s I was a Master's student in Foundations of Education at Temple University. At Temple I took several courses in philosophy of education that were taught by faculty who had completed their doctoral programs at Illinois. When I began to express interest in doctoral study in philosophy of education the Temple faculty who I knew all spoke enthusiastically about Prof. McMurray who had been the youngest member of Illinois's Department of History and Philosophy of Education in the 1950s. The professors who I knew at Temple were all interested in the teaching of critical thinking and regarded the philosophy of John Dewey as central to the study of philosophy of education. I later became aware of Prof. McMurray's acquaintance with Dewey while Prof. McMurray was doing his doctoral study at Teachers College in the 1940s. When I became a doctoral student at Illinois I heard Prof. McMurray deliver excellent presentations on Dewey's and Jean Piaget's philosophies of education. The first time I chatted with him in his office he was pleased to find out that there was a student in his department who had a Bachelor's degree from a Pennsylvania state college. Later I took an excellent seminar with Prof. McMurray on "Educational Classics." In that course he encouraged rigorous analytical reading of texts on education by Aristotle, Jean-Jacques Rousseau, Herbert Spencer, John Dewey, Abraham Maslow, and Jean Piaget. We also analyzed the text of a new book on the 19th Century German philosopher of education J. F. Herbart by Prof. Harold Dunkel of the University of Chicago. The discussions in that class were some of the best I had while a doctoral student. Prof. McMurray later served as a member of my dissertation committee. His comments on my writing and research were always helpful.
A member of the faculty at Temple University when I was a student there is Prof. James E. McClellan who is now a retired Professor of Philosophy at Texas A & M University. Prof. McClellan studied with Prof. McMurray at the University of Texas in the late 1940s and at Illinois in the early 1950s. Although McClellan was McMurray's student, they became friends because they were both veterans of World War II. In a recent e-mail message, McClellan told me that:

"Both veterans, Foster and I soon became friends. I was a very junior commissioned officer with no combat experience, Foster a very senior non-com who had gone through the entire campaign from D-Day to VE-Day with an armored battalion, 'constant discomfort, alternating boredom and terror,' as he described it. ... At Illinois our devoted friendship and close association continued but with a subtle difference. Whereas we'd been mostly fellow veterans in Austin, we were definitely mentor-mentee at Champaign-Urbana. When Foster had time to spend with me, it wasn't to go to beer halls but to those occasions where he could fulfill his mentorly duties, inducting me into the ways of the examined life, asking me to take responsibility for my taste through all the realms of art and science, exercising me in the discipline of cultural criticism. At Illinois in those days, the university made sure there was always ample culture to critique. Classical music, art exhibits, dance troupes, shows at the School of Architecture, lectures on everything from astronomy to zoology, philosophy of law, and poetry readings. We took in all we could."

One of Prof. McMurray's first publications was an essay entitled "The Problems of Verification in Formal School Learning," which appeared in 1949 in Essays for John Dewey's Ninetieth Birthday, pp 47-58. The book was edited by Kenneth D. Benne and William O. Stanley and published in Urbana, Illinois by the College of Education at the University of Illinois. Dewey died in 1952 but has remained a significant figure in the field of philosophy of education.


FOSTER MCMURRAY BIBLIOGRAPHY:

I. WORKS BY MCMURRAY


1981. “Animadversions on the Eightieth Yearbook of the NSSE.” *Educational Theory* 31 n1 (Winter): 73-89. Abstract: The purpose of educational philosophy, as represented in "Philosophy and Education: Eightieth Yearbook of the National Society for the Study of Education," is discussed and a proper role for the discipline is suggested. Several authors of essays in the yearbook are criticized for emphasizing adherence to schools of philosophy at the expense of educational needs.


II. WORKS ABOUT MCMURRAY


1968b. Shugert, Diane P. “A Rationale for Curriculum Decisions.” ERIC document #ED027294 Abstract: Designing an English program to close the startling discrepancy between high educational aims and current teaching practices requires a delineation of learning objectives. A rationale that would achieve a clarification of goals should be based on a sound theory of the learning process and be guided by the writings of such educational philosophers and psychologists as Robert Mager, Benjamin Bloom, David Krathwohl, John Dewey, and Foster McMurray. This study would prepare curriculum designers to (1) determine realistic behavioral and cognitive learning objectives, (2) effect, through discovering and organizing their own goals and values, internally consistent and readily demonstrable curriculum decisions, and (3) base their selection of curricular materials on an understanding of the learning process in a democracy, the school's function as a social institution, and the subject matter of English. (JB)Pub date 01 JAN 1968 Pages: 261 Price EDRS Price - MF01 Plus Postage. PC Not Available from EDRS Note(s)26p.; In *The Growing Edges of Secondary English; Essays by the Experienced Teacher Fellows at the University of Illinois 1966-1967*, ed. Charles Suhor and others (Champaign: NCTE, 1968, pp. 3-27.) OCLC ID No.: 00040684.


THE END
Chapter 1 Defining Philosophy of Education

Anyone who approaches philosophy of education with serious intent, either to learn or to contribute, may suffer some confusion concerning the proper limits of that discipline. He may wonder, indeed, whether philosophy of education may be called a "discipline." Although a body of literature commonly recognized as philosophy of education is easy to locate, it seems to contain a large portion of content from other disciplines--from philosophy primarily, but also from psychology and social theory--together with conclusions about education which the non-educational material seems to justify. It is not entirely clear that philosophy of education has a character distinctly its own. Above all, in ways of selecting and using non-educational materials, philosophy of education is extraordinarily controversial.

One kind of controversy concerns relations between philosophy and philosophy of education. Some say that philosophy of education is derived by implication from philosophy itself. Others say that if a philosophy is fully explicated, it becomes a philosophy of education; and still others maintain that conclusions about education cannot be derived by logical deduction from the substantive contents of philosophy alone. Related to this is a further controversy on the question of whether ideas about education may be justified by appeal to philosophy alone, or whether doctrines from other disciplines, like psychology and sociology, are not equally necessary as foundations upon which a structure of educational ideas may be supported. A different kind of difficulty centers around questions of method. Some
would say that conceptual or linguistic analysis, popular in academic philosophy, furnishes a model of procedure for philosophy of education. Others, thinking that conceptual analysis is only a part of what an educational philosopher is expected to do, would include synthetic and speculative activities as more central to the tasks of educational theory. These and still more are the controversies which divide specialists in philosophy of education and prevent their working together in a common enterprise.

Among the many controversies is one which comes, so to speak, at the beginning. It is a controversy concerning how to define philosophy of education, how to establish its legitimate domain and the range of its inquiries. This kind of problem is not uncommon in the early history of any discipline. It marks the efforts of those who pioneer in breaking off a piece of traditional philosophy and making from it the subject matter of independent inquiry. For much of the 20th Century, philosophy of education has been recognized as a professional specialization, studied and taught in graduate schools of education. Nevertheless, the creation of a specialized subject matter devoted to a philosophic treatment of problems encountered in education—rather than of those problems commonly treated by philosophers—is not much in evidence.

To confess this state of affairs may seem also to deplore it. Failure of agreement on the most fundamental of matters could be interpreted as a sign of intellectual confusion. But perhaps it is better perceived as the result of active participation by educational theorists in controversies of a more general sort which dominate intellectual life in the educator's milieu. There is, first of all, a
great variety of values and ways of ordering them to which people are committed. Since almost everybody thinks of schooling as an institution essential for the preservation or the extension of his own hierarchy of values, the control of ideas about education is to be fought over as a part of fighting the good fight. In the second place, philosophy itself, the parent discipline, is suffering an identity crisis which afflicts anyone who believes that philosophy of education is related in essential ways to philosophy. The name, "philosophy of education," suggests such an intimate connection. But there is more than mere nomenclature to support a prediction that whatever happens to philosophy in its search for definition is bound to influence also philosophy of education. The former discipline entertains interior divisions of various sorts: over the question whether philosophy is a pursuit of knowledge; whether the conclusions of philosophic inquiry may include rules or generalizations applicable to conduct; whether metaphysics and system building are a proper part of its concern. Given a matrix of controversy over matters so fundamental, it could not be otherwise in philosophy of education.

To make a beginning, therefore, one is forced to stake out his own claim, to say: Here is how I conceive the subject matter of my discourse; this is the kind of thing to be called hereinafter "philosophy of education." This may seem like arbitrary fiat, but it cannot be avoided. Since no one can presume to speak for all who profess educational theory, anyone who writes about it must choose according to his own lights and deny, in effect, that anyone else has a better right to an alternative. Therefore, to launch discussion with a concept which any who read may understand, let the following definition
of educational philosophy be offered for consideration: philosophy of education is a search for rationally justified educational doctrine. It is a very brief definition, but it ends with a term which also requires definition. An "educational doctrine" is a proposal intended to govern the conduct of deliberate education; it includes ideas about what to teach and how to teach, and for what ends. This use of the term "doctrine" seems appropriate because it suggests that the proposals of an educational philosophy are offered as objects of possible belief or as the content of a commitment. And this connection with belief and commitment bespeaks the seriousness of educational philosophy as a kind of theoretical activity which stimulates further and more practical actions having consequences in human life.

Concerning this definition, further comment is needed to say how it relates to other possible conceptions. The idea that philosophy of education seeks for rationally justified ideas about education is not likely to cause much dissent. Justification of ideas in the light of reason is the sort of activity which tradition associates with philosophy. It can boast of intellectual respectability. But to speak further of "doctrines", and to say that the end product of educational philosophy is a justified doctrine, is to depart at once from customary ways of thinking.

At issue here is a question of whether educational philosophy is to be conceived as a practical discipline, or instead as theoretical. To think of it as essentially theoretical is to suggest a division whereby theoretical inquiries are opposed to the practical. The former are those which seek only to know or to understand the objects of their investigations; the latter are those which search for ideas about
ways of acting to secure desired outcomes. In some contexts of discourse this distinction is possibly useful, as when it is said that physics and chemistry are pure sciences, whereas engineering and scientific agriculture are practical. But when we are speaking of philosophy and philosophy of education, the distinction is more confusing than helpful. It is doubtful that either discipline should be described as a knowledge-seeking kind of enterprise. In the past, most philosophers did indeed suppose that theirs was a cognitive discipline. Metaphysical inquiry, for example, was an attempt to find out, truly, what is ultimately real. That tradition is not altogether dead, there being at least a few philosophers who continue to think of philosophy as searching for knowledge of its objects. But most philosophers would hold a different view. They tend toward agreement that philosophy is not properly directed toward finding out what can be known about states of affairs in our universe, this being the sphere of the various sciences; nor is it a process of logical deduction of propositions from initial axioms known to be true. On these negatives, telling us what philosophy is not, there is large measure of agreement. But when we try to say what philosophy does rightly include, and what are thought to be its proper objects, we cannot hope for the same degree of harmony. At this point it is not necessary to review the variety of conceptions now being advocated, nor to assert any of them as preferred. It is sufficient merely to extend the negative characterization of philosophy to philosophy of education: like philosophy, philosophy of education is not an affair of knowledge.

In what sense, then, could it be said that philosophy of education is theoretical? Obviously, not in the same sense as intended when it
is said that a branch of physics is theoretical. If the term "theory" be applied to educational philosophy, it does not signify the elaboration of hypotheses about possible connections among events or matters of fact. If the term is used in a legitimate way, it is with an unrefined meaning close to coarse common sense; it signifies that kind of activity which is ideational in character in contrast to overtly physical. To do theory is to spend one's time thinking, under circumstances which permit remaining aloof from active engagement with an external environment; and to think with the aid of ideas constructed for their usefulness in intellectual endeavor. In this sense, it may be said properly that philosophy of education is theoretical. But this does not imply that it is not also practical.

When it is said that there is nothing more practical than good theory, one might well be talking about enterprises of a kind which includes philosophy of education. As stipulated in the definition above, philosophy of education is practical discipline. It is pursued in hopes that it will enlighten acts of educating, of teaching and learning, of choosing materials for curriculum, of adjusting methods suitably to desired outcomes, etc. In this respect it is different from philosophy, which is pursued for enlightenment alone, or for its own sake. There are some among educational philosophers who would not agree to this difference. They would prefer to conceive philosophy of education as like philosophy in spirit, in method, and in all ways save that of proximate subject matter. To do educational theory, they would say, is to try to "understand" education, to give a rational accounting of it; as a "pure" discipline, philosophy of education cannot presume to offer recommendations or prescriptions for the guidance
of action in practical affairs. It must be confessed that good reasons could be offered to support such a view. Consideration of them must be postponed for later. In the meantime, let it be noted that the history of educational philosophy shows it to have been a practical discipline, culminating in prescriptive doctrines. Hence, the definition here preferred has the merit of representing philosophy of education as continuous in some ways with the work of major contributors from the past, from Plato to Herbart and Dewey.

If we say that philosophy of education is a kind of discipline which yields recommendations for guiding educative acts, then this acknowledgment of it as serving practical ends is not unimportant. It signifies a choice which not everyone would make. And yet, the usefulness of educational theory is perhaps not of its essence. There must be something other than practicality which could account for the close relationship which exists between philosophy and educational doctrine.

That there must be another and distinctive characteristic is suggested further by noting that professional students of education are divided among several fields of specialization, of which educational philosophy is only one. There are specialists in curriculum, in methods of teaching reading, and so on. All alike contribute practical proposals intended to guide educational activity.

Nor could it be said that philosophy of education is different from other kinds of practical proposals about education in that it provides a rational justification for such proposals. It is true that an educational philosopher is especially concerned to give reasons why his ideas are believed to be good ideas. But any other kind of specialist in the study of education also gives reasons to support his
ideas. He is no less concerned with trying to be rational. If then there is something which distinguishes philosophy of education from other educational studies, it would have to lie in the scope of reasons offered to justify conclusions. Philosophy of education includes a comprehensive rationale for an entire doctrine of aims, curriculum, and methods. But even that is not a sufficient characterization. What is most distinctive is the kind of reasons given in rational justification. One is tempted to say that they are reasons of the most "fundamental" sort. Unfortunately, the word "fundamental" is more rhetorical than it is clear, but its connotations move in the right direction. In philosophy of education, rational justification is by way of appeal to values and beliefs that have priority over others, that lie closest to what is cherished most.

Here is the cause of greatest difficulty: the difficulty, namely, of locating those values and beliefs which can serve the needed role. Where can we find beliefs which are sufficiently broad in scope, and which are held with that degree of conviction that would seem necessary for foundations of an educational doctrine? The problem is something like this: for the "foundations," meaning that which we look to for intellectual justification of practical proposals, we seem to require what may be called both "breadth" and "depth", breadth signifying strength of commitment, or supremacy in that which we would like to preserve and extend. These two characteristics do not seem to go together. If we look for a high degree of generality, we can find it in the domain of abstract theory: in political theory, in psychological and psychiatric theory, and above all in philosophy. But the theoretical materials of the behavioral sciences and of philosophy are
the sophisticated product of much ratiocination. They are many de-
grees removed, by elaborate dialectical processes, from deep-seated
convictions and fundamental values. Although they may be interesting,
stimulating, or intellectually exciting, the theoretical products of
analysis and speculation are not the kind of objects which command our
most profound emotional loyalties. A further part of the problem is
that the processes of logical refinement and generalization seem to
move away from the individuality of the psyche, and it is in the
uniquely personal self that intellect and feeling, or belief and val-
ues, come together.

Perhaps for this reason it is often said that anyone who is se-
riously interested in education should try to develop his own philoso-
phy of education. As a bit of common sense, this advice seems to mean
that anyone who thinks at length about education ought to think con-
sistently, so that the conclusions of his thinking are compatible not
only with one another, but compatible also with his personality. His
philosophy of education should serve to tie together his practical
proposals concerning the conduct of education, and to provide intel-
lectual assurance that they square with his conceptions of what is
good and true, so that he does not at one time support and at another
time confound his own best interests.

It is unlikely that anyone would quarrel with such counsel. There
is a sense in which it may be said that any philosophy of education is
a personal one; that is to say, a philosophy of education is proposed,
accepted and advocated by individual human beings, and there is no way
by which a philosophy of education may prosper other than by its ex-
pression of personal commitment. If we may think of some persons as
creators and others as consumers and disciples of educational theory, then for both alike a judgment of rightness and acceptance is a function of how one conceives the character of educational problems and their right solution; how, that is, these matters seem to him in the light of his own mind and beliefs. In this sense, philosophy of education is necessarily personal.

There is also another and different meaning. To speak of each person as his own philosopher of education may be taken as an emphasis upon the uniqueness of each person, meaning, then, that anyone who cares about education will cultivate a point of view toward educational matters that reflects his own particular way of valuing some qualities more than others. In this sense, a personal philosophy of education is individualized, and therefore not exactly like the educational philosophy of anyone else. Each person who takes pains to structure his ideas about education has his own philosophy of education, and the number of educational philosophies in existence at any given time is equal to the number of persons who hold more or less articulate viewpoints. Although there is no difficulty in understanding this conception of individualization, it seems a little unrealistic. Perhaps it exaggerates too much the individuality or uniqueness of socialized human beings.

When speaking about personal philosophies of education, one would not rule out the possibility that each person might try not only to cultivate his own, but also to persuade others to share his conclusions, to agree with him and perhaps to join forces in building a like-minded group. The social-political human being does not want to be too different and alone. Not only that. If he really cares, then
his sense of importance pushes him toward persuasion, toward winning 
public recognition for the educational values that he thinks most 
worthy of support. It would be odd indeed if anyone thought that 
education ought to have a certain quality, and yet cared not at all 
whether anyone else agreed with him. To have established a hierarchy 
of educational values is to have decided not only what I individually 
think to be important, but also and therefore what I think anyone else 
who is intelligent and good within a common framework of acceptance 
would think to be important. I would not expect, let us say, a Fascist 
to agree with me, because he is not my sort of person, but if I am, 
let us say, a liberal intellectual committed to democratic ideals, 
then my belief in certain educational doctrines implies a belief that 
other liberal intellectuals might agree with me, at least eventually 
and in the long run, provided that I and others speak out. I might 
even think that the acceptability of my educational ideas by men of 
good will is a test of their validity. The point of these remarks is 
simply that anyone who has taken the trouble to achieve a personal 
philosophy of education becomes an advocate. He might not publish his 
results nor even write letters to editors, but he has those potentials. 

This produces a state of affairs useful to the public interest. 
Given many persons concerned about education, and given a diversity of 
tastes, interests, and personal perspectives, the resulting deluge of 
educational ideas and their importuning advocates reduces the possi-
bility that anything important will be overlooked. Every persistent 
human interest, every organization of values, every considered scheme 
of social action and all structured moralities will find their spokes-
men. Thus, educational literature is enriched with countless possibil-
ities urged by innumerable advocates.
But now, if everyone is to be his own philosopher of education, what is it which distinguishes the work of a specialist, of a person whose career is devoted to philosophy of education? The difference is not radical; it is one of degree only, but still sufficiently real to be stated with clarity. To do philosophy of education in the manner of a professional is to work with ideas judged appropriate for the deliberate education of a public, in ways and directions that are intended to advance public welfare, and justified by reasons which clarify the educational interests of a public. Rather than argue from standards of personal validity, a professional argues by appeal to reasons of a kind which some would call "universal", but whether this is the right term is not easy to say. It would seem that any conception of the public good is one which may be judged or criticized only by reference to the public of a particular time and place. Perhaps every society is seeking to cultivate the welfare of universal man rather than of a merely local and transient population; what is good for us in our society is good for anyone whatsoever. But what is good for anyone whatsoever is perhaps correctly taken to mean good for anyone living within these circumstances, and with this kind of history. Somewhere along the line of reasoning, an appeal to universality seems to gain a bit of the particular. Let us say, therefore, that a professional in philosophy of education is one who argues for educational doctrine by appeals for which some movement in the direction of universality may be claimed. He tries to speak not simply for himself and his personal preferences, but for the public he tries to serve.

An obvious difficulty is that "the public" is hard to find. In a pluralistic society there would seem to be such diversity of groupings
and relationships that no one could presume to speak for a commonality of public concern and welfare. And yet, to do philosophy of education in a professional manner would require of a contributor that he try to represent the educational values of the whole public, rather than of only a selected segment. Is this possible? Is it possible to develop a philosophy of education such that it might be claimed to have validity for all legitimate social groups, interests and values?

To this question educational theorists have offered two conflicting answers, one affirmative and the other negative. The affirmative answer proposes to find an adequate representation of the public interest in the doctrines of systematic philosophy (or, for some, in philosophy plus further materials from the social and behavioral sciences.) The negative answer is equally tied to philosophy, but to a conception of philosophy which eschews the system-building of tradition and claims for itself a more limited role, that of conceptual (linguistic or logical) analysis. Each of these answers merits consideration.

We might look first at the affirmative answer. It is older, more honored in the history of educational theory. This is the position of those who claim to find suitable foundations for educational theory in the materials of traditional philosophy--philosophy, that is, of the kind which presumes to give answers to the questions or problems which philosophers have taken to be their province. Those who support this position inherit a way of thinking about philosophy which makes it seem most plausible to look to philosophy for what might be considered the "ultimate" in intellectual justification. They think so not only because philosophy is said to be the love of wisdom, but also because philosophy, in some traditional conceptions of it, is that discipline
which informs us about matters of the most universal sort. These include the nature of reality, of truth and knowledge, of value and the good, and of the beautiful.

The appeal, and the apparent plausibility, of this viewpoint rests upon a conjunction of two ideas, at least one of which is undoubtedly true. The undoubtedly true one is that, if one is in search of opinions about the nature of truth, of reality, or of the good, then one can do no better than to turn to the literature of philosophy, for it is there that one finds the most carefully considered and critically examined opinions on questions of that kind. The other idea is somewhat less assured. It is, that any complex intellectual construction, such as a philosophy of education, is properly "grounded", or intellectually justified, to the degree that it is related logically to what is believed about the nature of reality, of truth, and the good.

It is easy to see why these ideas have been popular. It is often said that an educational theory is rendered valid by virtue of its "foundations". This way of speaking uses an analogy that seems appropriately suggestive. An educational doctrine is conceived as like the super-structure of a building, which needs for its stability a firm foundation. And for that kind of "foundational" role, philosophy seems to offer the requisite characteristic of getting down below superficial and shifting levels to an underlying stratum. Philosophy is the discipline which probes most "deeply" into ideas which lie "beneath" our more ordinary cognitions. But there is more to it than merely figurative speaking. There is a supposition that philosophies of education are created by a process that might be described as "logical extension"; extension, that is, from beliefs or from propositions.
of a primitive and universal sort. These most primitive and universal beliefs, which ordinarily lie below conscious awareness as presuppositions of thinking and believing, are brought forth for explicit recognition in philosophy, and, after criticism and testing for logical coherence, they become the characteristic propositions of philosophy concerning what is real, what is true, and so on. Such materials, now brought into critical control, provide a comprehensive viewpoint upon man and the world. If comprehensive enough to be a complete philosophical system, then from them it is possible to work out by logical implication a self-consistent way of thinking about matters of greater particularity, such as education.

There are, of course, a variety of philosophic systems—realism, idealism, materialism, pragmatism, existentialism, and more—from which it follows that a philosophy of education, of the kind we are considering, must be qualified by the name of the system from which it is derived. Thus there are realist philosophies of education, idealist philosophies of education, etc. And that is where the trouble lies. If philosophy is to serve the intended function, there ought not to be a variety of competing philosophies. The traditionalist educational philosopher is looking for a secure foundation, a kind of knowledge which, as Aristotle would say, is "better known than" that which is derived by logical implication from it. What he finds, instead, is conflicting and competing claims, not all of which could possibly be true, and a perpetual dialectic of arguments for and against each of the systems.

It would seem that the traditionalist is caught in a self-defeating process. In advancing practical recommendations about education, he is
trying to do more than merely to express his own personal preferences. He is trying to justify educational doctrine in the light of reason, and he thinks that this can be done by means of philosophic foundations. But there are many philosophic systems, or schools of thought, each having its partisan advocates whose arguments are designed to show the logical superiority of a favored system, but also each having its critics who deny those claims and advance alternative arguments designed to show the superior claims of a different system. And since philosophy is supposed to offer the ultimate in rationality and wisdom, there is then no higher court of appeals, no superior form of rationality by which to test the conflicting arguments and determine which of many philosophies is the most reasonable, or possessed of the higher validity.

It is difficult to know what to make of this situation. No doubt philosophers hold to their philosophic doctrines with something like conviction, believing that arguments in support of some doctrines are more reasonable than are the arguments of those who hold to other doctrines. But what is convincing to one philosopher is not to another. Appeals to evidence and to the canons of logic are not the sole determiners of philosophic allegiance. Something else, which varies from person to person, is involved. In short, the acceptance of philosophic doctrine is in part a matter of personal preference. And it is this variability of personal preference from which the professional educational philosopher was trying to escape.

The conclusion to which these considerations lead is no doubt already evident. Given the fact that philosophy is a kind of discipline which cannot achieve universal acceptance for whatever is affirmed by
its contributors, there being no known method by which perpetual controversy may be put to rest; and given also the wide distribution of philosophic allegiance, there being many alternatives having some status and some degree of acceptance at any given time; and given, also, our democratic forebearance for diversity of opinion and our support for freedom of thought; then we can expect for the future nothing more than a continued diversity of philosophic opinion. Hence, anyone who argues for practical proposals about education by giving reasons taken from philosophic materials is necessarily representing only a segment of a public. He can expect his arguments to be rationally convincing only to that limited group who can accept the kind of philosophy to which he appeals for its support. If we may imagine an educational philosopher who is fully aware of these connections, and who nevertheless argues for educational ideas on the grounds that they are derived from a particular philosophic position which he finds acceptable, then we can only conclude that he is not trying to advance publicly acceptable reasons to justify an educational program for a public school. If we also assume that he is intellectually honest, then we perceive him as trying to do something altogether different. He is a partisan pleader, trying to persuade as many as he can to join him in his partisanship. There is nothing wrong with that. Everyone is at times or in ways a partisan pleader. But a professional educational philosopher who searches for enlightened public acceptance of an educational doctrine designed to represent the interests of the public (rather than of a special group) must abjure any appeal to philosophic materials as giving good reasons for acceptance of that doctrine.
For reasons of a somewhat different sort, some educational philosophers might have no quarrel with the preceding conclusion, but they might suggest that the trouble lies further back, closer to beginnings. It is a mistake, they might say, to suppose that philosophy, including philosophy of education, has anything to do with efforts to establish the reasonableness of prescriptive educational doctrines. Realizing that traditional system building is not productive of reliable and substantial knowledge, they propose for philosophy and for philosophy of education a more modest and limited role. That role is one of linguistic or conceptual analysis. To do linguistic analysis is to overcome confusions which result from a mis-use of language and thereby to arrive at a purified, clarified, and self-consistent way of using words or concepts. Philosophy of education is the employment of analytic techniques directed specifically to words or concepts that are prominent in talk about education. Presumably, the service rendered by educational philosophers is one of making it possible for others who wish to think and to talk about education to do so with greater precision and clarity than might have been expected from anyone in a state of pre-analytic confusion and innocence.

The above represents an attempt to describe without bias a least common denominator among versions of linguistic analysis. But the attempt, alas, is not altogether successful. In a movement that is sufficiently popular to enroll within it what appears to be a majority of educational philosophers, there are bound to be many variations, some of them different from others in more than superficial ways. In an earlier and simpler stage, analytic philosophers might have thought it enough to overcome linguistic confusion. They might have perceived
themselves as rejecting the kind of speculative and constructive work that had been typical of metaphysicians and other more traditional philosophers. But that early purity of enterprise has crumbled. Educational philosophers who adopt the analytic method are not in all cases willing to limit their activity to analysis; at least some of them are now eager to derive from their analyses what they take to be good reasons to support proposals about the practical conduct of schooling. Whether there is a way of proceeding logically from analysis to prescription is something for those who attempt it to reveal to the rest of us. In the meantime, present concern is for the idea that philosophy of education is or ought to be a matter of linguistic or conceptual analysis.

One among many possible reasons for the popularity of analysis is a belief that those who limit their professional philosophic activity to doing analyses are free to follow the path of pure reason wherever it goes--free, that is, because not hampered by a prior allegiance to any sort of (ultimately unprovable) philosophic doctrine. But that is not the case. Analytic philosophers are, no less than anybody else, committed to doctrines which are more often presumed than openly examined. The substance of accepted but unproven doctrine differs from one analytic philosopher to another. Some believe that there is something which may be called "the wisdom of the human race," and it is contained in rules which are said to govern the right use of language. Even those who might not accept the idea of racial wisdom nevertheless generally accept the belief that there are in fact rules which are learned in the learning of a language and that these unconsciously held rules, if not violated, serve to protect thinking from going astray.
Some believe that philosophic problems arise only because language has been mis-used; to "solve" a philosophic problem is simply to cause it to disappear when the linguistic mistakes are uncovered. One of the most popular (and, to an outsider, incredible) beliefs is that it is both possible and desirable to clarify a concept before and apart from any attempt to use that concept in coming to grips with a specific problem; that, before trying to say something significant about how ideas ought to be related to one another, it is first desirable to make ideas clear, and then, only after they have been scrubbed to gleaming purity does one go on to string them together, protected now from any contagion, from any likelihood of error. These and other dogmas seem to be so readily accepted simply because they go with the philosopher's territory. If they were not both trendy and passed over quickly in order to get into the fun of doing analysis, they might not survive critical examination.

However that may be, consider the unmodified version of educational philosophy: the version, that is, of educational philosophy as encompassing primarily or solely the linguistic analysis of concepts commonly used to talk about education. Advantages claimed for this are that, after analysis, educators may carry on their further discussion freed from errors in use of words and categories; in their subsequent use of now clearly defined terms they can increase the probability of reaching common agreement; and they can do so without having first to persuade everyone to some prior metaphysical or other school of thought. Suppose that one holds in abeyance his scepticism toward such claims; what then can be said?
There is at least one question which would seem to pop forth immediately: if educational philosophers do only the analytic thing, then who will take responsibility for the elaboration of better ideas about how and why to educate? Should the creative activity that had been for centuries the province of educational philosophy be turned over to educationists of a different and perhaps more practical sort? To, say, administrators, or to faculty committees? The suggestions seem absurd. If the activities of schooling are open to criticism and to the possibility of improvement, then human beings must inquire into the rational justification of educational programs, both those that are in operation and those that new thinking would suggest as possibly better. Those persons, whoever they are, might just as well as be called "philosophers of education."
Chapter 2 Non-partisan Educational Theory

Until at least the recent past, changes in educational theory was a reflection of changes in philosophy and related humanistic ideology. The appearance of new theories about the nature of man, of mind, and of knowledge served as the most usual kind of stimulant to theorizing about education. For reasons cited in the preceding chapter, it is doubtful that further advances in educational theory will continue to be dominated by purely philosophic doctrines. What makes it doubtful is not only a growing realization that philosophy is more like quicksand than like a firm foundation for any structure built upon it, but also a tendency to enlarge upon the number and kind of resources used by educational theorists. Educationists include among their ranks a growing number of specialists in behavioral and social sciences whose work is perceived as that of enlightening our understanding of educational processes by using the conceptual structures of the disciplines they represent. This reflects a kind of intensified specialization which marks scholarly and professional life in general, university organization in particular, and within universities, schools of education. In the larger of such schools there continue to be specialists in philosophy of education, but also specialists in other so called "foundation": psychological, sociological, anthropological, economic and political-science foundations of education.

The choice of language now commonly used may have unfortunate connotations. To speak of many foundations—psychological foundations, sociological foundations, etc.—is to suggest that philosophical foundations are on a par with the others. Each specialist brings
to the enterprise of building educational doctrine the special resources of whatever discipline he represents; just as the educational sociologist employs the materials of sociology in application to problems about schooling, so the educational philosopher brings to this common enterprise the concepts and other resources of philosophy. There are, indeed, some educational philosophers who think of their professional role in that way. As they see it, their specialized contribution is one of bringing over into theory of education the insights or achievements of philosophers, whether ancient or contemporary. Presumably, contributions from philosophy are then to be put together with resources from the behavioral and social sciences contributed by others. What is unfortunate in this way of speaking is the suggestion that the work of putting everything together is either not the task of an educational philosopher—he is simply one specialist among many—or else not the task of anyone.

But the elaboration of numerous foundations for educational theory is probably, on the whole, more fortunate than otherwise. To at least some educational philosophers it has been evident that searching for a rationally justified educational doctrine leads beyond the limits of traditional philosophic materials. Some of the problems confronted, of the kinds of question one must ask, are such that epistemological, axiological and metaphysical considerations are not at the center of focus. If, at least, one accepts a definition of educational philosophy as a practical discipline intended to offer guidance for educative action, then it is a kind of discipline for which the findings of social and behavioral science are no less relevant than those of philosophy alone. A few examples may illustrate the point.
One which comes most readily to mind is the potential value to educational theorists of psychological knowledge concerning the nature of learning. It seems obvious that the occurrence of learning is the essence of schooling, and therefore that whatever is known about learning and the conditions which promote its happening could be especially useful to educators. But this example, however obvious, is perhaps not of the best kind. An educational philosopher might object that he cannot be expected to master the literature of either domain is vast. Therefore, he might say, we have divided up the work such that educational psychologists deal with learning and the psychology of learning while educational philosophers do something different. For this reason another but related example may be better.

Suppose that, instead of learning and the psychology of learning, we consider the topic of motivation. Scientists interested in discovering the causes of behavior may sooner or later give their attention to questions about the various kinds and relative frequencies of motives, and about the relative efficacy of distinguishable kinds of motivation under varying circumstances. These are, let us agree, psychological questions, and hence appropriate subject matter for the scientific study of behavior. But philosophers and educational philosophers have long been interested in the topic of motivation. Plato thought that the most reliable characteristic of human beings for the task of separating them into socio-economic classes is the kind of motivation which most often calls forth their day-by-day behavior. Aristotle believed that the most truly human sort of person is the one who is most frequently motivated by a desire to know for its own sake rather than for any practical gain. These ancient Greek ways of thinking are
still prominent in the beliefs and values of modern humanists, who also think that the question of what motivates learning is the basis upon which to distinguish liberal from non-liberal education. In 20th Century philosophy, John Dewey proposed that the logical processes of a layman in ordinary problem solving are the same as those of a scientist in professional inquiry; what distinguishes one kind of endeavor from the other is not methodological, but rather a difference in motive. Common sense inquiry, he thought, is motivated by a concern for "use and enjoyment," scientific inquiry by a desire to know "for its own sake."

Given a persisting tradition of relating categories of motivation to categories of humanistic and educational values, one would suppose that educational philosophers might attend carefully to whatever is known from psychology about motives. Is it true, for example, that some people are motivated more than others by a desire to know for the sake of knowing? This is a question which calls for empirical research. The same observation applies to all questions concerning why people learn, and under what circumstances one kind of motive is more likely to appear and to be stronger or weaker than some other. To be sure, the professional concerns of an educational philosopher are different from those of a psychologist. The former is concerned, for example, with the task of evaluating different kinds of motivation, some being thought more worthy than others, rather than with knowing only what is the case. Yet it would seem that the practical workability of educational doctrines might vary, depending upon the degree to which they are informed by knowledge from psychology.

The social sciences are no less closely related than the behavioral to concerns of educational philosophy. In a comprehensive educational
theory there is usually included a point of view about relationships between a child's life within the school and his life within the surrounding cultural milieu. There might also be some consideration given to the vexing question of whether a school program is necessarily tied to support of traditional institutional life, or whether, instead, it may be in conflict with social forces judged undesirable. There are well known educational philosophies which argue for educational programs by pointing to the ills of society and to a preferred conception of how those ills may be corrected. And, to give one more example, there are pressing considerations about sub-cultures and their dialects, and the influence these have upon the educability of children.

The point of these remarks is that an educational philosophy is more likely to seem defensible if the authors of it are informed by knowledge of psychology and the social sciences. A reason for wanting to establish that point is to refute the idea than an educational philosopher is a specialist in applying to educational problems the resources of philosophy, who can leave to others a responsibility for other kinds of resources.

But now, the expansion of disciplines for which an educational philosopher might hold himself accountable is likely to be perceived as either a threat or an impossibility. No one can take all knowledge as his province. To be able to survey the available research findings and the proliferation of theoretical materials from any one discipline, and from that to determine what is germane to educational issues and precisely what it signifies for the conduct of deliberate education, is work enough to tax the abilities of any educationist. How, then, could anyone expect of educational philosophers that they be able to work with so many branches of knowledge?
In one sense happily, and in another sense sadly, the problem need not be of serious present concern. Happily, because the problem may be postponed for an indefinite time into the future. There is, as yet, no herculean task before us. Sadly, because the cognitive resources of the social and psychological sciences, as they bear upon major issues of educational theory, are very few. So little is known with scientific assurance that an educationist may do his home work and yet not be overburdened. This sweeping protestation of ignorance is not easily documented. How, after all, does one prove the non-existence of knowledge? The best one can do is to review some typical examples.

That which an educationist would most like to know from psychology is about learning, what it is, what circumstances are most propitious for its occurrence, and why or when learning is most durable. But on these matters, his curiosity is not to be satisfied. Instead of answers, he finds conflicting theories. Is learning an event of conditioning, or is it instead a building up of neural connections; is it a matter of insight determined by a field of forces, or instead, of blind mechanical associations? The literature which provides so many possibilities is intellectually exciting, but it offers no definite answers. The same situation pertains for other questions from the same science. Questions like these: concerning the development of mind and personality, are there natural stages which follow a fixed order from infancy to maturity; concerning intelligence, how much of it is determined by inheritance and how much is subject to educative stimulation; concerning special talents, how early and by what tests may their presence be detected for deliberate cultivation; concerning the nature of psychological good health, what is it and how much variation of personality
structures is allowable within the range of normalcy? These are ques-
tions which, if we could answer them, would allow educators to decide
more clearly than in pre-scientific times how much of educative in-
fluence to exert, in what directions, and with what techniques.

Although psychology is the most obviously relevant science, there
are questions to be asked of the social sciences which, if answerable,
could prove as decisive in shaping the formation of educational policy.
We would like to know, for example, under what circumstances, if any,
the cultural forces which surround and influence a child's development
may be modified by school intervention. Taking a similar perspective on
a larger scale, we would like to know whether a diagnosis of politico-
economic health may be made scientifically, and whether we can use the
power of schooling as one force among others to bring about improve-
ment by deliberate intent. We would like to know whether it is possi-
ble by scientific means to determine whether some dialects are better
than others for the communication of sophisticated cognitive insights.
We would like to know whether differing ways of filling in the sub-
stance of cultural and institutional forms can be tested for relative
efficacy in promoting social welfare. If these questions could be
answered with verified knowledge, as they cannot at this time, then
surely educational programs would be different because of it.

They are examples from a large class of questions which have two
characteristics in common. First, they are questions to which some kind
of answer is usually assumed by educational philosophers. And second,
they not only permit of no presently verifiable answer; they are also
such that answers often appropriated by educational theorists are heav-
ily involved in controversy among scientists and related professionals.
That educational philosophers should assume answers to questions which have not yet been cleared up by scientific inquiry is not surprising. It is the way of everyone, because necessary to human functioning. Prior to any refinement of cognition by science, people possess a rough and ready kind of knowledge on the level of common sense—knowledge, that is, about those same objects and events from which scientific inquiry takes off. Although at times the coming along of new knowledge demands a change in common sense, as in finding that the earth is spherical rather than flat, this is not always the case. In any event, the cognitive structures of even the best educated of persons are a mixture of scientifically informed knowledge with scientifically innocent common sense. The two are so mixed together that one is not aware of seams and joints. This being true of educational philosophers as of everyone else, when an educator is trying to determine a rationally justified stance on an educational issue his thinking makes use of whatever is "there", so to speak, "in his mind." He cannot purge his thinking of pre-scientific opinions, but must make do with whatever is available. The web of common sense and scientifically informed opinion is the matrix from which new organizations of ideas come forth. To cite an example: although we do not know exactly what learning is, this does not prevent us from thinking about ways to stimulate its happening, and to devise tests to see whether it has. In the absence of scientific knowledge about learning, or about social forces, developmental stages, etc., we are forced by demands for action to go ahead with whatever we do have.

In thus going ahead to meet their professional obligations, many educational philosophers have tried to escape the limitations and
crudities of common sense and to achieve a kind of intellectual sophistication by directly putting to use the theoretical structures currently employed by scientists in their work. And there they enter the realm of controversy. On issues most directly related to problems of educational theory, the resources of social science and psychology are rife with controversy.

For scientists, participation in the heat of controversy is probably a good thing. To be sure, theories are constructed for their role in the pursuit of knowledge, and their scientific utility is judged by objective criteria: by how well they can explain observational data, by their fertility, by what they lead to in the discovery of new data. But when the application of these criteria does not discriminate among alternative theories—because several conflicting theories seem roughly equal in their capacity to satisfy—then impersonal objectivity is replaced by a warmer loyalty to choices among alternatives. For anyone to have identified himself professionally with a chosen theory is to take toward it an attitude of belief; not, perhaps, of belief in its truth, but of belief that it is better than others. There is a personal investment, which leads to cherishing. One becomes an advocate, a partisan. It seems reasonable to suppose that the emotions generated by partisanship are motivators to spur further research. In the case of the educational philosopher who participates in the same controversies, is there an equally positive value?

Between an educational philosopher who chooses theoretical materials for practical application and a scientist who chooses for the sake of further inquiry there is both a similarity and a difference. The similarity is in the first part of the process. Both are confronted
with a need to choose, and, presumably, a choice is determined by critical survey of possibilities. We may credit an educational philosopher with the same regard as a scientist's for satisfaction of logical criteria and for accord with evidence. When a choice has been made, it confers upon whatever is chosen a seal of approval, of judgmental preferring. The same feelings which stimulate partisanship are there. The difference occurs in the further use to which a selected theory is put. To an educational philosopher, chosen theories are not instruments for guiding research; they are "foundations" for educational doctrine. They are that to which he appeals as giving reasons why educational effort should take some particular form or direction. He is now acting as if theories to which he is committed have a claim to cognitive stability and reliability which they do not really have.

To base a claim of rational support upon theoretical materials from psychology and the social sciences is similar in significant ways to making a claim for rational support by appeal to philosophy. The same elements of critical choice and preference among competing alternatives is present in both cases. Granted that the cognitive status of philosophic doctrine is different from that of theoretical constructions in the sciences, nevertheless the use of either as a presumed support for educational doctrines is subject to the same criticisms.

The most telling criticism, applied in the preceding chapter to traditional philosophy of education, is this: controversial materials cannot provide good reasons for public acceptance of educational doctrine. It makes no difference whether the controversial materials are from philosophy or from science. Where controversy is legitimate, then it is to be expected that some persons of good will and informed
intelligence will choose one kind of philosophy or one kind of theory, and others will choose one or another of the alternatives. To deny such expectation is either to deny that controversy is legitimate—the theory I favor is the only one which is defensible—or else to hope for a capacity to end further controversy by exercise of totalitarian power. The first of the above possibilities could be accepted only by those blinded by partisan passion, and the second only by radicals of the far right and far left.

The above argument is, alone and by itself, sufficient reason why educational philosophers ought to remain aloof from allegiance to controversial materials, either from philosophy or from science. One knows in advance that when reasons given to justify an educational doctrine are drawn from such sources, they are likely to be accepted as good reasons by only a fraction of the public to which they are addressed, and also likely to be rejected by a significant part of the public who are partisans of alternative theories. To be aware of this, and at the same time to be seeking by such means for a program of public education that can be found rationally acceptable by a public, is self-contradictory. The argument seems conclusive; nevertheless there are others. To point out further difficulties may seem like over-kill, but a few observations are herewith offered simply as a way of describing a situation which now obtains.

When educational programs are said to be rationally justified by virtue of foundations in controversial materials, then a consequence of this is that controversy about education becomes, in reality, controversy about something different. A reasoned consideration of various ideas about education is pushed back into a consideration of ideas
from other domains: from philosophy, from learning theory, from social theory etc. A critical examination may start with ideas about education, but upon being told that this or that proposal is recommended because it is based upon, say, a realist theory of knowledge, a humanistic theory of learning, a socialist theory of political economy, or a Kohlbergian theory of moral development, one is forced to consider first whether it is valid as a translation into practical programs, and second whether its foundation support is as strong as it ought to be to bear the weight of educational doctrine erected upon it. Attempts to subject educational ideas to criticism tend to dissolve into criticism of non-educational materials. For educational thought itself, a deeply probing literature of controversy does not exist.

When educational theorists participate in the dialectic of disciplines other than their own, their contributions to philosophic and scientific controversy may not be much appreciated by those whose participation is first hand rather than second hand. If contributions from educationists sometimes seem of inferior intellectual quality, this might have been expected. Controversies to which educators are drawn are the growing points for further developments within the disciplines which house them. Their location, so to speak, is at the frontiers of philosophy or science. It would seem that working at the frontiers of any discipline requires a full time effort, that those best qualified to carry on the refinement of theoretical instruments are those who specialize intensively in some particular area marked out from a single discipline. Presumably, the professional competence of an educational theorist lies in the refinement of ideas about education; when he crosses over into adjacent domains, he is no longer working within his own speciality.
A further consequence is that the professional literature of education remains at an elementary level. That is to say, publications devoted to ideas about education may be understood readily by any intelligent reader without need for prior training in a more elementary literature. That is one reason why so many persons feel as qualified to discuss educational theory as are those whose careers are devoted to its study and augmentation. Failure to push the exploration of educational theory to a more advanced plane is not often remarked, at least by those in university schools of education, because academic course work in the study of education is offered not only on an elementary level, but also in courses called "advanced". Contrary to beliefs to some non-educationists, such courses may be as demanding of intellectual performance as courses of an advanced nature in other disciplines of greater age and academic respectability. But what makes them so is the requirement of study in philosophy or in social and behavioral science, the disciplines to which all serious critical discussion sooner or later reverts. Since the non-educational materials upon which graduate instruction depends are plentiful, complex and sophisticated, the professional training of educationists may stimulate the growth of informed intelligence to very high levels. But the literature of education remains none the less elementary.

There is one further criticism, of a somewhat different character from the preceding. It requires the anticipation of an unlikely eventuality. Suppose that an educational philosophy came to be adopted for guiding the school programs of a multitudinous public. All public schools would be regulated in curriculum and procedure by that philosophy. Suppose, also, that this educational philosophy drew heavily
for support upon particular philosophic and scientific theories which were said to be its foundations. Such foundations might include, for example, from philosophy, existentialism, and for conceptions of learning and human development, a humanistic psychology. To say of an educational philosophy that it is existentialist-humanistic means something more than a predisposition to favor, where appropriate, the philosophic and psychological ideas that characterize those choices. It means a reflection of existentialist and humanist values and beliefs in every part of the curriculum, in every kind of subject matter, and an emphasis upon the kinds of learning experiences and methods of teaching that are viewed favorably from those perspectives. School experiences would be influenced pervasively by preferred attitudes, values, and ways of thinking. Among those who share those preferences, that kind of schooling might seem the best possible, and a cause for rejoicing. But what happens then to the legitimate controversies which, as remarked above, are the growing points for evolution of philosophic insight and scientific knowledge?

Surely there would be a tendency for legitimate controversy, at least in philosophy and psychology, to dry up and disappear. With a new generation growing up in an atmosphere saturated by one particular evaluative and cognitive orientation, other and opposed ways of thinking and perceiving would have little chance of striking anyone as plausible or persuasive. Alternatives would lose their advocates. Those who think of like-mindedness as inherently desirable might be happy about such a situation, but when controversy is put to rest by the power of schooling to shape preferences rather than by the further working out of inquiry and logical process, the growth of civilization is jeopardized.
At this point a brief review of argument may be helpful. The argument began with acknowledging that the potentially useful intellectual resources for philosophy of education include not only those from philosophy, but also from the behavioral and social sciences. However, that which, if known, could make the biggest contribution to educational theory is not available at this early stage of those sciences. Instead of knowledge we have only a variety of theories which are alternative to one another, and usually in conflict. The main purpose of discussion has been to argue against a common practice of dipping into controversial materials, choosing one or another of currently supported theories, and then putting it to use as offering reasons to justify practical proposals about education. It is conceivable that many educationists could be offended by the preceding discussion. The practice of making practical recommendations based upon preferred philosophic and scientific theories is widespread, and let it be acknowledged that some, at least, of what happens because of that practice is possibly beneficial. Therefore it is important to note precisely what it is that has been subject to adverse criticism.

In the preceding discussion, criticism was directed against using controversial materials as "foundations" for educational doctrine; that is, against using those materials as if they could provide good and sufficient reasons why we ought to conduct education in some particular manner. To use a chosen theory of learning or a preferred philosophic or social doctrine in the position whose logical properties are suggested by the term "foundation" is to imply that anything which has that structural value is utterly reliable. This conceals the true cognitive status of such materials. What is claimed in the
preceding discussion to be wrong is the practice of arguing for conclusions about educational practice from a presumption that a favorite theory is reliable enough for anyone whosoever to accept it as offering reasons sufficient to justify an educational doctrine.

What is not under attack is a practice that might seem almost the same: the practice, namely, of using theory in an experimental way in hopes of learning how to improve educational procedures. There are, for example, many followers of Piaget's theory of cognitive epistemology who sponsor classroom activities devised in the light of Piaget's ideas. There are others who recommend classroom methods developed by followers of Skinner's behaviorist theory. And still others who advocate educational practices intended to promote authenticity, as that term is understood by existentialists. These and many others of a like nature need not suffer the adverse criticism of foregoing argument. If a truly experimental approach is intended, than educational activities are recommended not because of a presumed truth of borrowed theoretical foundations, but for other reasons. Among such reasons would be a prediction of probably consequences, combined with a judgment that such consequences as seem likely to occur will include results to be found educationally desirable. This moves the appeal to reason onto a different court, which includes within it a place for reasons of an educational rather than a psychological, sociological or philosophical kind.

A consideration of what is meant by "educational" reasons as different from others that might be given will come up shortly. There remains for immediate attention an examination of the "first commandment" for method in philosophy of education; the commandment, namely,
that educational doctrine, and the educational activities of schools guided by doctrine, remain non-partisan toward the legitimate controversies of the humanities and the sciences.

Concerning school teaching itself, common sense has already triumphed for the subject matters of religion and politics. It is thought that schools in a democratic society should remain neutral concerning religion and politics, because if this were not the case, then any particular religious or political persuasion that might receive favored treatment would be given an unfair advantage over other persuasions which have, so far as anyone knows, an equally legitimate right to be heard and maintained. If all the teachers of a public school system were to agree together to teach their students that the political ideas of, say, the Republican party, or the religious ideas of the Baptists, are superior to others, the public clamor and protest would be quick and righteous. Even among Republicans and Baptists, only the foolish and short-sighted could welcome such partisanship. This demand for fairness and justice is an achievement which, although fairly recent in the history of democratic societies, is now well accepted. Still to be accomplished is the generalization of that wisdom to cover all situations wherein the same consideration for fairness and justice may be perceived as having the same force. To justify an educational doctrine by preference for a particular and controversial theory from philosophy, from social theory, from theory of learning etc., is unfair in the same way, and objectionable to the same degree, as to justify educational acts by preference for particular religious or political doctrines.

Using the term "non-partisan" has a special significance. It is said that educational philosophers—those, that is, who think of their
role as one of creating rationally justified educational doctrine—should strive to be "non-partisan". The term is chosen as intending a meaning different from what might have been conveyed by the somewhat similar term "neutral". It may seem that there is no difference between saying, for example, that with respect to religion, schools should remain neutral and saying that they should remain non-partisan. But without doing violence to language, it is possible to legislate a difference between the terms which, although apparently slight, can take on a considerable importance.

The difference of intent may be approached by recalling from the recent past a debate about whether schools can or should be neutral. During the Depression of the 1930's, liberals hoped for positive remedial action from the government, and also, from the nation's schools, a kind of teaching which would enable the public to participate in an enlightened way in the reconstruction of political economy. The conservative position was, of course, opposed. Many conservatives believed that the government should not interfere in the natural operations of the economy, and concerning the schools, the conservatives might have preferred indoctrination in their own kind of beliefs but, failing that, then a policy of remaining neutral in whatever was taught about social problems and possible solutions. In reply to this, liberals argued that neither governments nor schools can be neutral; that neutrality, even if it were assiduously pursued by all hands, is really impossible. As applied to government, the liberal argument was obviously strong. For a government to refrain from any effort to improve a failing economy is to act on a very controversial policy, and therefore to depart radically from any pretense of neutrality.
Concerning the schools and the issue of neutrality, the position of the liberals was similar, but perhaps more complex. Two, especially, of their arguments may be recalled for some profit in the present.

The first argument pertains to educational methods. (Because it applies to classroom teaching in situations where the content of instruction includes controversial issues, this argument may not seem appropriate when thinking about how to justify educational doctrine. But the problem of justification cannot be separated from questions about educational procedures. In both alike the issue of how to handle cultural diversity and alternative systems of value is a demand of first priority.) The argument follows upon a supposition that teachers and writers of text materials try assiduously to be neutral in presenting controversial materials. Suppose that all agencies responsible for providing instruction were to attempt to be fair to all sides or viewpoints, giving to each viewpoint an equal and emotionally colorless treatment, presenting the issues about which opinions are divided, the arguments for and against each perspective, strong points and weaknesses, and in all of this remaining as objective as possible. Concerning this supposition, the argument is that such efforts to be fair cannot help but fail. Teachers and other educators are, like everyone else, themselves emotionally involved. Their biases would show through. In spite of good intentions, their presentations would be influenced in subtle ways to show the greater appeal of one viewpoint over another. The point of the argument is that one cannot step outside a characteristic way of conceiving a problem or issue; differences in viewpoint are not alone differences in ideas about solutions or policies, but also differences in what the whole situation is taken to be.
The second argument hinges upon the fact that any educational act, if deliberate, reflects a choice, and a choice, any choice, reflects the values which action intends to realize. To have chosen to do one particular thing at a given time is to have decided upon a particular way of ordering or preferring values to be attained; it is to have placed some values over others. Since the choices and values of anyone are subject to criticism from others who might have chosen differently, educative acts cannot be neutral.

Both of the above arguments are accepted here as valid. How then could it be said that the educational activities of schools and the rational justification of those activities should be non-partisan? If it is agreed that schools cannot be neutral, then a proposal of non-partisanship may seem to be self-contradictory. How to avoid self-contradiction is best explained by a further consideration of the two arguments.

The first argument refers to educational communication; the teaching of controversial materials is unavoidably biased by the personal perspective of the communicator. But the argument is telling only against efforts to deal with all sides fairly. There is another and better way of trying to assure fairness. Instead of channeling controversial alternatives through a supposedly neutral speaker, let spokesmen be chosen for their persuasive or authoritative ability to represent perspectives to which they are committed. Other things being equal, a controversial position is best explained and defended by a partisan advocate. A critical comparison of a favored viewpoint with its rivals is also best expressed by one whose involvement in a particular controversy has carried him to a firm choice and allegiance. He can be counted upon to make the best case for his preference, and to expose whatever weaknesses there may
be in whatever he takes to be an opposition. To assure fairness, only two requirements need be satisfied: first, that anyone chosen to present any side in controversy be an agent acceptable as a voice to those who share his commitment; and second, that all sides which might qualify as legitimate be represented—not, necessarily, within a brief span of time and all together, but somewhere within the total period of school experience. To be sure, it may be difficult in practice to assure that these requirements are fully satisfied, but the ideal is clear and simple, and if it were to be accepted, accomplishment would not be insurmountable.

This could result in an educational treatment of controversy that is not, in the most ordinary meaning of the term, "neutral", but nevertheless one that could qualify as "non-partisan". Part of the difference intended by these two terms is a difference concerning the appearance in a deliberately educational program of emotion or feeling related to ideas and advocacies. "Neutral" seems to suggest a freedom from feelings of loyalty or of belongingness within schools of thought; it connotes a standing apart from engagement with others in attack and defense in order to preserve an impartial objectivity. "Non-partisan", by contrast, signifies in this context only that educational activities or programs of instruction do not give favorable treatment to any one viewpoint, all sides being represented as fairly as possible.

Before taking the argument any further, it might be well to insert an observation for the purpose of avoiding a possible misunderstanding. It is customary to think of the school in its approach to controversial issues in a rather limited way; controversy is the sort of thing that arises in a context of politics or social theory. But it would be a mistake to suppose that the appearance of alternatives and the conflicting
tensions of having to choose are found only occasionally, only here and there in school experience. In the teaching of science, a critical consideration of differing theories is surely not to be avoided. And what about the humanities? At every point the humanities offer us ways of perceiving, of conceiving and of valuing that reflect alternative outlooks upon the world and what is to be found good or bad within it. Any contribution to the humanities is, among other things, an effort to persuade; to persuade others to think and feel on matters of concern in this way rather than that, to value these qualities more than those, to arrange concepts in such and such a pattern rather than in the mistaken ways of worthy opponents, etc. Especially in a mature and complex civilization, universal like-mindedness on matters of importance is very rare, perhaps non-existent. Diversity of belief and value is the rule. What we are talking about here includes the domains of ethics, morality, esthetics, of life styles and ways of conceiving the good life and the good society. The existent literature in which these matters are given expression is extraordinarily controversial, and it is from this literature that a substantial part of curriculum is constructed. Whatever happens in schooling that might influence a student's sense of importance, his awareness of what is good and bad and of what makes life worth living, is an event of controversy. Which means that the controversial stuff in educative experiences is both ubiquitous and of great concern.

There are humanists and educators who wish that this is not so, and who might prefer to describe our situation in a different way. They write and talk about the humanities as if they present a cohesive body of materials possessed of a common core of sensibility and morality. Of course, by a process of selection and rejection—preferring,
for example, the esthetic tastes of a Pater rather than a Croce, the political economy of an Adam Smith rather than a Karl Marx, etc.—it would be possible to steer clear of antitheses and incompatibilities. For any one consumer, that kind of selectivity is to be expected and not denied. But in fulfilling the responsibility of the school to transmit a cultural heritage, any attempt to purify that material of its alternatives and its contradictions would be mis-representation and bad education.

What then, concerning the issue at hand, would be the hallmark of good education? If it is agreed that a sizable part of upper-level cultural materials are controversial, and further that the materials in which controversy flourishes are those of great concern, then an immature member of society who approaches them may be said to have learned and to have understood only as he becomes himself a more or less active participant in the process of preferring, choosing, identifying, and taking sides. Issues about which men of good will are divided, concerning which they become heated, are not to be viewed with cool detachment except by some failure to understand and to relate one thing with another and with one's own values. As a learner becomes sensitive to issues and alternatives, he is obligated by his perception of new possibilities to locate himself among them, to discover what sort of person he becomes in this new context (or if "discover" is not the right word, then to "extend" his personal identity into new avenues of awareness.) If he fails to become involved and to feel concern, he fails the lesson. Or else it is his teachers who fail.

The point of the preceding paragraph may be expressed very simply: controversies should be transmitted as controversies. To learn in the most desirable way is to participate, to find out where to take a stand, what to cherish, and where to find the enemy.
At first blush it may seem that what is being considered here is of consequence only for students in the upper years of schooling. Young children, it could be said, are not yet ready to understand issues and alternatives; they are too young to decide where they belong and to form personal identifications on matters of complex valuation. But a closer look at school experiences of even the youngest children reveals a humanistic content to curriculum, as in Mother Goose rhymes and in fairy tales, from which the consideration of value alternatives cannot be escaped. No matter how young, school children cannot be held apart from involvement until older. It is to be expected, therefore, that early choices may later be changed, that radical shifts of personal identification and value may occur during years of prolonged schooling, and that such changes are a normal part of maturing and of forming a self. What is needed is a school program designed in recognition of such facts rather than, as in the past, a school which is conducted in hopes that early learning can be made so right or so true that later revision is unnecessary.

Now it is necessary to confront a more difficult problem. According to the second argument on the question of neutrality, schools cannot be neutral because to have adopted an educative program is to have placed some values over others, and any particular way of ordering values may be in conflict with equally possible other ways. For example, to emphasize the humanities rather than science, or practical and technical training rather than a liberal education, is to have exercised a preference which is open to challenge by those who would rather see the schools do otherwise. However, to locate the center of difficulty within differences of value, which is probably true enough,
may seem to posit a separation of values from cognitions; indeed, a 
supposition that a person's value holdings have an entirely different 
epistemological status from beliefs about matters of fact is now a 
widely shared opinion. But there is no need to raise here the ques-
tion of whether evaluations are or are not a kind of knowledge. It is 
sufficient only to point out that values are closely tied to beliefs 
about actions, consequences, and states of affairs. It is certain 
doings, experiences, and achieved situations which we value; to say 
what it is that is valued is to describe a state of affairs. Differ-
ences in educational doctrine are differences in perception, concep-
tion, belief and value, all taken together.

Ideas about education are so many and divergent because they are 
usually associated with beliefs and values about almost everything 
else. Concerning any proposal, to ask why education ought to have this 
or that character is to be told something about the needs of the eco-
nomy, about how to preserve the social fabric, about a superior kind 
of psychological theory, about how to achieve wholeness, how to win in 
the competitive struggle, and so on. Clearly enough, if schools were 
to base their programs upon adherence to any selection of non-educa-
tional causes or missions, they would become actively partisan, lend-
ing their influence to advancement of values shared by some portion of 
a population, but thereby threatening the values of many other portions.

Obviously, no way out of the difficulty is to be found in trying 
to be neutral. It is necessary to make a choice, to exercise a prefer-
ence. How can this be done consistently with the ideal of a non-partisan 
school doctrine? There is only one way, and that is to construct an 
educational doctrine that admits only those values which may be called
"educational" values; that is, to explore and elaborate a commitment to public schooling, excluding from that commitment all others except those which comprise the core values of democracy and equality of opportunity. The intent of this proposal is to take as a first or determining consideration the support of schooling in a democracy, realizing that if one places his values there, then he cannot also use public schooling to give favored treatment to any other (non-educational) value. One is not asked thereby to give up other commitments and causes, but rather to hope that in a school which transmits controversial doctrines and values in a manner contrived to continue controversy and to promote enlightened participation, his other commitments will also prosper. The question of whether there are values other than those of democratic schooling and equality of opportunity which might be judged to have greater weight or a prior claim need arise only for anyone who fears that liberated intelligence is hostile to his cause.

Is there such a thing as a distinctively educational value? The quickest route to a definition of that term is by way of another: the definition, namely, of a "school sponsored educational event." A school sponsored educational event is a transaction arranged to occur between a learner and some part of a culture, and which results in some kind or amount of apprehension or learning. Nothing is intended by this definition that is in the least bit esoteric or scientifically precise. It is simply an attempt to say in few words what kind of thing happens in schools whenever the efforts of teachers to encourage learning produces some result. Even so, a few more words in elaboration may be desirable.
The definition speaks about a transaction taking place between a learner and "some part of a culture." This wording reflects a customary and still useful way of conceiving schooling as a matter of transmission, the transmission of achievements in the arts, sciences and humanities to new generations. Although customary, it is a conception that is not always looked upon with favor, especially by romantics and radicals, who seem to think that schooling described as cultural transmission is too much like an imprisoning of new generations in the outmoded ways of the past. If the romantics and radicals may be credited with having a point, it could be the observation that if younger generations are steeped perforce in the attitudes and ideals of older generations, and in a way that might be called "indoctrinating", then their capacity to create, to modify and to adjust to new circumstance could be endangered. But this is a purely methodological concern, and not sufficient reason to reject cultural transmission as the proper business of schooling. It is conceivable that cultural transmission could be realized in ways which free rather than imprison the ability of educated persons to cope creatively with a changing world.

A different kind of objection could arise from supposing that this idea refers to the transmission of cultural heritage from the past, and perhaps, as in Renaissance education, from the more distant past. This could be objectionable on the grounds that products from societies and situations of an earlier time are not suited for preparing people to confront the complexities of a present day world. Although it is true that some traditionalists, especially among professors of the liberal arts, are inclined to look upon the present and its contributions as inferior to some favored era of an earlier time, the obligation of schools to the culture is to the living culture, to the arts, sciences and humanities as they have grown to the present.
A school sponsored educational event is an encounter between a learner and an arranged environment in which a portion of culture is a prominent part. Something happens—an experience—which has its character only because of that arrangement, and in response to the arranged presence. Otherwise the definition would not apply. However, it cannot be assumed that whatever happens is just that which a teacher might wish to happen. He hopes for a quality of experience or a depth of learning that might realize his best intent. But if we were to say that an educational event occurs only when that intent is realized, we would have idealized away whatever usefulness the concept might have.

If it is an event where intellectual learning is the desideratum, then we can suppose that a modicum of learning suffices to qualify it as an educational event. If a teacher's intent is to bring about a realization of esthetic quality, as in music appreciation, then an attentive awareness is sufficient, regardless of the presence or absence of a positive appreciation.

There are several reasons why the idea of an educational event should be so delimited, but in this context, one in particular will suffice. A student's response to instructional materials or environments is a function of the apperceptive mass which his prior experience and his previously formed intellectual structures bring to the interpretation of whatever is presently before him. (If the term "apperceptive mass", which is not now in vogue, should deter understanding, it may be omitted. The argument stands even if the language changes.) An environment is constituted not only by what is physically present to the senses, but also by the relative sensitivity of the person to the sorts of events and objects present, and by a structure.
of concepts of expectations which a person uses to interpret, to categorize and to assimilate whatever he is able to perceive. Inevitably, the response of learners to educative situations is individualized; it is different in quality and amount of learning from one person to another. Hence, an educative event is whatever happens when a learner responds to a situation created for educational purposes, and responds in a way different from simple rejection or evasion.

The purpose of this discussion is to arrive at a conception of educational value. An educational value is any positive value which is conceptually related to the anticipated consequences of a school sponsored educational event. The expression "conceptually related" means that educational values are those which are reasonably predictable, without additional assumptions or idealizations, solely from the idea of an educative event as having occurred. To distinguish educative event from educational value: an educative event is an experience, the result of bringing together a learner and a culturally enriched environment. An educational value is any aspect or part of that event, or any anticipated longer range consequence of it, which is judged to be good, or in some way contributing to a realization of good.

Consider an example: suppose that a teacher directs the attention of his students to cultural differences between ethnic groups in American cities. His students learn about different styles of dress, differences in food preferences, various ways of seeking sport and entertainment, alternative approaches to manners and mores, and so on. Suppose, furthermore, that the teacher's educational purpose is to promote thereby a greater measure of tolerance for cultural diversity than commonly exists in the sub-cultures of urban neighborhoods. His
expectation would be reasonable only by the addition of a further supposition added to the idea of the educative event itself: a supposition, namely, that ethnic bias is a function of ignorance, to be dispelled by gaining more knowledge about ethnic cultures. This is a dubious idea, probably false. But it must be ruled out not for that reason, but because it is outside the boundaries of an educative event itself; it is not part of what is meant by the concept. If such limitations were not to be placed upon the concepts of educational event and educational value, then there would be no way of ruling out, by principle, any number of smuggled in and controversial beliefs from non-educational domains, thereby contaminating the effort to be non-partisan.

Herewith, a summary of argument: if we think of educational philosophy as the effort to find an educational doctrine for which the support of reason may be claimed; and if, furthermore, the kind of doctrine to be achieved is one that is suitable for public schools in a democratic society, then the problem arises of how to provide good reasons for any recommended educational program which are not biased toward the beliefs and values favored by some portions of society, but possibly tending against the equally legitimate (so far as can be known) beliefs and values of other portions. The principal source of difficulty is that the kinds of belief and value which are usually thought to support educational ideas are controversial, and we have no satisfactory way of determining which sides to controversy are more right than others. Therefore, to establish school programs upon a partisan acceptance of unprovable materials is a form of imposition which cannot be accepted within the values of a democratic society. This is a difficulty from which there is no escape by way of universal, non-controversial values.
The solution is to force a choice between conflicting values; between values associated with democracy and education, on the one hand, or on the other, any values which are incompatible with the first. This means, of course, that rationality may be established only after a choice is made, and as a further elaboration of what that choice entails. We cannot prove that one ought to prefer democratic educational values over others which might seem very important. The best one can hope for is that, if one chooses as prior and fundamental the claims of democracy and education, then good reasons may be found to support educational doctrine. But to radicals of the extreme right and left, who would not make the same choice of what is prior and fundamental, what would count as good reasons may be quite different. In philosophy of education, the rationality for which a philosopher strives is not absolute nor universally compelling. It operates only within a framework of acceptance which is not itself rational in the same sense.

It would extend too much the bounds of inquiry to imagine what becomes of educational philosophy in a non-democratic social system, or in a utopia. But for a democracy of the imperfectly realized sort, it is perhaps possible to say how educational philosophers go about the pursuit of their goals. They do so by making explicit the criteria by which we recognize an event as belonging to the category "educational", and going beyond that, structuring in some detail a kind of educational program that seems designed to satisfy those criteria, plus other criteria that may be brought forth from examining possible connections between concepts of democracy and of conditions for promoting human growth. In brief, to do philosophy of education is to explicate what it means to be committed to public education in a democracy.
Chapter 3

THE FUNCTION OF THE FORMAL SCHOOL

As he approaches the tasks of his profession, an educational philosopher encounters a question of priority in the problems his work presents. Where should he begin? A usual answer is to suggest that his first task is to define the aims of education, and only after this is done go on to more detailed problems of curriculum and procedure. This seems a reasonable way to go about it; for whatever theory of curriculum or of method one might propose ought to be judged by how well designed it seems to be for reaching the proper goals of educational endeavor. Any more particular product of educational theorizing can be criticized or justified only if a prior understanding has already been reached about the more inclusive or greatest of values toward which educational action should be directed. But perhaps there is another problem which, for purposes of logical exposition, comes even earlier. Before deciding what to accept as aims of education, an educational philosopher might think it prudent to consider the kind of institution for which aims are to be proposed, and to clarify if he can the unique character of that institution.

There are at least two reasons for this ordering of priorities. In the first place, if we consider the school as an institution, then it must have some more or less definite character or set of attributes which are essential to its institutional being, and therefore it is not open to be used for any ends whatsoever, but rather, only for those ends which are appropriate to its nature. And in the second place, if we achieve some clarity concerning the school as institution, then we might avoid criticizing it for failure to do that which was never part of a legitimate
expectation. These are two sides of the same coin.

The idea that aims for education ought to be selected for appropriateness to the formal school seems obvious. Like any other institution or agency, the school has its own characteristics, its own capacities, potentials, and limitations, and is therefore well suited to achieve some kinds of objectives but not others. In this respect an institution is like a tool. Although tools are designed for specific jobs, as a saw is designed for dividing a piece of wood, they may be used with some degree of freedom for doing that which had not been part of the original intent. A saw, for example, may be used to make music. But whatever the uses to which a tool is put, they must be uses which are permitted by the given shape, structure, or material. Structural properties set limits upon employment; they lend themselves either well, poorly, or not at all to possible tasks, and this may be said also of schools.

However much these considerations might seem obvious, it has been the case that schools are sometimes criticized for failure to do what they should not have been expected to do. For example, schools have been criticized adversely for not bringing about a more equable distribution of wealth. That the rich get richer while the poor get poorer has been offered as evidence showing that schools have failed to provide equality of opportunity. It should have been evident, but apparently was not, that the distribution or maldistribution of wealth is a function of the economic institution and its power structure, and not necessarily subject to modification by what happens in a completely different institution. A similar but more absurd example is the claim, sometimes implicit in ideas popular with school administrators, that if everyone were to be educated in a specific vocational skill, then unemployment would decline or disappear.
For almost every diagnosis of a social ill, there is a suggestion that the schools are to blame. And in almost every plan for the evolution of a better society, there is a prominent role for schooling. Recriminations and unrealistic expectations are unpleasant irritants, but they are also a kind of tribute. They show what glorious capacities for doing good have been attributed to the institution of the school. Educators may be flattered by all this, but no doubt they would prefer modest hopes geared to a true understanding.

In search of that true understanding, where should we turn? Is it a kind of empirical, scientific knowledge that is needed, or is it a kind of insight that philosophic activity might be expected to uncover? On first consideration, it may seem that questions about the institutional role of the school are properly addressed to sociology. Even if that suggestion should be taken as correct, a search of sociological literature will not yield what is needed. Given an absence of scientific knowledge on this matter, there is no urgent need to decide whether a question about a unique function is one for empirical research. Like it or not, we are forced to approach the problem as one which calls for defining an essence. The question, let us say, becomes something like this: given the many kinds of differing activities that may be found within schools, which ones shall we take to be essential to the institution and which ones can be regarded as peripheral, accidental, or dispensable? It is a kind of question for which empirical considerations are consulted; one must think about schools and remember the kinds of activities that have been observed to occur. But those considerations are preliminary only, and not sufficient to determine an answer. To say what is of the essence of schooling—that is, to say what kinds of activities are most characteristic of schooling—is not to offer any matters of fact, but rather to make a decision about

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**Note:** The document appears to contain some formatting issues, such as missing or extra characters, which may affect the readability of certain sections. The text has been transcribed as accurately as possible, given the constraints.
what to call essential and what to call unessential. Although decisions
are not anything which experience may prove or disprove, they may be
criticized. Some decisions (or definitions) are more apt than others,
more likely than others to advance insight and understanding through the
uses to which they are put. (This brief comment about method may suffice,
it is hoped, to legitimize the non-sociological, non-scientific discussion
which follows.)

The most readily available idea about schools is that the formal school
exists to transmit a cultural heritage to new generations. This may be
elaborated in more or less reasonable ways. One can say, for example, that
the education of new generations in the discoveries and achievements of
previous generations is a process that makes it unnecessary for each gener-
aton to XXX begin all over again to learn about the world and how to handle
it. To be born into a human society is to be born with a heritage, like
being born with a silver spoon but more valuable. And this way of speaking
is surely true. Knowledge and other achievements of human genius have
been accumulating for many centuries, and what makes the accumulation
possible is the constant communication of it. To say, therefore, that the
function of the school is to transmit the culture is to say not only what
is obviously true, but also what may be accepted as coming close to the
essence of the school as an institution.

It is close, but still, the idea needs further work. Another observation
which springs to mind with facility is that the transmission of cultural
heritage is not anything special about the school. **That kind of transmission**
characterizes, more
or less, just about all of the agencies and institutions of a society.
The communication of something believed or something practiced is a constant
accompaniment of social life; it goes on when people are together in XXX
work or play, no matter what kind of institution is responsible for bringing them together. Hence, what is needed is an idea about the specialized or unique part which the school has to play within the shared activity of transmission. A way of working toward that goal is to take a look at some of the kinds of culture which are *not* transmitted by schools, in hopes that by an act of comparison, one might discern a clue or a general principle about a division of labor. Perhaps there is something intelligible in the way the whole task of communication is divided up among many different instruments of the society.

One part of the cultural fabric which is *not* communicated (at least not very much) by the formal school is that part which may be called, for want of a better term, the "common sense." It is difficult to give a satisfactory definition of common sense. It is that part of the culture which prescribes and regulates the little details of day-by-day routine: how to dress, to bathe, to eat with implements, to greet acquaintances, to walk on the right, to talk about the White Sox and the Dodgers. The common sense is, one might say, a least common denominator among ways of thinking, feeling, and acting within a social group. Or, to venture a further description, the common sense is that part of the culture which is neither scientifically nor technologically refined, but which is nevertheless essential to human life. A person is able to recognize another as a fellow human of the same sort as himself by the extent of their sharing common ways of talking and acting. Anyone who failed to acquire the common sense of any group at all would not qualify as human. It is by virtue of the common sense that recognition and companionship can take place in an atmosphere of familiarity and ease. (More could be said along these same lines, but perhaps the above will suffice.) Now the question may be *XXX* raised concerning why it is that
the common sense is not taught through the agency of the formal school.

Someone might be tempted to say that we don't teach common sense in
school because there is no need to teach it there; it is well enough
communicated in the ordinary way, as part of what goes on in human
association and participation in cooperative activities. But to answer in
that way is simply to repeat in another form the basic idea
of common sense.

A more satisfactory answer may be derived from noting the above
mentioned connection between one's acquisition of common sense and one's
recognition and acceptance as a fellow creature. The possession of common
sense is essential to becoming human. (It could be said, if not already
evident, that learning a mother tongue is both a means to and a part of
the common sense.) For such reasons, the communication of this part of the
culture cannot wait until children reach the age—usually five or six—for going off to school. The communication of common sense begins with the
first day of life, along with being fed and clothed, and continues daily.
No one can say what proportion is learned in the first few years of life,
but it must be very high. It seems reasonable to suggest that by the time
a child enters the first grade, there is not too much more of common sense
to still be learned. Whatever remains is mainly that part which is reserved
for particular stages of growth, like learning the peculiar ways of adolescence.

The idea, to repeat, is that the common sense is so necessary to day
by day social life that the teaching of it cannot be delayed. But this
explanation offers a risk of promoting misunderstanding. To say that it is too necessary to brook delay in the teaching of it might seem to imply that the kind of culture which is taught outside of school is so important that we are not willing to see it turned over to school teachers and their programs of study. From this it is a simple step further to concluding that schools are allowed to teach only that which is not very important. Admittedly, one is sometimes tempted to think so, especially while being a parent of young children. One can readily imagine such a parent saying "Sure, it's all right for teachers to teach my kids about Hastings 1066 and standing up to a bully, and other matters of real concern." However, this is a stage which passes as one's children grow older and the significance of schooling for life chances becomes more evident. By the time the children have reached college age, many parents are willing to make great sacrifices to keep them in school. Perhaps these older parents are not altogether clear in their thinking about schooling, but they have become amenable to the suggestion that what is taught and learned in the formal school is also possibly important.

If anyone doubts that importance, let him notice that whatever most people learn about the arts, sciences, and humanities is something learned in school. Indeed, the greatest part of what makes up the content of school-taught culture is content selected from the arts, sciences, and humanities. It is this kind of material which is rightly taken to be the crowning achievement of mankind, the highest expression of the human spirit, the very essence of civilization. What could be more important than that?

The point to be especially noted is that when we consider the distribution of responsibility for cultural transmission, (some parts of the heritage being taught mainly by one institution and other parts by other institutions), it is not a matter of relative importance nor of social worth that furnishes
a basis for the distribution. Value, or social worth, has nothing to do with it. Can we, then, be a little more precise about how or why the distribution is made?

Two observations from preceding discussion may be recalled for further consideration. One is that the teaching and learning of common sense is a matter of some urgency, or immediacy. The more quickly it is learned, the more quickly do people manage to live together with a minimum of friction. The other observation is that the common sense is not organized in the manner of a discipline. Therefore, common sense materials may be learned in any order; there is no systematic build up of content which makes the learning of some materials pre-requisite to others. It would seem that items of common sense are like sequence self-contained units, teachable and learnable in any order you please.

From these observations it seems to follow that the teaching and learning of common sense is prompted by on-the-spot opportunity; it is, let us say, occasional. A child enters an environment or a situation for which the common sense prescribes an appropriate form of behavior, and he or a parent or "society" takes advantage of the occasion to acquire or to teach another little piece of the culture. Sometimes the acquisition results from some one deliberately teaching, but very often there is little or no intent on anyone's part to teach nor even of the learner to learn. Simply happens as part of social interaction, of seeking goals other than learning, so that the learning aspect of an occasion is coincidental or instrumental to something else.

One is to say that common sense cultural heritage is acquired as needed for the occasions of its occurrence. But that would be not quite correct. Who is to say when a child "needs" to learn how to tie his shoes
or how to cut up his meat into small pieces?

A better way of expressing the point is to say that common sense learning of any particular bit takes place when and because it fits in with a person's doing what comes naturally as he tries to pursue his interests, gratify his wishes, or meet his needs within an environment which is not entered nor established for the main purpose of learning. For the most part, nobody plans to teach the common sense at any pre-established time, and nobody plans deliberately to acquire it; but this lack of planning is no defect of cultural transmission, no situation needing to be rectified by the injection of care and foresight. The communication of common sense works very well just the way it happens. And what makes it so effective is just this fact that it is occasional and instrumental to the doing of whatever one would in any case be doing even if there were no pay-off by way of learning.

The nature of such learning as occasional is to be remarked because, since it is so effective, its qualities are ones which many educators would like to capture for the kind of learning which takes place within the school. Would it not be good, they ask, if we could arrange the educational experiences of children and youth in school such that pupils are motivated to learn in the same natural way as out of school, and they could learn with that same kind of direct connection between immediate concerns and the content of learning? Romantics especially, and even the more level headed progressive educationists, take as a model of good learning the pattern of acquisition of common sense. They point to the fact that children in their out-of-school lives are generally curious, eager learners, whereas in school they seem to lose their natural educability and to bank down their adventurous, inquiring minds. Let us, they say, bring to learning
in school the quality of learning in life outside.

Whether it would be possible to fabricate within the school an equivalent kind of readiness to learn and an equivalent awareness of relatedness between school taught materials and non-school interests and needs is a difficult and complex question. It is too big a topic for consideration here. But part of the purpose to be served by this discussion is to minimize a tendency to suppose that the achievement of such an equivalency ought to be an easy matter if only we were aware of how desirable it could be, and if only we would cease and desist from the oppression of youth. The pertinent fact is this: whatever knowledge, information or skill is readily perceived by school age pupils related to their out-of-school activities and concerns—to their play, their peer group relations, their conforming to codes of conduct, their acquiring and modifying of automobiles, their proper execution of the dating game, and so on—is directly and more or less readily learned. Because of its immediate appeal, because of its connectedness with pre-existing interests and concerns, because of its obvious applicability to the immediate environment, and because of its direct availability within the ubiquitous common sense, it is learned, it is learned with a will, it is learned with motivation from within, and it is learned without any need for the existence or the intervention of the formal school. If this were not so, then schooling would be easy; so easy that it could be replaced with simpler and cheaper arrangements and nothing would be lost. If the formal school has an essential function, it cannot be that of merely augmenting the cultural heritage of a common sense.

The point of the immediately preceding remark is this: the kind of cultural transmission that occurs readily, easily, and spontaneously
is simply not possible, in any significant amount, for the institutional formal school. To put it baldly, the school is an institution which has aspects of the cultural heritage which are a responsibility for transmitting, not readily perceived (by children and youth) as having a connection with their most urgent concerns. That is why schooling is a difficult enterprise, calling for hard work and skill from professional teachers.

Those who are unwilling or unable to acknowledge this fact, and who continue to chastise teachers and curriculum planners for the non-relevance and "artificiality" of what is taught in school, may take some comfort from a further observation. The kind of learning which they take to be a model of goodness--the occasional, instrumental learning of a basic common sense--does indeed have certain qualities which would seem to recommend it highly. It is a kind of learning which accompanies the pursuit of interests, it is often spontaneous and impulsive, and it occurs within a sequence of motivated behavior in which there is opportunity for non-delayed application to a "real" situation, with resulting feedback and reenforcement. All of these would seem desirable qualities. But the further observation, which changes greatly the educational perspective, is that common sense learning has other qualities which are considerably less than ideal, and which, however undesirable, are as natural to the situation, as inevitable, as those which are looked upon with favor. is a mixed bag, partly good, but also partly smelly. To acquire the common sense of a society is to learn without benefit of conscious critical scrutiny, and in ignorance of what is concomitantly involved. Because learned without help from the more rational levels of the mind, ways of thinking, feeling, and behaving which comprise the common culture are likely to be partly or sometimes self-defeating, bringing about more of pain than of lasting satisfaction; to be
self-contradictory, because the application of logical criteria is not part of the process; to be coarse and crude, because of insensitivity to any features of a situation which are not readily perceived; to be biased unfairly toward and against broad classes of existents, because of hasty over-generalization; and to contribute more to the strength of group pressures than to the welfare of particular human beings. To become aware of these qualities, ordinary out-of-school learning is to realize the absurdity of those popular viewpoints which romanticize and glamorize instruction by the street, the neighborhood, the gang. That sort of learning is not what we should be willing to promote by deliberate intent within the school.

School taught materials, in sharp contrast with common sense, are products of refined sensitivity and perception or else of logically and scientifically controlled judgment and ratiocination. They are products which have been pushed in the direction of perfection in the human capacity for perceiving, valuing and knowing. Let us admit that these admirable qualities are those which characterize the arts, sciences and humanities as they come from those who contributed them; they are not necessarily passed on to reluctant students by exposure in school. What any given student acquires from his reading of Shakespeare or his study of geometry may be little better in esthetic quality or in logical coherence than what he learns from Playboy or from his peer group code of conduct. But to admit this possibility is only to admit the possibility of limited success, of falling short in accomplishment of what is attempted. If the educational venture is successful, then common sense is transcended.

That the institution of the formal school is responsible for drawing its part of the cultural heritage from the arts, sciences and humanities has
not been questioned seriously or successfully. On this we may assume almost universal agreement. Disputes about curriculum have always been evident, but they have been about which kind of such materials should be in the majority, and about reasons why these are the proper domains from which to draw. Humanist educators from the Renaissance, for example, gave very little space in curriculum for content from the sciences, whereas the Baconians and the Spencerians, in their turn, urged a maximum of science. But these and similar differences have never challenged the more fundamental understanding: the formal school is the place for transmitting to new generations the upper levels of cultural achievement.

What is not commonly understood, and awaits new clarification, is a reason why this is so. Various explanations have been offered. It is said that instruction in scientific and humanistic achievement is the responsibility of schools because if it were not for the school, most people would learn little or nothing from that part of their cultural heritage. It is also said that must be educated in such materials because otherwise might not survive. These familiar ideas seem at least roughly acceptable. But we would ask further why it is that the school seems to have such an essential role. Why is it that, if it were not for the formal school, most people would learn little or nothing from the sciences and the humanities? A preliminary step in searching for an answer has already been prepared in preceding discussion: these parts of the cultural heritage are not necessary for the successful negotiation of particular moments and situations. If we consider the multitude of small episodes that make up a large part of anyone's non-vocational day--episodes like, for example, finding a parking place, deciding what to buy for a wife's birthday, ordering tickets for the theatre, participating in
small talk during a coffee break, moving the grass--and if we consider only what a person need take into account in order to satisfy the most obvious demands of those situations, then it would seem that everything essential is more ordinary, less refined and much less exact, than the humanities and the sciences. The materials which constitute the curriculum of a liberal education seem to play little or no part in guiding behavior toward acceptable outcomes.

The point to be made here is important, but difficult to assert in a precise and guarded manner. It concerns, among other things, how a person who is well educated is different from one who is not. What advantage does his schooling confer upon him? From one perspective, very little. If we ask whether the well educated person is more successful in accomplishing his objectives and executing his purposes than the poorly educated, we can not answer unhesitatingly in the affirmative. If we were to observe the mundane actions of two persons, one of them well and the other poorly educated, we might find little difference by which to see in action the advantages which education is supposed to bring. Indeed, this kind of difficulty should not be surprising. If the advantages of education were readily apparent, easily perceived as a marked difference in capacity to live well, happily, successfully, then nearly everyone, having observed that difference, would be strongly motivated to seek an education, and the enormous problems which teachers encounter in trying to convince their students that education is a good thing would hardly arise.

This, then, is no small difficulty. We may agree that formal schooling contributes little to ordinary small actions of non-vocational life, but even so we would insist that schooling makes a difference of some positive and important kind. But how is that difference to be understood?
One is tempted to say that the differences are largely internal: an educated person is more perceptive, more sensitive, more aware of finely discriminated objects and relationships than the undereducated. That is true. But if there is an "internal" difference of significant proportion, then whatever is internal should bring forth sooner or later some kind of issue in overt conduct. And, indeed, it does; a well educated person is overtly, observably different. How could it be otherwise? To be aware of something in the human environment (to which the uneducated remains obtuse) is to require of one's self that it be taken into account, which means that in some way one is required by his sensitivity to modify his disposition toward reality. A disposition toward the world may not become evident in overt behavior for some long time after its formation, and perhaps never; but given some conjunction of events, some pattern of elements to serve as a trigger, and the disposition is actualized. School learning makes a difference, but it is a kind of difference which becomes manifest only in the long run and in the broader sweep of a life. It is the kind of change in patterns of behavior which results from confronting more possibilities, more alternatives, and from making a greater number of choices. To look for the difference which education makes is to look within the longer stretches of a person's life. There is where the difference lies.

Now it is time to venture an explanation for why the formal school draws its content of instruction from the arts, sciences, and humanities. These cultural ingredients are contributions from people who are generally more perceptive, or more brilliant and creative, than the majority. Their talents make it possible to discern forces at work within the human
environment which otherwise might go undetected. The expression "environ-
mental forces" signifies any sort of object or event which bears a relation-
ship, either positive or negative and either potential or actual, with the
welfare of anyone for whom they are environmental. It is because of a
relationship with human welfare that it seems desirable to become aware
of their presence and their potential. But--this is the most important
part--their presence within the environment and the nature of their connection
with human concern is not obviously nor easily discerned. They are
forces of a kind which make no immediate demands for action on the part of
whoever is aware of them; they are not part of any emergency.

So we come at last to a statement concerning the function of the formal
school. The unique function of the formal school is to encourage awareness
of environmental forces which are difficult to discern, because hidden from
ordinary perception; which are subtle rather than obvious in their effects,
forces or which are indirectly rather than directly related to immediate concerns;
in becoming aware of such forces, one may adjust his behavior to
take them into account.

The best way to make clear the intent of this proposal is by way of
examples. One kind of environmental force is that kind which is hidden from
ordinary perception. Examples are electro-magnetic radiations, odorless
and colorless gases, the hostility of a paranoid neurotic, and vitamins in
food. The last mentioned--vitamins--may serve to elaborate a little further
the idea it illustrates. That vitamins are difficult to discern is readily
understandable. They cannot be seen, smelled or tasted. But there is a
further aspect. They are a kind of environmental force which makes no
immediate demand for action. Upon learning about vitamins, there is no
pressing need to do anything new and different in relation to food. One
may continue on to Macdonalds for lunch and order the usual Big Mac and chocolate shake. There is ample time for whatever adjustments, if any, might become advisable. If the newly learned information does seem to call for a change, it is a kind of change which becomes evident in behavior only over a span of time, cumulatively. This characterizes a large amount of schoolroom learning, and it could not be otherwise.

Another kind of environmental force is that kind which is present in subtle rather than obvious ways. A good example is found in music, in differences between popular and serious music. In popular music the elements which together are the heart of its appeal, like melody and rhythm, are so unmistakably repeated that no one could miss hearing them. In serious music, however, those same musical elements are present in more subtle forms, such that their presence is easily missed by the unenlightened. It becomes necessary to point out that which is not readily apparent. In the case of serious music as in the arts generally, only if pains are taken to direct attention to subtle aspects of it will many people learn to experience the available esthetic quality.

The third and last class of environmental forces is that kind which is indirect rather than direct in its bearing upon human welfare. An example may be found in the folklore of many inhabitants of the northeastern United States. There it is said that those who live in the Southern states "are still fighting the Civil War." If this were true, it would mean that events of a long time ago are continuing to influence the present, by an indirect process of attitude transference. A traveler in the South might note certain attitudes prevalent among the local population, but there is nothing in the attitudes themselves which could reveal the reason
for their existence. The connection operates through intervening processes occurring over several generations.

It is hoped that these examples can clarify the above concept of a unique function for the formal school: the function, namely, of revealing environmental forces which are difficult or impossible for the untaught to discern. This way of conceiving schooling may contribute a measure of enlightenment about something else which is rather puzzling, and that is, the difficulty anyone might have in saying with hard boiled honesty why, if at all, it is better to be educated than to remain ignorant. As mentioned before, it is not abundantly clear that a large amount of schooling is better for the human being than a smaller amount. For confronting the ordinary situations of mundane life, the cultural heritage at the common sense level is adequate to assure ability to get along at a reasonable XXXXXX level of success. It is not easy to convince a sceptical child that the well educated are better off than others. The reason for this peculiarity is that to become aware of otherwise hidden environmental forces—to become aware of one's own fate as bound up XXXXX in so many connections with other events—is not necessarily nor always to be able to do something effective about them, either to secure what is potentially good or to avoid a potential harm. In an admittedly extreme example, it is sometimes the case that becoming aware of what is going on is only to become aware in fuller detail of impending doom and helplessness. XXXXXXXX

To be educated is to be more sensitive not only to the esthetic qualities of an environment and to the potential goodness of situations to be secured, but also to be more painfully aware of the smoke, the stench, and the horrors.

Why, then, do educators end up, in final analysis, on the side of formal schooling, thinking it to be, on the whole and in the long run, a positive
good in what it contributes? Because we believe that it is better to know the realities than to be deluded, ignorant, or mistaken. A ladybug doesn't know that her house is on fire, and the grasshopper cannot predict the deprivations of the coming winter; for them, it may be just as well that they do not know. For human beings, an awareness of what is going on is mostly an advantage.
Chapter 4 Educational Aims

Materials of the preceding chapter--mainly, arguments concerning the special role of the formal school--are preliminaries encountered on the way to a bigger problem of saying something helpful about the aims of education. Even if we assume that conclusions reached in that previous chapter leave us better informed about what, in the most general sense, the school as an institution manages to accomplish, we would still find it necessary to treat as a different kind of question the matter of educational aims. The earlier inquiry had been directed toward an understanding of activities which may be regarded as most essential to the nature of the school as institution. Now, in coming to the question of appropriate aims, we are asking about deliberate intent, and what we think ought to be the best sense of direction for guiding educational effort.

The first question one might ask is whether it is really necessary to engage in serious intellectual labors on a topic of this kind. In the formal school, any particular lesson, any act of teaching, has its own aim, and of such aims there is an infinitely large potential. Therefore, if there is any sensible way of talking about "the aim(s) of education," that expression would have to signify the highest or greatest of goods toward which all educational endeavors make some contribution, and in the light of which any event, like a particular episode of teaching, may be entitled to the category "educational." To seek enlightenment is to look for a way of formulating the criteria which are implicit in using the idea of education as signifying something good.

If the inquiry is successful, then the utility of such an achievement seems to be evident. To have brought into conscious recognition a sense of
direction which before had been only implicit in the hazy background of understanding is to have rendered easier the task of deciding what to do and what not to do. The facilitation is a matter of sharpening a sense of direction and thereby increasing the deliberateness and the vigor of subsequent educational acts. The more of such clarity, the better. But whether the determination of aims is a matter of difficulty, or whether instead an easy romp suited to the talents of a banquet orator or an administrator, remains to be seen.

In the past, it would seem to have been easy. A sense of high purpose and of noble calling was everywhere to be found, and from those ubiquitous ornaments it was a short step to picking out something suitable for the formal school. For the intensely religious, the aim of education was to promote piety. For a British gentleman, to cultivate good breeding. For a left-wing radical, to reconstruct society. But in the Twentieth Century a couple of things happened which introduced the possibility that the determination of aims is not so easy.

One was the spread of scepticism concerning the possibility of attaining anything appropriately called "knowledge" about values. Supposing that the term signifies a high degree of assurance of truth or rightness, achieved by virtue of universally available evidence, then it is not the case that we are in a position to know what is good or valuable. Publicly acceptable methods which could put to rest all honest doubts about what is claimed to be valuable have not been achieved—at least not yet—and this limitation applies to anyone's hope of knowing what is the greatest good to be attained by means of schooling. We can not prove that anyone's favorite notion about the aim of education is truly a good one, nor can we prove that everyone ought to accept any particular
In spite of scepticism, there continue to be some educational philosophers who try to prove that education is of value in some specific way, just as there are still some who try to prove the existence of God. Perhaps it would be unkind to say anything derogatory about such efforts. Note, however, that those who try to prove the existence of God are trying to convince others, not to satisfy their own desire to know the truth. They themselves are already convinced of God's existence prior to the effort, and convinced for reasons other than a clear entitlement to the status of knowledge. As for those not already sure in their faith, it is unlikely that philosophic argument will convince them. To be open to persuasion, a person must be favorably disposed beforehand, and sufficiently eager for belief that he is willing to relax standards for truth and knowledge. The same applies to efforts by educators to prove that certain values are the proper goals of educational endeavor. No one is likely to be convinced unless favorably disposed beforehand. This does not mean, however, that rational discussion about educational aims is impossible or futile. But it does mean that the consideration of arguments and viewpoints to determine their rational status can proceed only from a shared prior commitment.

Another event which helped to make the consideration of educational aims somewhat less easy and forthright than before was the publication of a position on this topic by John Dewey. In Democracy and Education, his major contribution to philosophy of education, he proposed that it is possible to divide all conceivable aims for education into two kinds, the internal and the external. An internal aim is one which is developed from within an educative process as its own natural direction. An external
aim is imposed upon the educative process from without. Because imposed from without, external aims are incompatible with free use of intelligence by learner and teacher (intelligence free to operate only in a choice of means, not of ends.) The only acceptable kind of aim is the internal. And the internal aim, in its most universal form, is simply "growth leading to more growth." "...the aim of education is to enable individuals to continue their education . . . the object and reward of learning is continued capacity for growth." (Op. cit. p. 117)

A difficulty introduced by Dewey's position was its open-ended character. To a majority of people, no doubt, it would seem that growth and learning are processes which move toward something other than, something more specifically good than, merely further capacity to learn. In any given situation wherein learning is a part of what goes on, there is an anticipated gain of some kind to be secured as a consequence. One learns in order to reach a particular goal or to achieve some position of advantage. Since learning is often a matter of some difficulty, or of time and effort expended, a learner is assumed to have in mind a gain that justifies the cost. The trouble with Dewey's position is that it seems to be like suggesting that one works in order to keep on working. There appears to be a peculiar incompleteness in his proposal. At the same time, to be aware of Dewey's objections to the kind of aim that he would call "external" is to share his feeling that external aims represent an undemocratic imposition.

An example of what seems classifiable in the external category is the recently popular aim of promoting good citizenship. On a superficial level it seems obviously true that education ought to result in a person's becoming a better citizen than he might otherwise have been. This follows from a natural supposition that education generally brings
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It suggests that growth is the ultimate goal of intelligent life, but surely that cannot be. Continuous physical growth would produce gigantism; any other kind of "growth" -- meaning, perhaps, avoidance of merely habitual action or escape from the staidness of doing again whatever has become easy and familiar -- is at best an accompaniment of a person's efforts to achieve some kind or quality of goodness other than still another occasion for the exercise of mind and effort. [I take up from here to "At the same time..."

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about good results in the character of the well educated person; one of the most likely ways in which a person may become good is in his role as citizen, for this involves his relations with others and with the political society. The trouble is, however, that if one accepts this aim, then to make it functional as aim one must decide what a good citizen is like, not only in a definitional sense, but in practical detail. It becomes necessary to describe the behavioral, cognitive, and attitudinal characteristics that attest the goodness of a good citizen. If this were not so, then educators could not determine whether school-induced changes in their students are moving in the right direction. There are educators who are willing to do this. They feel confident of being able to list the behavioral criteria of good citizenship. Since their criteria are supposed to determine something wholly good, they are not inclined to hesitate about doing whatever can be done to assure the formation of desirable characteristics in their students. Is it imposition, they might ask, to promote the virtues of good citizenship?

Indeed it is. To try to form the behavioral patterns of young and growing human beings in a pre-chosen and specific mold is imposition, and incompatible with democratic values. But this fact is not, it seems, self-evident. A source of confusion is the inherent appeal—indeed, the necessity—of fashioning an expectation of particular good outcomes. It is because of such expectations that we are willing to spend resources in the support of schooling. So, it is without question reasonable to hope that formal schooling will make a favorable difference in an educated person’s quality as citizen. No adverse criticism of that sanguine expectation is intended, for the fault lies not there, but rather, in converting a reasonable expectation into a deliberate intent. When that
happens, an expectation that might have remained vague and variably permissive becomes, by conversion into aim, specific and constricting.

It becomes necessary to conceive an ideal kind of person, "the good citizen," and to expect that if educational efforts are successful, then the learner becomes in his own being that kind of person. The initial difficulty with what becomes, finally, an undemocratic act is that we do not know what good citizenship is. Ideas about it are easy enough to construct, but because they are speculative and a function of evaluation, such ideal constructs are necessarily controversial. No one can claim a right to impose his own favored ideal upon everyone else, not even if it is acceptable to a majority of those concerned. This statement—that no one can claim a right to impose his ideal upon others—is asserted dogmatically simply in order to save time. The justification of it, if it were to be spelled out, would rely upon an aspect of the democratic idea concerned with respect for the integrity of individual human beings. Respect for personal integrity means that each person is expected to form his values and opinions as individual judgments, made in the light of his own interpretation of his own experiences. Concerning citizenship, one cannot be faulted for hoping that education will make a favorable difference. But whether it does, and in what particular shape or manifestation, is a matter for any learner to determine for himself, through his own informed choices.

This argument is not Dewey's, but it seems compatible with his rejection of externally imposed aims. It is an argument that may be generalized. It applies not only to education for citizenship, but also to any attempt by anyone to impose his own values or his own conception of a good person upon another human being.
But, if that is so, someone might wonder whether education itself is compatible with democracy. Is it not in the nature of education to fashion a learner in some more or less particularized and idealized direction? Those who think in this way would say that the idea of education implies a deliberate influence upon growth, and the idea of deliberateness implies a preferred direction in which growth is steered; and this injection of preference means preference for shaping the object of educational endeavors into the kind of person one would like to have in the society or in the future which educators are helping to realize. Among those who conceive education in this way there are some who are pleased to embrace it and others who would not. In the former group are many of the conservatives or traditionalists, who are not particularly sensitive to a liberal's conception of human rights, and who find nothing objectionable in the idea of shaping children and youth within what they deem to be desirable molds. But it also includes revolutionary radicals, both of left and of right, who would dearly love to gather into their hands the power to shape human development in a preferred image.

On the opposite side are those who also believe that to educate is necessarily to shape in some preferred pattern of growth, but who, because of their belief in that supposed connection, reject education as being unethical or undemocratic. As one spokesman for this viewpoint puts it, "Mass education of children is unavoidably authoritarian--a shaping of people according to the aims of those in power."\(^1\) Therefore compulsory public education "...is seen to be preposterous and out of keeping with notions of human rights and the sanctity of the individual."\(^2\) To reject

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\(^2\)Ibid., p. 44.
public schooling in this manner, claiming that education is undemocratic, is likely to challenge the preconceptions of most American educators, who have been accustomed to supposing that democratic and educational values mutually support one another. The remedy being proposed is even more shocking. To preserve "human rights and the sanctity of the individual" it becomes advisable, say the de-schoolers, to eliminate public schooling for most people, putting in its place simple training in basic skills plus training for vocations. But for a small minority, an academically gifted elite, schooling would continue to be provided. Trade training for the masses plus schooling reserved only for an elite is a strange program to offer on the grounds that it is in keeping with democracy.

And yet, it would be foolish to dismiss the de-schoolers simply as hidden enemies of democracy, who masquerade in the guise of moral sensitivity. For they are right, not only in supposing that the deliberate shaping of human growth is morally objectionable, but also in their observation that most people seem to think otherwise. Many advocates of public schooling do believe, in a way that seems to come naturally to them, that there is a necessary connection between education and the imposition of some more or less deliberately idealized goal of personality development. As suggested previously, the reason for this ubiquitous tendency is that education is expected to accomplish something good, and this is taken to mean some kind of favorable influence upon the formation of mind and character. That expectation, taken alone, is reasonable, proper, and not to be gainsaid. If education could not be expected to make such a favorable difference, there would be no reason to give it support. How, then, can one avoid taking the usual next step in the succession of ideas: the step, that is, of making explicit some more or less particular
ideal of the educated person?

Let it be noted that the commonplace supposition about education--by its own nature that education is an activity of molding character in some preferred direction--is merely an unexamined habit of connecting ideas in that way. However deeply rooted in popular consciousness, and however natural these connections may be, they are simply habits. There is no conceptual rational compulsion, no logical force, no conceptual necessity. It does no violence to the concept of education to suggest that in a democracy, there is an obligation to purge schooling of efforts to impose upon human development any and all ideal ends. To understand that obligation is then to achieve a vantage point from which it may seem absurd to propose the abolition of schooling in the name of democracy. What is needed is to fashion aims for schooling that comply with democratic morality. This can be done.

How? First, by staying close to the plainest understanding of ideas about schooling, shorn of ornament, bombast and high intentions. Start off, let us say, with the idea that schooling is a process of transmitting culture deliberately. Add, next, the observation that cultural transmission is not the province of schooling alone, and therefore it is necessary to discern a division of labor, according to which it becomes possible to state a unique or specialized role for the school. Drawing upon conclusions reached in an earlier chapter, we may propose that the specialized function of the school is to inform learners concerning those forces within an environment which, because of their subtlety or their being hidden from ordinary perception, are not made perceptible through common sense. That which makes it possible for schools to perform this function is the availability of cultural materials which transcend the more ubiquitous
lower levels of awareness.

To speak of "transcending" lower levels of culture is to imply that school-taught materials are parts from a larger \textit{accumulation}, and that these are parts which have been especially subjected to refinement \textit{and movement in the direction of perfection} by means of invention, \textit{extraordinary creativity,} and discovery. And that is true. But to realize \textit{that it is so} is to run a risk of \textit{error: the error, specifically, of supposing that the refining and perfecting process leads away from confusion, wrong opinions and the controversies they generate, away from the crude quarrelsomeness and belligerency of sub-cultural conflicts and into the calm serenity of true insight, exquisite sensibility, refined awareness, and universal truth.} And that is \textit{bosh.} A kind of scientism popular in the recent past led many to think of scientific inquiry as the essence of intelligent capability and the methods of science as the only acceptable procedures for reaching agreement in cognition. Those were not bad ideas, but unfortunately, they contributed to the idea that the highest kind of human achievement is universal agreement. An ideal of scholarship as the search for a "definitive" study contributed also. If one looks calmly at that old enthusiasm, one might see what should have been evident. What should have been evident is not just that scientists and scholars do wrangle with one another, but even more, that the upper levels of culture could not possibly be otherwise than very controversial. They concern the hidden, the hypothetical, the extrapolated and interpolated, the projected, the creative fictions; they are products of the fragile as well as the robust poetic imagination, the solitary venture beyond frontiers as well as of the gathering up and the proving. That being the case, why should anyone have expected agreement? It should have been seen that what we are offered in
the arts, sciences, and humanities is intricacy, complexity and diversity.

An educated person is anyone who has become aware of that diversity. In the process of cultural appropriation he finds it necessary to pick and choose among the available alternatives in accord with personal tastes and inclinations. Becoming educated is an activity, among others, of discovering an internally consistent self by seeing what happens from the confrontation with cultural complexes and the necessity to identify oneself with some but not all. In this as in other matters of personal choice the predictable result is that, given many persons becoming educated, many differing choices will be made. The wealth of alternatives is preserved. Through schooling one person becomes more liberal and humane, another becomes a revolutionary zealot, and still another becomes a bohemian esthete. There is no reason to fear that education might result in the imposition of pre-selected values. Education and imposition are incompatible concepts.

Concerning educational aims, this at least could be said: whatever for good outcomes could be hoped from schooling must be compatible with diversity of achievement in tastes, commitments, and patterns of living. This eliminates the possibility of aiming toward any particular ideal of human development, or even any filled-in portrait of the good human being. One must be tolerant of the possibility that well educated persons might choose to embrace a way of life that others would think regrettable. Even so liberal and right-sounding an aim as that of promoting personal autonomy must be rejected, for it is conceivable that a well educated person might choose life in a military organization, or even in a politico-religious group which requires of him not only obedience, but also the subjugation of his own mind on certain particulars of faith.
It may seem that whatever we could accept as a sense of direction for educational endeavors must be so open or so empty as to be useless. But that is not so. We can give at least a little of determinate shape to our picture of the well educated person and, therefore, to what it is that we expect education to accomplish. The easiest way to build an appropriate understanding is by spelling out how an educated person differs from an uneducated. No matter how great the diversity of educated persons, there are certain characteristics which they share in common. Accordingly, we can say that an educated person is more aware of what lies behind the surface features of his world. Whereas the uneducated is aware only of that which is obvious, the educated person is sensitive to the subtle but nevertheless significant forces at work within his environment, helping to shape future outcomes. He is aware of the range, kinds, and extent of resources available to his command in his efforts to make the environment suitable to his wishes. He is capable of conceiving his own environment as continuous with a larger world, and he is more informed about the kinds of goods or qualities which the world offers to those who seek them.

More could be said along the same lines, elaborating what it means to speak of a person as being well educated. But that would be taking the wrong direction. What is wanted is some simple, comprehensive conception, a small, sharp circle of clarity to serve as the most general of aims for educational endeavor. Obviously, it would not do to say simply that education is the extension of a person's knowledge, although such extension is a prominent part of it. No matter how loosely the term "knowledge" might be used, there are other changes no less important than the cognitive which are also intended by one's speaking of becoming educated.
changes in awareness and in concern, changes in disposition toward man and society, changes in what is to be appreciated and sought after.

Among changes of so many kinds there is at least one sort which accompanies all the others: an educated person cannot recapture his lost innocence. As he is becoming better educated, the range of behaviors for which he might hold himself accountable is being expanded, which is to say that he is less often able to excuse himself on the grounds of not knowing what he is doing. After learning about cholesterol in current medical opinion, a person can no longer eat two eggs for breakfast every day with the kind of innocent pleasure he once knew. Now he must either change his eating habits or suffer pangs of guilt. Another way to express this idea is to say that as a result of becoming better educated, a person becomes more "intentional" about himself and his actions. To speak of behavior as intentional is to acknowledge awareness in the shape of foresight about what is likely to result and an acceptance of it in ways which could be made subject matter for praise or blame, for congratulations or regrets.

Perhaps these are the ideas upon which to focus as providing material for the construction of educational aims; education changes the degree to which a person's behavior is undertaken deliberately, with awareness of what is chosen, and hence with a greater degree of accountability for consequences to himself and others. To speak of accountability in this way is to suggest a question of morality. That is unavoidable and unfortunate. This does not mean that an educated person is necessarily more moral than others. He may or may not be. It is conceivable that a very well educated person may choose to be Satanic rather than saintly. But whatever his choice, his being well educated means that he knew what he was doing, could not plead ignorance in exculpation, and was aware,
to a degree not true of the uneducated, of the complexity, including the moral complexity, of his situation and his action. This, then, is the cluster of ideas from which to choose a statement of aim: ideas about sensitivity in perception, awareness, intentionality, accountability; ideas about behavior as guided by deliberate choice and rational expectation. There is a further idea to which these lead by what may be called "conceptual implication" of, if one prefers, by habitual association: it is the idea of "mind" as signifying a central direction of behavior. To act with awareness of one's situation and by deliberate intent is to act under the guidance of mind. Following this customary way of using terms, one could say that the aim of education is to cultivate the mind.

This would have the virtue of brevity, and of suggesting in a few words a potential richness of meanings. Not only that; there is the additional bonus of incorporating a long tradition. Throughout Western history it has been customary to suppose that education is essentially a matter of exerting a favorable influence upon the developing mind. To adopt that tradition, one could say that the aim of education is to enhance the role of mind in the guidance of behavior, or, in a somewhat different but essentially similar formulation, the aim of education is to increase the scope of informed intelligence in directing subsequent acts. These are relatively clear and simple in meaning, and not open to objections which may be brought against many other suggestions concerning aims for education.

It is, let us say, rather free from objections, but not entirely so. One can easily imagine some difficulties which certain educators might have with the above suggestions. There is an almost universal tendency to suppose that at its best, formal education can be expected to accomplish great good. Occasions for speaking about educational aims are
seized upon as occasions for reaching rhetorically toward the highest conceivable goals. It is said that the aims of education should include such admirable intentions as those of promoting piety and morality, dedication to the good of mankind, the reform of society, the achievement of happiness, and the realization of human potential. In contrast, to speak only of enhancing the role of mind or intelligence may seem too modest. To all who would urge grandiloquent aims, let it be noted that what we can rightfully expect to happen as consequences of good education are, indeed, positive goods, but not, alas, quite so supremely good. Good, but not that good.

Consider, for instance, the hope that education ought to have a favorable impact upon society. It seems reasonable to suppose that as everyone becomes better educated through the greater availability of public schooling, the condition of future society ought to become better than before. But an avid social reformer is not content to rest upon the reasonableness of that hope. He wants to gain control of the school and the aims of education to assure that the future condition of society is the particular kind which he and his social gospel would portray as best for mankind. It is understandable that he might be impatient with the requirements of democracy as they pertain to education. But those requirements, with respect to the future of society, are clear. We can try to influence social reform only to the extent that liberated and informed human intelligence, simply by virtue of its being liberated and informed, can make a favorable difference in a future society. Whether, and to what extent, the enhanced distribution of informed intelligence will make a difference cannot be predicted, nor can the exact direction or kind of social change be plotted in advance. To someone who is committed to democratic values, the uncertainty and apparent formlessness which must accompany the appeal to better educated minds is readily acceptable. What could be better than that, whatever it
may turn out to be, which people choose freely and intelligently? But to those whose allegiance is above all to some particular 19th Century ideal of the good society, democracy comes off second best.

Similar observations would apply to other kinds of grandiose aims. A currently popular idea is that education ought to secure happiness or the good life. That it should have some bearing upon happiness is acceptable. But whether anyone is or is not happy is a condition subject to many influences, some of which are not related to the presence or absence of informed intelligence in the determination of a life plan. But given the individual circumstances which surround and condition any particular person's hopes for a good life, then to whatever extent those conditions may be secured or otherwise influenced by efforts under the direction of knowledgeable and perceptive intelligence, then to that extent it is possible that education may have a positive bearing upon achieving the good life.

To emphasize in this way the role of mind or intelligence is to invite a kind of objection which might arise from almost any quarter, even from those whose commitment to education and its traditions is strong and sincere. Owing to the influence of Kant and Pestalozzi, it was often said that education ought to exert its influence not only upon the mind, or the head, but also upon the emotions, or the heart, and the will, or the hands. And in the humanistic heritage there is a strand of something like anti-intellectualism. Not the anti-intellectualism of a prejudiced and ignorant boor, but a more seasoned and, one is almost tempted to say, a more "reasonable" kind of belief that the heart has reasons which the mind knows not, or that the judgments of the intellect, taken straight and unadulterated, are apt to be cold and lacking in appropriate sentiment, concern, compassion, and conscience. To some degree, this kind of objection
is merely the result of wrongly conceiving the mind as severed from feelings and morality. A more liberal and modern conception of mind is called for. But perhaps that is not the entire difficulty. The anti-intellectual may be intent upon something else as well: he may be suggesting that educators ought to smuggle in an emotional appeal past the gates of reason or, to change the metaphor, to short-circuit the routing of educational influence by avoiding the higher centers of conscious awareness and proceeding directly to the medulla oblongata, to the seat of passion. But this would be to short-circuit not only the higher centers of the mind, but also a democratic morality. To respect the integrity of learners as human beings is to try to effect an educational result only through keener perception, greater sensitivity, and enhanced awareness. Where these are absent, there is only propaganda and indoctrination.

So, with awareness of difficulty in conception or theory, and of attaining something less than the ideal one would wish for, one is brought to accept as the ultimate aim of education the cultivation of mind. It has the virtue of being, in John Dewey's sense, an internal rather than an external aim. It is not the kind of aim for which one argues by appeal to a prior and non-educational doctrine, but rather, the other way around; it is by consideration of educational changes that one reaches the concept of mind. It is the kind of aim one reaches by trying to make clear the criteria by which we judge an event to be, in the best sense, an educational event.
The aim of education is the cultivation of mind. To say it is to sound a little old-fashioned; nowadays, bold philosophic speculation about the nature of the human mind and how it works is no longer much in evidence. And whatever is no longer stylish in philosophy is not likely to appear in philosophy of education. Nevertheless, to propose a connection between the ideas of mind and of education is to invoke the most nearly universal of educational concepts. Philosophers like Plato, Herbart, and John Dewey contributed both to theory of mind and to theory of education. Connecting one kind of theory with the other came about so naturally as to seem inevitable. For every innovation in theory of mind, something corresponding to it happened in education. Granted that much of educational tradition is no longer is a domain where to be supported, it would seem that here, at least, continuing to look for such connections is as appropriate as ever. But what are the resources available for use? Do we have a new and improved theory of mind, and especially, do we have any new insights into the ways in which the human mind is open to influence by deliberately educational action?

Indicative of the present situation is Gilbert Ryle’s modern classic, The Concept of Mind.* [New York: Barnes & Noble, 1949] Although devoted to theory of mind, the treatise is almost entirely negative. The intent of the author was not to elaborate a new conception, but rather to attack ways of speaking about the mind which have been inherited from which are said to be insupportable. No attempt is made to the past and presumably, to find a positive value in the work is to find value in being cleansed or purified. Discussions to have come along more recently in the philosophic mainstream construct a newer and better concept of the mind.

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are similar in purpose, but directed toward specific problems which appear when applying the usual concerns of philosophers—concerns in the theory of knowledge, for example—to some particular concept of mind.

Is it true that I have private access to my own mind but not to others? Is it possible to know other minds? Can we speak properly of minds as belonging to persons? Can we ascribe to minds any capacity which could not conceivably be duplicated by machines? Those who pursue these questions are attempting, in the main, to purge language habits of ways that once seemed right, but that lead us, it is claimed, into problems which could have been avoided by better ways of using words.

Part of the negative dialectic in contemporary philosophy is devoted to criticizing a supposed that the concept of mind is useful for explaining efforts by some philosophers to invoke the concept of mind as a device useful for explaining behavior. A frequently used tool of such criticism is the third man argument: if one tries to explain an incident of behavior by appeal to a prior act of the mind, then the explanation demands an intervening agent between mind and act, and so on forever. Third man arguments are highly regarded by some philosophers, in spite of the taint of sophistry. But whatever their true merit, it is possible that criticism is justified, for it is not the province of philosophers to explain behavior. The elaboration of theory for the explanation of events is the kind of activity that scientists do. What, then, about psychologists? Do they have a legitimate interest in building speculative theory about mind?

Some would say Yes, and others No. Among the No sayers are psychologists who believe that the concept of mind has no place in science because the mind is unobservable, and unobservable not merely because of present
limitations in technological aids to perception, but unobservable in principle. Simply put, some psychologists would argue that psychology is the science of behavior, and mental events are not behavioral. On the opposite side of this issue, a psychologist who is open to theory of mind could say, for example, that the kind of "mind" he is talking about is a hypothetical construction which refers to the functioning of the brain and the higher nervous system. Theorizing about the mind is the same kind of scientific activity as theorizing about atoms and molecules.* Unfortunately, those who participate as psychologists in building hypotheses about mind are few in number, and their work is as yet lacking in high degrees of mutual agreement and confirmation.

For theory of mind, the present scene is not rich in available resources. It may seem that an educational philosopher today is not as fortunate as Pestalozzi had been when he was able to appropriate the gist of Kant's theory of mind, and put it to good use in the improvement of schooling. But there is a better way of sizing up the situation, a way which eventuates in the proposal that theorizing about the mind for use in educational philosophy is best done by educational philosophers themselves.

A first move toward that outcome is to observe that a theory (or an hypothesis) is an instrument created for use in some kind of situation and to effect some kind of purpose. If a philosopher speculates about the mind, he is led to do so by the hope that certain questions or problems will be more readily answered or solved by means of the created theory. That may seem so obvious as to be hardly worth saying. But it needs to be said because it stands in contrast to a way of thinking which is thereby called into question. Naively, it could be said that a theory of mind is created in hopes of making clear what the mind is, what

it "really" is. One might suppose that a philosopher or a psychologist starts out with a belief in the existence of a certain entity, called mind, and then constructs a theory about it as a best guess concerning the true nature of that entity. That is the naive view, which is challenged by speaking about theories as instruments created for specific purposes. In rejecting the naive view, one supposes that a starting point is not a presumed real entity, but rather, some question or difficulty about something other than minds; to bring in the concept of mind is to anticipate getting help in understanding or explaining those other matters. Consider some examples. A philosopher is troubled by his bringing together two ideas, both of which seem important and "correct" taken by themselves, but conflicting when joined in the same universe of discourse. One idea is about knowledge; knowledge is thought to be that which is intersubjective, or open to universal agreement. The other idea is about consciousness, which is thought to be private, accessible only to "me". The problem that arises when bringing these ideas together is that the evidence which leads us to accept anything as having the status of knowledge is evidence in consciousness. How could such private evidence be used to reach intersubjective agreement? In trying to iron out the difficulty, a philosopher brings in the concept of mind. Another example: a psychologist notices that sometimes human beings act in ways which have no apparent relationship to the immediately surrounding environment or the presumed present situation, and yet such behaviors do not appear to be merely a refusal to cope, or a loss of adjustment to reality. In wanting to understand what is going on, a psychologist appeals to the concept of mind.

For the naive view, difficulty is especially evident when considering the worthwhileness--one cannot say here "the truth"--of a theory about mind. Naively, one might suppose that a theory is as good as the degree of its accord with the entity which it describes. Instead, it seems more
reasonable to say that the degree of acceptance a theory can earn is determined by how well it serves the purposes for which it was created. Does a theory of mind help to achieve understanding of the situations which were occasions for resorting to that theory? To whatever degree a theory about mind enables a theorist to explain satisfactorily something other than minds, it is then acceptable. To whatever degree there remains something puzzling, then to that degree more work is required. This way of describing an instrumental role for theories is likely to cause some uneasiness. One wishes to say that a theory of mind is either right in what it says the mind is, or it is not right. But this is a wish which cannot be honored.

There is another and related difficulty. Naively, one supposes that if a theory of mind proves worthwhile, then, no matter what kind of problems or questions had provoked the construction of that theory, it should prove equally worthwhile in any other kind of investigation of mental events, no matter how different the range of questions or problems. However, the realities of inquiry are somewhat different, becoming somewhat different. What may be a successful treatment of mind for a philosopher's or a psychologist's purposes may be unsuited to the very different sorts of questions which are likely to arise in the engagements of an educational philosopher. A typical philosopher's question—for example, whether it is possible to know other minds—is not the sort of question which arises in a context of educational philosophy. Nor is an educational philosopher concerned, as are some psychologists, with problems concerning mechanisms of the brain with respect to localization versus non-localization of function. It is possible that a theory of mind arising in the pursuit of such questions may turn
out to be useful in educational theory. But the experiences of educational philosophers in the past would suggest that relationships between theories of mind and of education are not such that the second is derived simply by implication from the first. No matter in which domain—theory of mind or theory of education—a creative product is first contributed, the bearing of it upon the other is itself a creative product. It is reasonable to suggest that they develop together. In the case of Herbart, whose work is presumably the classic example of an educational theory made rational by appeal to a prior theory of mind, recent scholarship suggests that the educational theory could easily have been developed first, the theory of mind later.*

*Harold B. Dunkel, "Herbart and Herbartianism," ch. 11. (Chicago: University of Chicago Press, 1970) See especially page 206, "...the psychology appears to be a pompous elaboration of basic pedagogical principles..."

What kind of problem, characteristic of an educator's concern, could send an educational philosopher into speculation about the mind? There is one problem which could easily do it. It is a kind of problem—one which, when taken care of, makes everything encountered later easier to handle. One encounters this problem when trying to decide what to teach now so that learners will be prepared for the future. First, however, let it be asserted that deliberate education is intended to prepare for the future. At a time when the idea of education as preparation is unpopular, one needs to be reminded that children go to school in order to learn what may turn out to be useful later on. Whatever they need to know now, for today, they acquire in natural ways from the common sense level of culture. Whatever is not immediately essential, but nevertheless desirable, is entrusted to the school. The problem to which this gives rise is that the future for which children and youth are to be prepared is unknown and unpredictable. Not knowing what kinds of situations
will be encountered later--perhaps years later--and therefore not knowing what precise contents of learning will be most useful in the realities of situations, later how can we choose an appropriate form of preparation? This is the kind of question which is likely to send an educational philosopher into an encounter with the concept of mind.

An educational philosopher turns to theory of mind because, lacking a knowledge of particulars (the particulars of knowledge, skill or value which will be most useful in later life), one must rely upon generalizations and generalities; the acquisition of generalized forms of knowledge and the subsequent application of generalizations to the unique demands of experienced situations is the sort of activity which we attribute to minds. Doing those things well is the essence of intelligence. It is, therefore, the educated mind upon which we rely in preparation for an unpredictable future. If we knew precisely what to teach for later use, then the concept of mind might seem a needless luxury or a wasteful detour. There are, indeed, a few situations where the details of learning which will be useful in the future can be predicted with assurance. Certain vocational skills, like welding, are sufficiently limited and simple that a training program for potential welders can be specific and realistically preparatory. But that is not typical. The interesting and difficult problems for educational philosophy are those which come to the fore especially when thinking about general or liberal education, or, if about preparation for vocational life, then in consideration of vocations which are more complex and less job amenable to simple surveys than are welding and tinsmithing.

Before taking a look at educator's ideas about the mind, it would be well to note that not everyone will agree concerning the claimed unpredictability of that future life for which learners in school are said to be
preparing. In recent memory there are two rather similar efforts to get around the problem. They are both, in slightly different ways, attempts to foresee enough of the future to be able to plan some more or less specific preparation for it. They rely upon the idea that the problems of typical living are common enough that they may be expected to happen to each and to all.

One way of anticipating such problems is by means of the "developmental tasks" concept. (Perhaps it should be called a theory rather than a concept.) It was said that living is a matter of progressing through stages, each stage characterized by a specific kind of task to be performed. By empirical study it is possible to learn what these tasks are and in what order they are encountered. The theory holds that to be successful in living, one must perform the obligatory tasks in a certain sequence, satisfying the demands of one before going on to the next. Given the predictability of the developmental tasks, education can be designed to prepare learners for them, it is said, by teaching not only what to expect and when, but also how to accomplish each task successfully.

The other and similar effort was the embarrassing episode of the "life adjustment" movement. By means of a questionnaire survey, a long list of problems that people reported having encountered after leaving school was developed and then put to use by schoolmen. Selecting from the results of the survey a list of typical problems that everyone seems to encounter at one time or another (one such list contained 150 "real life" problems) they proposed that a significant part of the daily program of instruction be set aside for units of instruction built around advice on how to solve each problem.

Both efforts were commendable, no doubt, in their zeal for bringing

* Havighurst, Robert J. Developmental Tasks and Education. (New York: Longmans, Green, 1952)
the content of schoolroom learning into practical touch with life outside of school. But neither proved to be more than a passing fad. What was wrong became evident almost at once. The typical problems or tasks which may be expected to occur in everyone's experience may be anticipated only in the most general way. Not knowing, for any given person, the particulars which will give definition and reality to the happening of any problem, one can teach in advance only the most generalized advice and the most obvious bromides of ordinary common sense. What can be taught is only that which anyone of ordinary intelligence would think of readily when the problem became actualized, without need for prior instruction. If, however, any such "real life" problem requires more than an ordinary application of common sense and good will, then what makes for the degree of difficulty are those features of the person and his situation which are more or less individualized and unpredictable, and therefore for which no advance preparation, aimed specifically at particular problems, can be scheduled. That brings us back to the consideration of education as preparation for an uncertain and unpredictable future.

Looking to the history of education, one can find that education proposals about fall roughly into two contrasting patterns, with many variations of each. They differ from one another on the question of whether, in preparing learners for their future, one should rely more heavily upon the content of instruction--upon what is taught--or, instead, more upon the stimulation or teaching of a method for dealing with difficulties as they arise.

An example of the former, and the best available example, is the kind of curriculum advocated by Herbart and the Herbartians in the 19th Century. In teaching whatever particulars of content they chose to teach, the
Herbartians were intending to enlarge the circle of thought—one way of putting it—or, in an alternative formulation, to build many-sidedness of interest. The result of instruction in many inter-related subject matters was expected to be the building of a great many apperceptive masses. These would be sufficiently many and diverse that they would enable the well-educated adult to interpret experiences arising in later life by means of such already prepared networks of ideas or concepts, and thus to incorporate the expanding and changing world into pre-existent intellectual structures. Part of the rationale for the Herbartian solution was the psychological doctrine that new experiences are prepared for to whatever extent there is an already formed assimilative structure.

The alternative kind of educational theory is exemplified in the still popular philosophies of John Dewey, William Kilpatrick, and many others who could be associated somewhat loosely with the Progressive Education movement. On the crudest level it is represented by the slogan "teach not what to think, but how." Less crudely put, it is thought that the best way to prepare for the future is to let the future take care of itself by concentrating upon coming to grips effectively with the present. The best that one can do is to deal with situations and the problems to which they give rise as intelligently as one's resources will allow, thus building good habits of thinking, of acting whole-heartedly, of accepting responsibility for one's conduct, and by all of these achievements, becoming more disposed to rely upon intelligence and reflective thinking in the future. In Dewey's version there is no need to try to teach learners how to think; the method of intelligence comes naturally to anyone if his situation is congenial to its emergence. Educational strategy, therefore, is one of placing learners in environments which call out their native disposition to be responsive, curious, purposeful, and to tackle whatever
problems they might discover with their natural tendency to rely upon
the method of intelligence. In addition to his responsibility for
arranging the environment, a teacher sees his role as one of helping to
locate and use whatever resources are appropriate for problems at hand.

Both ways of preparing for the future are appealing, but the Deweyan
idea is especially so to present generations, who have been influenced
far more by Dewey's educational philosophy than by Herbart's. Anyone
pre-disposed toward romantic naturalism will take from the Dewey theory
a belief that children and youth, when placed in a stimulating environment
full of materials for interaction, will investigate and learn whatever one
could wish they would learn, and will do so of their own free will. Also,
the romantics will be pleased to agree that the way of behaving intelligently
in a natural encounter is a natural disposition which needs only to be
encouraged, or, better still, needs nothing more than for teachers to refrain
from interfering or from putting dampers upon natural inclination. Those
who are less romantic will be pleased with the economy. As a solution to
the problem of how to prepare for an unpredictable future, the Dewey theory
is, in a favorable sense, cheap. It saves whatever labor might have been
required in trying to select, in advance of learning, just that kind of
knowledge and skill which will be useful in the future. Rather than try
to anticipate future utility, one needs only to exercise his ingenuity in
arranging the learner's scene. Like the tutor in Emile, an educator is
a behind-the-scenes manipulator of the educative environment.

If anyone should think favorably of the alternative, which places edu-
cational reliance more upon content learned than upon a method
behavior, it is probably because of a surprising realization that the
Herbartian kind of theory is more in tune with contemporary psychological
theory than is Dewey's. The Herbartian theory of schooling proposes that the way to prepare learners for the future is to build apperceptive masses. The concept of apperceptive masses is not much in evidence, but the idea behind it is: the idea, namely, that any present experience becomes intelligible by virtue of being interpreted, and the instruments of interpretation are schemas brought to the situation from previous learning. Jean Piaget's theory of assimilation and accommodation is the best known example of psychological theory which accords better with Herbart's than with Dewey's educational program. Because the influence of Dewey's educational philosophy is still very strong, as is the psychology of Piaget, the tendency of many educators is to embrace both, apparently unaware of the fact that on this issue of preparation for the future, they are alternative to one another.

In this discussion of two alternatives, both have been presented as practical proposals concerning how to educate for the uncertain future. The question now is, How does an educational philosopher make a rational choice? Or, if choice has been made, how does he reveal a rational justification?

An answer is no doubt evident from the tenor of earlier discussion. The tendency of educational philosophers is to appeal to a theory of mind. If one conceives the mind in a certain way, then one of the educational alternatives seems right, and if another concept of mind is preferred, then another educational program. The suggestion here is that a theory of mind seems more "foundational" than does a practical proposal, and as such, more suitable for the task of giving reasons for preferring one practical solution to another. Certainly, it would seem silly to argue in the opposite direction: that is, to use a certain way of educating for the future as providing justification for a particular theory of mind. And yet, there
is some trouble here.

The trouble is that philosophic traditions concerning foundations and rationality do not prepare us for the realities of rational persuasion. In accord with tradition, one supposes, first, that a theory of mind used as foundation for proposals about education must be "better known than" the more practical matters to which it is related. This seems reasonable. If a theory of mind is that to which one appeals when asked to give reasons for educating in this or that particular way, then the theory ought to be more acceptable to any and all reasonable persons than the educational proposal which is said to be "supported" by it. But a theory of mind is not known at all, let alone better known. That is acknowledged in calling it a theory. Secondly, our traditions support an idea that the logical relationship of foundation to practical proposal is one of deduction: that, in this case, a proposal about how to educate is rational if it is derived by deduction from a doctrine about mind. There is much that is wrong with this tradition. Neither a theory of mind nor a proposal for practice can be made sufficiently precise in formulation and simple in assertion to permit of a deductive relationship. The best that can be achieved is a kind of suggestiveness. To characterize the mind in this or that particular way of educating is to suggest that a certain way of educating is appropriate to its nature. Some ways of conceiving the mind seem to go well with a specific way of educating, and not to go well with other possible ways. However, this is not a treatise on the nature of logical connections, and one must be content to continue a discussion without having disposed of this issue in a determinative way. It seems more enlightening to argue from theory of mind to practical proposal than to argue in the other direction. But to ask which comes first in gaining the assent of our intellects or in laying hold upon
our commitment is to ask what need not be answered.

Having noted two alternatives concerning how to educate for an unpredictable future, one may proceed next to the theories of mind which seem best related to each. Perhaps it would be easiest to consider first the more recent and better known educational proposal: that one which says that the best way to prepare for the future is to engage the present and to control it effectively. Since the most influential advocate of that viewpoint was John Dewey, and since his philosophic stance, including his theory of mind, is sometimes referred to as "instrumentalism", that name will be adopted here to facilitate reference in subsequent discussion.

The instrumentalist concept of mind is best understood as referring to a quality of behavior; some acts of a human being are fully qualified by the presence of mind, and others less so. What makes the difference is the appearance of a novel situation, a situation which is different in some significant way from situations that have been encountered in the past, and which demands something new or creative in response. Ordinary or routine situations, on the other hand, present nothing by way of challenge or demand for creative adjustment, and do not call for the kind of behavior in which thinking and the sense of difficulty which accompanies thinking is a prominent part. In the instrumentalist theory, the characteristic activity ascribed to minds is a reflective thinking, the kind of thinking other events which might also be called "mental", like a random flow of ideas without purpose or plan. Hence this may be called an "emergency" theory of mind; mind is that which comes to the aid of a person as he confronts a difficulty or emergency. Given this emphasis upon mind as a quality of behavior which functions in overcoming obstacles, in breaking the mold of habit, and in creating new adjustments to the unique demands of experienced situations, characteristics of the theory are effectively determined.
If it is said that the mind functions in response to the presence of an emergency, then certain further ideas concerning, first, the occasion which calls the mind into activity and second, the situation in which mental activity terminates, are predictably self-consistent. It would have to be the case that the initiating emergency, which calls the mind into active engagement, owes nothing itself to the mind or its activity. A person's intellectual apprehension that there is something amiss is not the beginning; rather, it follows upon the prior occurrence of a problem. What Dewey called an "existential" problematic situation is something that is encountered; it simply happens. It is only afterward, and because of its happening, that the mind becomes active. One way of characterizing a problematic situation is to say that it is doubtful; a person within such a situation finds himself in doubt about how to deal with it. That Dewey should use the term "doubt" in this connection is not surprising. It is a term that had been featured prominently in the original exposition of pragmatism --of which instrumentalism was a variant--by Charles Sanders Peirce. Pragmatism presented as incompatible with rationalism, and especially incompatible with Cartesian method of deliberate doubting. (According to Descartes, to find a secure basis for knowledge, one may apply a method of systematic doubting of all that one believes in order to find out if there is anything in the mind which cannot be doubted even when one tries.) As against Descartes, Peirce argued that doubting on principle is spurious doubt; in reality, one doubts not because of a decision to doubt, but rather because simply of self doubting. The occurrence of doubt is the stimulus for cognitive activity, and the search for knowledge comes to a close whenever belief replaces doubt.*

A criticism which could easily be directed against Peirce's theory of doubting and knowing is that it makes the occasion of searching for new knowledge a purely subjective happening within the mind. Subjectivism was unacceptable to Dewey. On this issue he avoided it by maintaining that the problematic character of a doubtful situation is something in the "existential" situation itself, not in the mind of the person who is thus caught up. "We are doubtful because the situation is inherently doubtful"*


And if the beginning of inquiry is a situation that is "inherently" doubtful, what about the termination of inquiry? The same subjectivism is evident. Inquiry ceases, or a problem is determined to have been solved, not by virtue of a decision reached in thought, but rather because the situation has been existentially transformed.* (*ibid, p. 159) A situation which before had been indeterminate is now determinate. This character of being determinate is not so merely in a person's understanding of the situation; it is objectively there, and its being found so (rather than judged so) is that which signals the successful completion of problem solving. These characteristics of Dewey's theory by which he avoids subjectivism are just that which should be expected from a theory which holds that mind is an instrument for dealing with emergencies. If the mind is assigned that kind of role, then it cannot be said to play a part in the happening of an emergency—in determining that an emergency exists—nor can it operate at the later end of inquiry in deciding that an emergency has been put to rest, or satisfactorily handled. It is only between these two objective occurrences that the mind performs its function.

This observation leads readily to another: the activity of mind—that is, the reflective thinking, the controlled observations, the intellectual
consideration of intellectual resources, and the construction of an hypothesis concerning how to solve a problem, which together constitute what the mind does when at its best—are necessarily intermediate between the occurrence and the resolution of a problematic situation, and instrumental to that resolution. The terms "intermediate" and "instrumental" mutually imply one another. Consider what this means when applied to intellectual resources such as those which schooling transmits. When considered from the standpoint of one who is trying to learn them, intellectual resources are to be regarded as instruments for the accomplishment of specific tasks, or the securing of specific goals. And this implies two further ideas, one concerned with what it means to understand such resources, and the other with the testing of that understanding.

According to the instrumentalists, to understand any particular communicable content—like a generalization, a rule, a statement of regularity in the ways of the universe—is to project what it may signify about how to deal with a present problem. Its meaning is its instrumental role. For example, the statement "Sugar is sweet" means that if sugar be sprinkled on these strawberries, which are otherwise something of a problem because exceedingly tart, the berries will become sweet and more readily edible. Furthermore, whether the meaning has been correctly understood is determined, in this example, by the test of eating. More generally, if the predicted experience in the light of which one had acted bears out the expectation, this accord of consequence with anticipation serves to test the correctness of one's understanding.

What this means for education seems clear. It seems to mean that any part of the cultural heritage, to be taught to future generations through the agency of the school, may be taught with maximum effectiveness only when and as it can be accorded an instrumental role in the experience of the learner; which means, in simplest terms, when and as it can
be used in application to an experienced "real" problem. The work of the school or of its teachers is essentially a matter of presenting an environment which is capable of stimulating learners into purposeful action, so that problems arise of a kind which can be solved intelligently only by acquiring and then applying to them the upper level resources (resources beyond the level of mere common sense) of an advanced civilization. If, for example, children are to learn the fundamentals of arithmetic, then get them to engage in projects which accord with their interests, and which, above all, require for their successful completion the manipulation of quantities. In this way arithmetic is learned instrumentally. When explained in the above manner, the instrumentalist educational doctrine seems readily understandable and no doubt appealing. (As will become evident in the following chapter, the appearance is misleading.)

However appealing it may be, instrumentalism is after all a philosophic theory, and therefore controversial. Like any such theory it is acceptable to some but quite unacceptable to others. One difficulty, for those who find it unacceptable, is encountered when considering the instrumentalist proposal about the nature of a problematic situation. According to that proposal, a problematic situation is determined to be such "inherently", apart from the acknowledged purposes, plans, and interests of the person for whom a difficulty has become actualized. This is a marked contrast with the usual way of speaking about the reality of a problem; it is, in fact, distinctly metaphysical. In non-metaphysical discourse, we would say that nothing in the flow of events is a problem, and nothing may be considered as the termination of a problem, except from the viewpoint of some creature and its attempts to preserve itself from harm or hunger.

Consider, for example, a newly born turtle finding itself on a sandy beach
some distance from the ocean where it will make its home. On its way to
the water the turtle is in danger of being eaten by a bird. If such a
bird appears, then surely the turtle may be said to have a problem.
His life is in danger. What about the bird; does he have a problem? In
this kind of situation, no. The turtle is helpless or defenseless if
cought. From the bird's standpoint, therefore, the catching of the turtle
is not a problem, it is simply the eating of available food. If, furthermore,
we refuse to take the perspective of the turtle, there is then nothing
problematic in the entire episode; there is simply a natural flow of events,
with no naturally demarcated beginnings and endings. The happening of
a problem, its duration and its termination, are all distinguishable only
by an act of judging, of deciding so from within a given orientation;*

(New York: W. W. Norton, 1940.) hence, by the determination of a mind.
Furthermore, in a usual perspective, one could say that a problem may exist
for someone without his being aware of it, and also, that a problem may be
judged to have been solved when it has only been changed in character, or
postponed to an unsuspected but greater difficulty later on. This accords
with the idea that events are simply events, not problems, unless judged
to be so by the decision of a fallible and judging mind. But this way of
speaking about happenings and problems is not available to an instrumentalist.
His philosophic doctrine requires him to insist that some situations are
by their nature problematic, and some eventualities are by nature terminations
or resolutions of inherently problematic situations. Indeed, when pressed
on this point, Dewey replied "I do mean to say that it [a doubtful situation]
can exist without a personal doubter." [Problems of Men, p. 349. (New York:
Philosophical Library, 1946)] It seems clear that the defense and explication
of instrumentalism is dependent upon maintaining a particular metaphysical
stance. It is not only metaphysical, and on principle incapable of being found true or false by empirical testing; it is a rather strange metaphysics, requiring an act of faith to support it. How else could one suppose that there can be a doubtful situation without a personal doubter?

The metaphysical underpinning of instrumentalism is a consequence of supposing that the mind is, by its nature, an instrument for dealing with emergencies. To say that the mind is called into action by having first experienced a difficult situation is to be well on the way toward believing in doubtfulness as a non-mental reality. To avoid this or any other peculiar metaphysics, one might wish to try out a different choice for XXX whatever is to be called the mind's most essential nature. Let it be noted that we have leeway here, being free within some limits to single out this or that mental activity as being, in a preferred conception, the defining characteristic of what we intend to call "the mind." Starting from any ordinary way of conceiving certain kinds of events as belonging to the category XXX "mental," we can alight upon one or another of the more prominent clues by means of which the categorization is effected, and see whether it can be exploited for purposes of definition. The instrumentalist theory, for example, could easily have originated in a customary supposition that minds do their best and hardest work when trying to realize purposes, under circumstances wherein the realization of purpose has been blocked by some difficulty standing in the way. That is readily understandable. Is there some other equally ordinary but quite different facet of the mental offer which could an alternative place from which to start?

Perhaps just as typical in ordinary conception as the instrumentalist, and holding promise as possible starting point for construction of an alternative, is the connection we tend to posit between mind and meaning; the mind is conceived as being active in a very typical way XXX when engaged in reading meaning into things, as in taking dark clouds to mean probable rain or a
flow of articulated sounds to be words in a unit of discourse. This widely celebrated aspect of the mental would seem to be as fundamental as that which the instrumentalist had singled out for theoretical elaboration. But to be sure that any theory which might result from that kind of starting point is worked up into a genuine alternative (rather than a mere variation upon a common theme), it would be best to locate a significant point of departure, a branching onto a different road, and to do so as close as possible to pre-theoretical beginnings. Accordingly, let it be noted that the strangest and least readily acceptable part of the instrumentalist theory is that part which explains why or in what kind of circumstance the mind comes into play. The instrumentalist theory needed a conception of something that could be said to "trigger" the mind; something external to the mind which could account for its coming into and going out of action. Now, if it could be possible to eliminate any need for a triggering device, that as a starting point would be sufficiently different to assure the construction of a significant alternative. A kind of theory which gives attention to mind in its connection with meaning, and which contains no triggering device, would seem to be what is called for.

A most likely idea about how to advance toward such an objective is to propose that the mind is continually, rather than intermittently, active. For if it could be said that the mind is always active, then there is no need to explain under what circumstances it begins to function, and under what circumstances it may rest upon its accomplishments. Suppose we say that the mind is not occasional, it is continuous; what then would be its central function, its most essential nature?

The function of the mind (so it may be said) is to destroy the solipsism of the present moment, to establish for what is given to experience a meaning that extends beyond the confines of what is directly given.
The expression "solipsism of the present moment" is meant to emphasize the immediacy, the here-and-nowness of first hand experience. That which any person may be said to have, with all of the fulness of experience, is always and only a present moment. In the sense of "having" here intended, one can never have either a past or a future moment, not even that one which is imminent. What was still in the future a moment ago as anticipation and potential is never experienced directly, for when it may be said to have arrived, it is then no longer a future. And when it too slips by into the past, it is quite as much beyond recovery as if it had been a million years ago. In consideration of that fulness which characterizes immediate experience, it makes sense to say that the future exists only by expectation and the past exists only by virtue of habit and recall. Nevertheless, any give moment is more likely to be infused by what is not directly present within the confines of that moment. Whatever else than the given is there, is there by action and office of the mind. For, we may say, it is the function of the mind to establish continuity of a presently given time and space with other things and events which are not, in an ordinary sense, "there" with the immediacy of experience.

This way of placing a construction upon the term "mind" is not without difficulties. For example, the concept of a present moment cannot be made exact. It cannot be said to have any measurable duration, such as a demi-second or a milli-second. Nor can it be said to have no duration, as if it were an instantaneous slice separating past from future. Nevertheless, this incapacity is not fatal to the concept and its usefulness. This term, "the immediate present" and its synonyms is one which language permits as meaningful. The notion of a something which is given to experience and, being given, is distinguishable from what is not so given, has been found necessary in much of philosophic discussion. What kind of construction a philosopher places upon, for example, the reality of what is given in contrast
the reality of

to that which is inferred is a matter of serious dispute, over which philosophers divide into conflicting schools of thought. In a context of educational philosophy, those issues for disputation may be avoided.

A different sort of difficulty is the idea, necessary to the theory, that mind is continuously active. Confronted with this suggestion, one's tendency might be to think of those moments when consciousness, which is often regarded as one of the most essential attributes of mind, is absent, as during sleep. Do you mean to say (someone might ask) that when a person is asleep or for other reasons not conscious, his mind is continuing to carry on its function? Surely the answer is Yes. Reflection upon anyone's experience would provide evidence of this. A sleeping person may be awakened by some sounds and not by others. Those which fail to awaken are not necessarily light or soft, and those which do awaken are not necessarily loud or harsh. A soldier in combat may sleep through an artillery barrage, if it is outgoing, but awaken at the faint sound of a snapping twig. What makes the difference is not a sensory quality of sounds as such, but rather the meaning of them, which comes into being by an act of interpretation and projection. Interpreting and projecting is the mind's doing. The mind breaks down the isolation of the present moment by attributing meaning.

Still another potential for difficulty is that the familiar facts of ordinary experience which are exploited in this construction of a theory may be over-exploited, pushed to opposite and almost equally possible extremes. On the one hand, to point out, as the theory requires, that all of life is contained within a present moment is to risk a suggestion of hedonism, of seeming to imply that if all that anyone ever really has is the present moment, he might just as well wallow in it. On the other hand, to say that the mind is busily relating each present to something else
not present--to causal origins, to possible consequences, to calculating the possibility of being pleased or sorry later on--is to invite a suggestion that the intelligent human being (the sort who uses his mind always to best advantage) is forever thinking of what comes next, never allowing himself to bask in the warmth of immediacy; thus the mind comes to seem like a grim Puritan who denies to himself the joy of living. If in calling these possibilities "extreme" one may appear to be begging the question, it is yet possible to find profit in a brief consideration of each.

Hedonism has the charm of being a temptation, like another Martini or a rich dessert. If only one could afford to embrace the sensuous present, savor to/XX every having in its full immediacy, one might never have to accuse himself of having failed to appreciate all that is provided. But the feast is there only for those who have toiled to grow and to harvest. Even the usurpers and the inheritors, whose way of life may seem an evasion of prudential concern, cannot manage to lose themselves entirely within the present. Inevitably, simply because one has a mind, one/XX the past and anticipates the future. But even if that were not so, it is the case that living only for the present would have consequences of an unfortunate kind. The conditions of life are such that doing something now in the interests of later on is necessary to the capacity for continued satisfaction of need. If one does not prepare a haven from the blizzard, one perishes. But it is best not to emphasize too much the idea of investing capital for the future. The idea of mind as continually active is better explained by reference to the ubiquity of change. Either change or the possibility of change is never absent for a moment. In language that is a little crude, but where polish is of no great value, we can say that changes are both internal and external. We ourselves are changing constantly within, although not always with awareness.
Having eaten last some time ago, and having been for a while satisfied, one's internal condition is now changing toward hunger. And while that is changing, the external environment is also changing. A while ago the sun was shining, but now dark clouds are threatening rain, which could be bad for the picnic. Although many kinds of change are regular and predictable, emergencies or sudden happenings, unexpected threats or opportunities, may come along at any moment. It is this ubiquity of change, and the indeterminacy of how, whether or in what ways change may influence one's welfare which makes the constant watchfulness of mind to be valuable or essential in the support of life. A genuine hedonist could survive only in the Garden of Eden, where every thing and every happening is beneficent.

As for the grim Puritan idea, there is at least this to be realized: the human mind can be so zealous in the pursuit of advantage as to threaten the realization of what it seeks. The classic case of mind gone astray is the person who denies himself every present satisfaction in behalf of the future, who saves for last that part of the cookie that has the cherry on it, but who can never find that the future has arrived, who forever denies himself the ultimate bite. No doubt it is good to be aware of this possibility, even if one is not sure of what to do about it. When is it safe to spend rather than save? In a world which contains a California, it is not likely that an informed person can overlook the claims of immediacy, of sensuous appeals, even of simple goods like basking in the sun and viewing the natural scene. But in the background of awareness one does not forget the hazards of risking the future, of having to pay the piper, of coming upon old age with too little prepared. Even if a person should decide to live adventurously, to take risks rather than to minimize the quality of living for the sake of mere safety, his deciding so can be either unintelligent and foolhardy, or else thought out with awareness of what one is doing and with acceptance of responsibility for what happens. Perhaps a fortunate
person can fall into a good life by pure happenstance, but if so, he
cannot congratulate himself; it was not his accomplishment. Generally,
if a life should turn out to be rich in immediate qualitativeness and
yet sufficiently guarded against foreseeable hazards, then this happy outcome
is the achievement of deliberate intelligence rather than of
unthinking spontaneity. If the good life is attainable by deliberate trying,
then it is so by virtue of the mind and its functioning. But we are
cautions to realize that our minds can operate against our best interests
without its being evident that have departed from doing that which the
mind most characteristically does.

What the mind does is accomplished by bringing, to the interpretation
of what is given, structures of belief and attitude, plus whatever expect-
atations those structures have the power to provoke. It may be that the
term "structure" is not the best choice of words; it suggests a degree of
integration in the mind's contents that may not be true of the disorderli-
ness and fragmentation which is just as characteristic of minds as the
neater packages of conceptual schemes which are also to be found there.
To speak of the mind's contents is to signify everything that enables a
person to read meaning into objects and events, to impute likelihoods and
trends to unfinished episodes, or in general, to anticipate a likely future
for something present by invoking residues from the past. It is possible
that nothing in the mind is wasted; all of it gets to be used again somewhere
and somehow. But even so, it is surely the case that some of the mind's
content is more often put to use in making one's life meaningful than other
little queer notions and odd attic storage that have yet to earn their keep.
There is a popular game for which the categories animal, vegetable, and mineral
are among the most frequently useful of ideas for dealing with the unknown
(even more useful than knowing the dimensions of a breadbox). This trivial
reminder will serve to introduce the idea concerning education which has
been the objective of preceding discussion.

The mind is prepared for coming to grips with next episodes to
whatever degree it is stocked with relevant categories and information.
For the unpredictable future of later adult life, children and youth may
prepare only in a general way, by learning something about what kind of
world this is, what kinds of goods it offers, and what kind of person I
am. Especially the breadth, but also to a lesser degree the depth, of
what is learned in these three categories is what determines the degree
of preparedness with which anyone faces the future.

This account of the matter is offered in contrast with the instrument-
alist, which would rely not upon what is known, but rather upon a
general method of being intelligent, resourceful, and confident in the way
one's mind works. Here are the choices we confront: we may try to educate
for an increased likelihood of success in dealing with the future either
by surveying the world and our ways of responding to it, in which case the
interpretive theory of mind is an appropriate theoretical tool; or else we
can hope to prepare by providing frequent occasions for stimulating the
mind to do its best, in which case the instrumentalist or emergency theory
is a likely reliance. These are not the only alternatives, of course.
They seem to be the most appealing at this time, or in the near future. Whichever
is chosen by any educator must be chosen for reasons which fall short of
proving its superior adequacy. Such is the nature of the case. But if no one can prove that this or that theory
of mind is best, this does not mean that intelligent choosing is therefore
impossible. One or the other will be found better suited to its uses in
thinking about education. An exploration of that issue will occupy
the next chapter. But there is another possibility to be taken up first:
the possibility of refusing to see the two concepts of mind as alternatives. Why, someone might ask, should we have to choose one or the other; can we not embrace them both? In hopes of obviating that question, a few of the stronger contrasts between one theory and the other may be mentioned.

There is a marked contrast between an instrumentalist and an interpretive theory in what is said to be "given" to experience, as against what is contributed through acts of interpretation and judgment. In the instrumentalist theory, the presentness of an emergency is given as part of an experienced environment. In the interpretive theory, however, what is given in experience is only a sensory core, from which the existence of enduring objects and of natural events must be inferred by action of the mind. For example, if I perceive a fountain pen on my desk, the fact that it is indeed a fountain pen—that is, an object having an independent reality apart from my perceiving it, and such that in its mode of operation it will leave upon paper a guided line of ink—is not a part of what is given. It is a construction placed upon a given core of sensation; the construction is accomplished by way of inductive habit, expectation, or implicit prediction. From the familiar sight of the pen, I predict how it would feel if picked up and what would happen if the point were brought into moving contact with paper. These are matters about which I could be wrong. To whatever extent such inference or construction is executed deliberately, it is the sort of thing commonly called a judgment. When this is applied to situations which might be classified as problematic, the presence of a problem in objective reality is not something given in immediate experience, it is something judged to be so by an act of the interpreting mind. In this too it is possible to be mistaken. A person may think that he has a problem until further experience show his earlier classification to have been a false alarm. The same kind of position applies at the other end of a
problem solving sequence. Whether or not a problem is solved, and at what level of adequacy to the demands of a situation, is a matter of judgment, and not, therefore, a directly experienced state of affairs. A person may think his problem to be solved, but discover later that what had been judged a solution was but a temporary stop gap.

Another point of contrast may be observed concerning relations between purposing, or the formation of purposes, and other activities, especially those which are attributed to mind. The instrumentalist theory suggests that problems occur in situations wherein the execution of a prior purpose is blocked. As an instrumentalist sees it, a person may be engaged in some kind of activity—presumably, therefore, an activity having a goal or purpose—when he discovers that something in his situation does not allow for the smooth and easy continuation of whatever it was that he had been doing. He has a problem, and it is his awareness of such that calls the mind into play. Mind is, therefore, conceived as being instrumental to the execution of purpose. That the mind is operative in that way is not to be questioned. But if mind is said to be instrumental to the execution of prior purposes, and if that is what is most distinctive of the mind, then it would seem that the mind is not responsible for purposes formed, but only for the execution of purpose. It is at this point that a contrast with an interpretive theory of mind is especially evident. Instead of supposing that purposes are somehow given, and that the function of the mind is the execution of purpose, an interpretive theorist would say that purposes are a characteristic product of the mind's activity. The choice of purposes is a kind of behavior which can be performed with more or less of insight or wisdom. Perhaps the term "mistake" does not apply here. A person is not usually spoken of as being either mistaken
or right in forming his purposes. But it is commonly believed that people are responsible for the kinds of purposes they construct, and that in this, the role of informed intelligence is evident in high degree. (Within the interpretive theory, to speak of that for which anyone may be held responsible is to speak at least indirectly about the doings of the mind.) The mind is engaged not only in the execution of purpose, but also in the determination of purpose.

The point of these remarks is only that of revealing a contrast between one theory and the other. But to pursue those distinctions in detail would be to veer off the track into purely philosophic problems and reflections. Admittedly, there is nothing sinful about such veerings, but they would contribute nothing to philosophy of education. The consideration of differences is not intended to produce arguments about which theory is correct, nor to accomplish anything that might be called a "true" theory of mind, but only to show that the differences are prickly enough to discourage a cowardly and eclectic embracing of both conceptions at once.

"Conceptions" is a better term for what has been said about mind than "theories". Nevertheless the latter term is allowed to stand, first, because there are indeed theories from which the above materials are drawn, and second, to suggest by means of connotations that what is said about the mind is not intended to describe a real entity (real, that is, in the way that the brain or the heart is real), but rather to yield a convenient short-hand designation for those characteristics of human beings which issue in thinking, knowing, purposing, doubting, etc. And the purpose behind that is to facilitate thinking about education, and in particular, about how to cultivate the mind in ways which prepare persons to deal more effectively than they otherwise might with an unpredictable future. How
these two conceptions of mind are employed in a context of educational concern is subject matter for the next chapter.
What is the best way to influence the growth of mind in preferred directions and by deliberate intent? The question overwhelms a modest workaday educator with the seriousness of it. If a teacher presumes merely to help a learner in the manipulation of fractions or in the recognition of adverbs, not too much is attempted, and anyone might think it is no big deal. But to influence the mind in its development, to stimulate the growth of intelligence, is an awesome task, not to be entered into lightly. For teachers at their daily tasks, the routines of instruction, the low hum of the not-too-busy classroom, conceal the scope of challenge and attendant risks. But in doing philosophy of education one is forced to confront the responsibility squarely and to think the issues through with the greatest care. Although the mind of a pupil is tough and does not yield readily to pressures applied by schooling, this recognition cannot excuse an educator for wrong moves or false theories. If deliberate education manages to make a significant difference, it may be said correctly enough to be a difference in the cultivation of mind.

Confronted with so great a task, an educational philosopher will welcome any available way of simplifying the work of theory construction. Accordingly, in this chapter the same two concepts of mind that had occupied the stage in the preceding chapter will return, with a different focus. The question to be pursued now is something like this: given a concept or a theory of mind, what kind of educational program would seem to be compatible with the cultivation of mind and with preparation for an uncertain future? How is the manner of educating to be different in the light of one theory as against another?
Discussion begins with that one of the two theories which is currently better known, because more recent: the emergency or instrumentalist theory. It has the advantage of contemporary popularity, and also of lending itself to a clear and straightforward educational application. It encourages the growth of mind and to prepare a learner for the future, place him in a stimulating environment, encourage his interaction with it, and as difficulties or obstructions occur, help him to confront his problems and to appropriate resources from his civilization which will help to solve them. This application of an instrumentalist position to education is most readily understood through contrast with more traditional educational procedures. In schools of the past (and, to a large extent, today also) teachers and curriculum planners could plan a sequence of instruction ahead of time. On any given day, a teacher could say to his class "Today we begin the study of ______," filling in the blank with specific school-taught materials, like the study of compound interest, of Columbus in 1492, or of osmosis across membranes. This predictability was expected to permit a coherent sequence of learning not only from day to day but even from year to year. By contrast, a problem centered approach based on instrumentalism would seem to be incompatible with a pre-planned program of studies. A requirement of the theory is that learners discover for themselves the problems they encounter, and that their problems be "real"--that is, not created by a teacher for instructional purposes, as in the traditional school, but as arising from a genuinely problematic situation. Presumably, problems which satisfy theoretical criteria cannot be programmed in advance. (It would be possible, however, to construct an academic calendar in the rough, a calendar of planned activities rather than of scheduled lessons.) The important consideration is that there be plentiful occasions for the
happening of problems, for "indeterminate situations" to emerge into historic reality.

Several advantages are claimed for problem centered education. (1) It is said that learners are strongly motivated to learn. They are motivated by realization that whatever they might be struggling to learn will be good to know because it promises to be useful in the execution of their own purposes, in the realization of their own plans and values. (2) It is said that instrumental learning provides a situation within which or for which the content of learning becomes meaningful. When it is possible for a learner to apply resources to a specific and real-to-him situation, the instrumental value of those resources confers upon them a specificity and clarity of meaning. (3) It is said that the entire situation and sequence of activity and learning comes to a close in a testing and verifying of that which is learned instrumentally.

These educational virtues, if they are legitimately to be expected, are of a high order. To see whether it is reasonable to anticipate such obviously desirable qualities, consider the above claims one by one.

The first of educational virtues claimed for instrumentalism is that learners are well and truly motivated; they have a reason for wanting to learn which originates within their own concerns. This follows from the fundamental conception of problem centered education, and therefore, as a relationship of concepts, it can hardly be denied. What is claimed is that when a purposive activity is prevented from proceeding smoothly by an obstacle encountered, the actor to whom this happens is motivated by his prior purposefulness to try to overcome the obstacle so that he can get on with what he had been trying to do. With that, one can only agree. If anything of an adversely critical nature is to be said, it will have to be directed against the applicability of this account to the kind of learning
that schools are especially concerned to promote.

On that issue, the recent history of Progressive education in America is informative. The greatest degree of attained success in classroom experience with problem centered procedures was found at the lowest levels of the school ladder. At those elementary levels, learning is closely related to activities of playing and of making physical objects. That fact makes it easy to apply the instrumentalist idea. Children can be surrounded by an environment rich in materials possessed of sensuous appeal; they can be helped to form projects for doing interesting things to and upon those materials. For a large part of the school day they will learn readily, even spontaneously, simply because they enjoy what they are doing. They will learn, for example, how to mix colors, how to use tools like hammer and saw, how to mold clay into amusing shapes, even, in an especially favorable environment, how to read and to manipulate quantities. The reason for this apparent suitability of the instrumentalist idea is that the elementary contents of school instruction have utility to children in their lively interaction with an immediately presented environment. A favorite idea of the romantic naturalists seems true of young children: place them in a colorful and supportive environment filled with stuff to do something with and they will form purposes, encounter difficulties, and learn with a will. But children soon get beyond the stage where they can learn by playing and by the manipulation of physical things. And then, as Progressive educators discovered, the instrumentalist theory becomes more and more difficult to apply.

As children grow older, two happenings together create the difficulty. One is that the interests of pupils become more divergent from the materials of an academic curriculum. Children and youth beyond the stage where they are mainly concerned with play and with constructions in physical materials turn toward their peers and the group culture. Their concerns are with how
to get along with other people, how to get from reluctant parents more
to get along with other people, how to get from reluctant parents more
money and more freedom, how to manage a sex life, and how to participate
in out-of-school group activities. Perhaps it is possible, as some educators
do propose, to structure a small part of curriculum around interests, or in
relation to interests, of that sort; but more than a small part would be
an abandonment of the school's main function. The other happening is that
the materials of instruction in an academic curriculum are related less
and less directly to the immediate environment, the first hand environment,
of children and youth. As children grow in knowledge and sophistication,
the materials of instruction which will most enrich their prior learning and
expand upon it are increasingly remote from the sensuous environment of the
classroom, and more and more constituted by symbols and abstractions.
Anti-intellectuals are apt to question the necessity for this, at least for
some children, but to accept willingly for children an early end to
intellectual development is anti-democratic. The minds of growing
child must come to grips with objects and events distant from the immediate
scene, like the contents of history and geography, or not directly
perceivable, like atoms and molecules, the state and the constitution,
linguistic rules and scientific laws. If this fact be confronted honestly,
it must be confessed that a gulf widens between the concerns of a scholar
which relates to his immediate environment, and the broader background of
his world, which must be brought to his attention by school instruction and
which has no immediately compelling significance for the here-and-now world
of involvements in action. Sooner or later anyone who is to reach the status
of being well educated will learn some algebra, some ancient history, some
physics and chemistry. But for its possible relevance to the child's life
outside of school, there is no particular moment when any of it really ought
to be learned; whether this year or next does not much matter, except perhaps for reasons of convenience in school planning. How then does a learner in school come upon problems which have their origin in his active and purposeful relations with an existential environment?

There is no easy answer. Romanticism in educational theory suggests that ingenuity and inventiveness will find a way. The usual way turns out to be some form of project method, which means helping learners to become involved in an elaborate program of activities having a clearly recognizable purpose and goal, and which, because of its complexity, can entail at least a modicum of academic learning in the intermediate stages. A high school class in civics will undertake to examine the municipal water supply system. A youngster interested in high fidelity reproduction of music will undertake to build an amplifier and associated electronic controls. Someone else will take up the task of programming a computer to play chess.

Behind all the diversity, what characterizes such projects in common is a high degree of specificity in the envisioned goals, which helps to account for the appeal they hold and the degree to which they have a power to motivate; plus a possibility that the path to the goal may be diverted from an immediately expeditious route to another avenue which takes longer because it involves learning some underlying scientific knowledge. Students of the municipal water supply are expected to learn from biology whatever is necessary for understanding how and why micro-organisms can be dangerous to humans; from chemistry, something about the means for killing bacteria; from physics, principles governing the flow and pressure of fluids in conduits. The high fidelity buff is expected to learn fundamental knowledge concerning capacitance, induction, Ohm's law, and the like. Those who play
with programming a computer are expected to learn a two-valued logic. According to its advocates, the project approach can succeed because the basic knowledge is perceived by learners as instrumental to the execution of their own well motivated goals.

Those who reason in this way may be blinded by their enthusiasm to a few facts which a hard headed learner may find important. Ours is a kind of world in which the practical achievement of specific goals is realizable without any need to learn the scientific knowledge which may be said to make the technology either understandable or possible. Happily, we are able to digest food and convert its energy without knowing anything about the physiology of nourishment. A similar happy circumstance applies to many other kinds of achievement which were first made possible, or first explained, by advances in science. Someone works out a technological application, and marks a route which no longer requires, of those who follow, the same kind of deep understanding and creativity which had functioned in his original fabrication. Thus, for example, a person interested in building a phonograph amplifier must either create his own circuit design or else use an already available and published design. To do the first, with any likelihood of getting good results, requires a degree of knowledge that is expected of professional engineers, not of young learners just approaching the fundamentals. Intelligence, if it is operating, suggests the second alternative. To apply a published design to the construction of an amplifier does not require of the builder that he learn anything whatsoever about the physics of electricity. If he has only a schematic diagram to work from, he will need to learn a special symbolism, and he will need to convert the information conveyed into a physical lay out, all of which could be challenging and interesting. But even so, he has no need to learn anything of science. If a
teacher had aroused his interest in the project, and then told him to delay the execution of it until he first learned some physics, the potential music enthusiast might feel, justifiably, that he had been tricked. The stronger his interest in being able to play music from a high fidelity source, the greater will be his resentment against anyone who tries to force him into an unnecessarily unnecessary detour through basic science. The motivating force of which the instrumentalist speaks is more likely than not to work against rather than for a teacher's purposes in the stimulation of learning.

To sum up: the instrumental idea applied to schooling is that pupils or students can be motivated to learn fundamental forms of knowledge if they can be placed in situations wherein that knowledge is instrumental to achieving specific non-cognitive goals which have a power to compel interest. The trouble with this idea is that intermediate forms of knowledge, of the how-to-do-it variety, abound and make the acquisition of underlying and more universal knowledge unnecessary. Hence, the stronger the motivation of a learner to achieve his own goals, the less likely he is to learn willingly that which can only delay unnecessarily what he hopes to attain. And to conceal from learners the existence within their cultural heritage of the more direct routes to various practical or interesting goals would be not only bad education, but also immoral.

There is another difficulty. If one says that the motivation for learning is not to acquire the supportive material for itself, but rather for its instrumental application in a specific setting, then supposedly the motivation applies only to that much of the cultural heritage as may be found necessary to the particular goal. A learner is motivated—instrumentally not to learn physics in general, but just some particular part which is most directly related to the achievement of a particular purpose.
difficulty with this is that systematically organized knowledge is not to be acquired in bits and pieces. It is simply not available—not stated or expounded—in a form which permits an instrumental learner to find and to understand that one portion in which he is interested. There is the hazard of a technical vocabulary, plus a constructed theory, plus a maze of concepts, the acquisition of which probably requires some more or less organized effort to learn over an extended period of time. For the practical application of the instrumentalist ideal to education, there would seem to be too many pre-requisites.

A second virtue claimed for an instrumentalist educational process is that whatever is learned for its role in resolving a problematic situation is learned with clarity of meaning. The content of learning is said to gain in meaning by seeing how it applies to a concretely real situation (instead of being learned as an abstraction or as having no known bearing upon the learner's immediate scene and concern.) If a student learns about electrical circuits through his personal experiences of building circuits in physical reality, then it would seem that otherwise abstract ideas concerning the flow of electrical current become meaningful and "real" to him. This is the expectation.

A question to be raised by this claim is one concerning relations between generalized forms of knowledge and the particulars of experience. It is a kind of question that lends itself to dialectical method. In traditional dialectical argument, a standard technique is to divide the realm of possibilities into two mutually exclusive parts, and to do it in a way which suggests that the subject of discourse must fit within one or the other. Borrowing that technique, one could say that in any given episode of problem centered learning, either the learner has already encountered and understood
the appropriate intellectual resource, or he has not. Consider the first
possibility: if he has already learned the material which could be a resource
for a new situation, then he must have learned it in a generalized form;
for if he had not, then he could not think how to apply it to a new and
different situation. If that is the case, then we can give him credit for
realizing the potential applicability to a situation different from that
within which he had learned originally. But if he had already encountered
the content in question previously and had acquired sufficient understanding
that he could apply it creatively, then credit (educational credit, that is)
to must go, the previous learning, and not to the more recent situation wherein
it proved to have instrumental value. Since what is at issue here is an
argument favoring instrumental learning, then it would appear that the first
possibility cannot be that which the instrumentalist had in mind. It must
be the case, therefore, that virtues claimed for instrumental learning are
realizable in the second possibility: in, namely, that kind of situation
wherein the content to be learned is not already known and generalized from
a prior experience, but is to be learned for the first time. A difficulty
appears at once: if certain material is previously unknown to the learner,
then he cannot himself figure out its application to his present situation.
If he is to learn it at all, it can only be because someone else, aware of
his problem, tells him about this potential resource and assures him that it
is just what he needs. But if that is the case, then we must suppose that
instrumental learning is of a kind which occurs only when a learner is advised
by another, and is motivated to learn on faith, or by acceptance of the advice
as being probably good. What happens then to the claim concerning meaning?
One way or another, the meaning of materials to be learned must be acquired
before its applicability to a particular problem can be anticipated.
To understand this last point, consider an example. Suppose that a child is confronted with a piece of grapefruit and told to eat it with his breakfast. If he has already learned about sugar as a sweetening agent for ingesta, then he can easily apply that knowledge to the problem of bitterness in the grapefruit. But in that case, of course, he could apply his previous knowledge instrumentally only because it was already meaningful to him, and meaningful with a degree of fulness and generality that permitted him to think for himself of its potential applicability to his present situation. If, on the other hand, he did not know about sugar, then someone else must be aware of his situation and offer to advise him to sweeten the grapefruit with sugar. If the child in this situation is blindly trustful, he may comply with advice given by another and without needing to understand what he is doing or why. But if he is to do whatever he does with understanding (in which case he treats the proferred advice as something to be adopted hypothetically), then his hypothesis concerning the sugar requires that he understand something about sugar in general before he conceives the purport of the advice. Therefore, to repeat: the instrumental application of ideas understood by the mind requires that those ideas be there in the understanding from some previous and non-instrumental episode of learning. It is only by virtue of an achieved or possessed understanding that instrumental applications to encountered situations may be worked out as acts of creative intelligence.

From these considerations, the conclusion to be reached is one which the instrumentalist cannot look upon with any pleasure. It is, that if we would educate children in such a way that they will be able to apply what they have acquired in school to their specific situation, then they must have been brought to learn the resources of their civilization as potential
resources first, in general, and by way of surveying the world and what it has to offer, before any need for those resources has been experienced.

The third claim made for problem centered education is that a complete episode of dealing successfully with a problematic situation ends up with a testing or verifying of the ideas in mind which had guided the problem solving action. If this claim can be sustained, then it would be a strong point in favor of instrumentalist education, for it would mean that a learner enjoys an added advantage of finding out, at the close of each learning sequence, whether his thinking, which made use of whatever intermediate learning is found useful, is good thinking or not. He would discover whether he had correctly read the needs of his problematic situation and had provided for them in a successful way.

Philosophically considered, the instrumentalist theory concerning verification is a sore point in the critical examination of John Dewey's theory of knowledge. A peculiarity of Dewey's theory is his proposal that the method of intelligence, as it operates in ordinary situations of daily conduct, is the same as the generalized method of science. If this could be accepted, then conceivably it might follow that an intelligent act is accompanied by a testing and verifying of the decisions which had precipitated action, for it seems correct to say that scientific method involves such verifying as an essential part. Also, if it can be accepted that intelligent acts are of a problem solving sort, and that problems are either solved or not solved as an objective, environmental determination, then the successful resolution of a problematic situation would seem to provide a proof of correctness for the intellectual processes which had led to success. But it was this feature of Dewey's theory which was most subject to attack by non-pragmatists. They accused Dewey of holding that the truth of an idea is determined by how
well it works in practice, a crude and easily criticized distortion prompted by misunderstanding. But the correct understanding, not subject to easy attack, is unfortunately elusive.

One is tempted to deal with these ideas in their original condition—that is, as epistemology—and to subject them to philosophical criticism. But philosophic dialectic is a never-ending process, and what is needed here is a basis for reaching a decision concerning how best to educate. With that in mind it would be better to consider the instrumentalist theory of verifying as a proposal about ordinary human experience, and to ask whether it seems true to one's sense of that experience.

Is it the case that whenever we are being intelligent—whenever our minds are most characteristically occupied—we are engaged in trying to solve a particular and distinct problem, a problem having distinct boundaries, such that finally we either succeed or fail, and if the former, we are given proof by the fact of succeeding that we had been right in what we did? Perhaps those who have adopted Dewey's theory in this matter would want to say Yes, our experience is really like that. How nice it would be to live a kind of life in which one is being rewarded time and again by clear proof that one had done the right thing, that intelligence had triumphed in this, that, and the other situation. If experience were like that, then an incentive to apply intelligence to the guidance of conduct would be so constant a characteristic that the of stupidity remaining in the world would seem astonishing and inexplicable. Let it be suggested, on the contrary, that daily experience is not a kind of affair in which one is either trying consciously to solve a particular problem (a problem clearly recognizable in its shape and demands) or else resting between times, one's mind idling while waiting for the next emergency to call it forth.
If, in a randomly selected moment, a person might be asked whether he is engaged upon a problem, he might very well not know how to reply. If he were to suggest that, after all, there is always something problematic waiting to be worked on, this would be cheating. To say that there is always one emergency or another, one is never entirely free of them, is tantamount to destroying the idea of emergency, and of mind as instrument for dealing with such.

The argument at this point is an appeal to a reading of experience; it is a way of asking, in effect, how you interpret your life: is it this way, or is it really more like that? In the same vein, then, consider placing in opposition to the instrumentalist idea about verification another which is perhaps more reasonable. It may be said that, in practical conduct, as distinguishable from scientific inquiry, a person is rarely in a position to verify the judgments which guide deliberate action. The reason is simple: in deliberate conduct, whatever one does represents a choice among alternatives; and whether one has made the right choice cannot be decided by the consequences of acting out only one of the possible courses of conduct. An example will make clear the point of the observation: suppose a young man is considering whether to marry or to remain a bachelor, and finally decides that, all things considered, it would be better to marry. Even if his marriage turns out happily, this outcome does not prove that he had made the right choice. It is possible that he might have achieved greater happiness had he remained single, or had he married the girl next door instead of the model from downtown. And what might have happened had he made a different choice cannot be learned.

Note that it is in situations where action is not quickly determined to be a failure that the inability to verify most obviously obtains. It is the relative success of conduct, or at least the non-rejection of it, which
precludes finding out whether a person had been right or wrong in his choice among alternatives. To speak in this way of success, even if qualified, might be taken as agreement with the instrumentalist theory. But it is not so. As indicated above, success does not verify a comparative judgment (it is better to do this rather than that), for the reason that one does not know what might have happened had an alternative course of conduct been pursued. But there is another reason. It is possible that a successful outcome is successful by good fortune and in spite of bad thinking, just as it is possible that impeccably good thinking leads on occasion to bad results for reasons that could not have been anticipated. This is a particularly telling observation against a crude form of pragmatism.

To sum up discussion thus far: looking critically at the instrumentalist theory of mind as it applies to deliberate education reveals certain difficulties and implausibilities lying beneath the surface appeal. What seemed to be its principal virtues tend to disappear. How does one go about the construction of a better model?

The most obvious critical flaw in the instrumentalist theory, as interpreted for educational theory, is the idea of problems as the stimulus for learning. Admittedly, it seems natural for teachers to think of learning as especially related in some way to problems. A standard procedure in traditional techniques of instruction is first to explain something new and then to make up or to assign typical or illustrative problems and exercises, with the expectation that in having to work the problems, learners will be forced to think over the materials of a lesson and, by repeated applications, stamp in and consolidate whatever understanding has been achieved. To be fair about it, that technique can be made to work well. But two observations are in order. One: the learner's confrontation with problems follows rather than precedes the initial learning. This suggests that it
is not necessary for learners to be confronted with problems before intelligence can be expected to operate. Learning can take place when awareness of having a specific problem to solve is absent. Two: what teachers have in mind when they use the word "problem"—something to be assigned for instructional purposes—is not what is intended by the instrumentalist theory. To meet the criteria which an instrumentalist has in mind, a problem must be an environmental happening, a difficulty experienced as such by a person in relationship to his environment. The point of this observation is that a teacher's predilection for problems should not be understood as inviting a similar predilection for the instrumentalist (problem centered) theory.

A suitable starting point for a new and different theory—the interpretive theory—is to discard any special emphasis upon the having of problems or the befalling of emergencies. An interpretive theory recognizes that thinking and learning can occur and often do when a person is not aware of having a problem. (If one says that a person's thinking means that he must be having a problem, this is simply a determination to use words in that way. It says nothing concerning the issues involved.) Living is not conceived, as in the instrumentalist theory, as divisible into discrete problem-solving and non-problem-solving episodes. The mind is active (at least minimally) from moment to moment; sometimes that activity is marked by a greater than usual degree of felt difficulty, in which case one can speak of having a problem. But intelligence is called forth and is engaged both before and after that kind of occurrence, and is, indeed, responsible for the discovery of anything problematic. That a problem exists, and that it is of a certain character, is a matter of judgments by the mind. Also, to say that a problem has been solved, and with what degree of adequacy, is a matter of judgment. To acknowledge this is also
to realize that those judgments may be mistaken. All judgments are fallible. That, however, is not the point. The point is that the activities of mind, the scope for intelligence, is greater than those occasions when a problem is judged to exist.

If the mind is not to be conceived as created especially for solving problems or for handling emergencies, what then is it for? To recall from earlier discussion, it is the function of mind to establish continuity of a present moment with its background and its probable future; put in another way, the function of mind is to destroy any tendency toward a life of discrete present moments. This is accomplished by infusing situations and objects with meanings which carry awareness beyond the surface of an environment. Given this of the mind, then it follows that mind is conceived as operating continuously rather than only from time to time as emergencies demand. A sufficient reason for continuous activity is the ubiquity of change; persons and their situations are changing in themselves and in relation to one another, and there is always the possibility that such changes are not neutral with respect to the welfare of the person and what he values. Changes may prompt awareness of a growing need; they may offer the prospect of a good to be seized or the threat of a harm to be avoided. Given a world fraught with possibilities, one must be alert to the potentials of every situation and scene, sensitive to trends, to forebodings, promises and portents. One is required by his having a mind to read into things more than is present to the naked eye.

To meet its obligation, so to speak, the mind finds it necessary to construct a world and a self to whom the events of the world are happening. It is these constructions which allow for the greatest continuity. The term "world" in this context refers not only to a physical thing on which we have our existence in space, which supports our bodies and keeps them
from falling through space. It refers also to a supposition of something held in common with everyone else. The world is that which is most universally shared. Although one may speak of private worlds and personal idiosyncrasies, nevertheless, there is in anyone's mind a belief that all experiences are experiences which occur in the same larger space, the space of a world within which all persons are distributed, some here and some there. A belief in such a common setting for all human life is related to the idea of truth. To say of a sentence or a proposition that it is true about states of affairs is to mean that it holds for the experience of anyone and everyone within a shared setting, the world. Those who participate in the most widely distributed suppositions of Western culture are most likely to believe that the world is an astronomical reality, that the earth, for instance, is a globe-shaped physical object traveling around the sun. Nevertheless very few persons have ever perceived the earth in its entirety as an object of visual experience. Expressions like "the world" and "the universe" intend a kind of reality which cannot be directly experienced in its entirety. At any given moment, only a tiny speck of what is taken to be the world is present to the senses. The connectedness of that miniscule environment with all the rest of the world is a construction by the mind. One can only hope that his construction of the world accords with a presumed objective existent and is in agreement with the best available constructions by others who are in a position to know.

Similar observations hold for the self. The self as a center of experience, as that which remains the same in the midst of change, as that to which the events of a biography happen, is a construction, the more or less stable product of the mind's creative function. The self is not only a construction, it is also that for the sake of which the mind is occupied in a continual search for continuity. In the case of constructing a self,
however, there is much less opportunity for objectivity or for reaching agreement concerning the self with others who are in a position to know; Happily, in forming one's beliefs about the traits and capacities of one's self, there appears to be less need, than in the construction of a world, for objectivity and common agreement. Perhaps it is good that we cannot see ourselves as others do. In the construction of a self, the major desideratum appears to be less that of satisfying the criteria of truth or of knowledge than of satisfying a need to think well of one's self. It seems that self regard is a determiner of conduct both in little details and in the big choices which guide careers; that this is the case is a new idea in modern civilization. But once it is discovered, it is found to be of the first magnitude. Whether a person is open and responsive to a diversity of stimuli or relatively withdrawn and obtuse is a function of his self concept. Apparently it may be said, without exaggeration, that a person's capacity for the good life is, in large part, a function of how he thinks and feels about himself.

To describe the interpreting mind as engaged in the construction of a self and a world is to begin with the highlights, so to speak, and to seize upon the most elaborate and universal of the mind's constructions. But constructions of a much smaller scope are the bread and butter of mind work. To interpret, in behalf of continuity, a given moment and its environmental presence is to posit objects and events as more than their bare immediacy can provide. The objects that an environment shows to the senses, for example, are invested with attributes that extend beyond anything evident at a given moment. They are given, by construction, a duration and an independent history as objects; they are expected to survive their being experienced. And they are credited with powers or capabilities--of a chair, for example,
that it will support the segments of a human body in a seated position—that are not necessarily being put to any test of verified expectation.

This is the most constant kind of service that the mind renders.

At this point it would be advisable to remember that the concept of a mind may be dispensed with and no damage done. Instead of speaking about constructions by the mind, we could speak about "habits of expectation" or we could rely upon the idea of "assimilating" a given segment of presentness to a previously learned schema and thus avoid any concept of mind and any need to elaborate such a concept into a theory. Application of Occam's razor might seem to favor such a purgation. Indeed, if it were simpler and more conducive to good thinking about psychological events to throw aside the idea of mind, then it would be wise to do so. However, given our heritage of language, it is probably easier, more convenient, and more economical of words to continue using it for certain purposes (including, of course, the kind of purpose served by this discussion), than to try to get along without it. Witness the beauty of an interpretive theory of mind when its meaning for education is explicated.

The function of mind is to furnish a background for the present moment. In the most general sense, the mind provides a stable world, a self, values and purposes, and expectations of where this moment is leading. The function of schooling is to enlarge the potential background which the mind can furnish to a present moment. Schooling presents for a learner's consideration what others have found out concerning a world shared in common, and suggests that these findings be incorporated with the learner's own so that he might respond with greater sensitivity and awareness to what is there in actuality and in potentiality. These two functions, of mind and of school, are complementary. To prepare the mind for an unpredictable future, schooling
contributes a preview and a sampling of what lies beyond the surface of an ordinary environment. It suggests something about what awaits further exploration, warns against possible hazards, suggests a trial of this or that to see what is pleasing to the individual taste, and, by stimulating an investigation of what otherwise might have remained too subtle, too hidden from ordinary perception or too indirect in its influence upon the present to be noticed, contributes to the construction of a world and a self from the greatest possible amount of diverse experiences.

This neatness of fit between concepts of mind and concepts of education is to be accepted with thanks. But it could be misleading, in at least two ways. First, it may suggest a coherence and an accuracy in the projected background of a learner's foreground that does not really obtain; and second, it may seem to be proposing that education accomplishes its ultimate aim by increasing the likelihood of a person's being able to cope successfully with that future for which he prepares.

Concerning the first, it is well to remind ourselves of the luxuriant disarray to be found within the arts, sciences, and humanities. Perhaps because the glorification of science seemed like a desirable activity for men of good will in the recent past—to overcome the anti-scientific bias of literary humanists—there is a tendency to think of the culture which awaits transmission through the school as a harmoniously integrated body of perceptions and values. In the sciences, that is not too far from the truth. Even there, in a pioneering domain of theory construction, there are incompatible alternatives. In the arts and humanities the conflicts, controversies and partisan urging of alternatives are not to be ignored. To try to smooth out or to cover over with melliorating smiles and eclectic honey would be to do something more educationally damaging than
would be
merely to lie a little. It to take away the liveliness and excitement
that attends a good mind seeking its own integrity and consistency. Demo-
ocratic schooling, which forbids indoctrination, does not make it easy for
the educated person to find his own niche and his truest loyalties, but
rather the opposite.

The second possibility for misunderstanding is a natural tendency to
suppose that if education prepares for the future, then it prepares the
educated person to be more successful in dealing with his world than other-
wise he might have been. Why else, one might ask, should we prepare for
the future if not to increase the chances of our being successful? The
intent of the question seems reasonable. It becomes even more so when
one realizes that the whole point of a person's becoming aware of his environ-
mental forces and continuities is so that he may take them into account in
deciding what to do. The expression "to take them into account" suggests
a move to increase the odds in one's favor. However, this natural tendency
to think of success as a reward for educational preparation is countered by
another part of common sense. We find no difficulty in conceiving a well
educated person who is judged a failure as compared with others in his cap-
acity to achieve important goals, in conceiving a poorly educated person
who is rich and successful. This means the criteria identify a well
educated person are not connected in any essential way with the criteria
which identify the traits conducive to success. It is understandable that
an educated person, with his heightened sensitivity to the under currents
and overtones of his situation, may be less inclined to feel pleased with
what is happening around him than are others of coarser fibre and lower ethical
awareness. He may choose for himself a way which is less self centered and
less threatening to the values of other persons than those ways which push
ruthlessly toward personal goals, toward advantage over others, and toward rewards passed down from the hierarchy. An educated person may enjoy success (there is nothing in the nature of being well educated which necessarily minimizes a tendency to set the kinds of goals which, if reached, produce judgments of success), but another and equally educated person may not. He may interpret his world and his role within it as involving him in diverse activities which do not have ends of sufficient specificity that the concept of achievement or success could apply. He might prefer asking of his style of living not whether he is successful, but whether his life is pervaded with quality. But even this—a richness of quality—is not necessarily the expectable outcome of good education.

The kind of difference which education makes is a difference in the perceived complexity of the environment, hence a difference in awareness of one's responsibility for what happens and therefore a difference in the degree to which behavior is guided by deliberate intent. It is easy to see that education leads to these outcomes; one could not have learned a relatively large amount of materials from the arts, sciences, and humanities without reaching a greater awareness of what is going on, of what is afoot not only close by but also more universally. To become increasingly aware of forces at work in the surrounding world is to gain insight into that for which one can be held accountable—one can no longer be excused because of ignorance—and insight also into that which controls the hapless human victim willy nilly (to be well educated is not necessarily to say, as the advocates of political religion are fond of doing, that we are all guilty for the unhappy state of the world.) Given a world in which very little of institutional action is within the possibility of human control, where everyone is pushed and pulled in directions he would rather not go, and where the
hierarchies of power are accountable to no one, education is the one hope for increase of personal control over one's own destiny. (Not everyone wants a kind of life marked by responsibility and by a more or less continuous direction of conduct by a watchful mind. What else could be expected? Not everyone cares much for education, and not everyone wants to be in charge.) Notice that this description of the difference which being educated makes is close to describing the kind of difference which the mind makes in its functional value to the human being. Hence the suitability of describing education as the cultivation of mind. The suitability is especially evident if one holds to an interpretive theory.

Earlier, when criticizing the instrumentalist concept in its educational application, discussion was organized under three headings. They were:

first, a claim concerning the motivation of learning; second, concerning a supposed increment of meaning; and third, concerning the testing and verifying of thought processes. To establish a contrast of the interpretive with the instrumentalist concepts, the same three headings will be used in what follows here.

About a learner's motivation for learning, a problem centered or instrumentalist educator might say that if you take away the stimulus of a directly experienced problem, then you take away also the most effective form of motivation to learn. If a learner does not foresee a potential contribution of learning to the pursuit of his purposes, then why should he bother to learn? The answer is simple even if not very dramatic. The fundamental form of educational procedure appropriate to an interpretive concept of mind is to place the learner in a deliberately created environment which is to some degree novel in the learner's experience. Finding himself in
such an environment, regardless of whether he sought it out, a learner is motivated simply by virtue of his having a mind; he is motivated to keep abreast of what is going on, to assure that nothing untoward happens, or that nothing of potential interest is allowed to slip by unobserved. To whatever degree the novelty is experienced as more than the merest, most trivial sort, to that degree there is motivation to learn. In its most elementary form, learning is the consequence of a drive to overcome novelty; that is, to reduce the previously unknown to a combination of familiar categories, or to learn enough of what is happening to feel confident that one is keeping abreast of developments and still in control, still able to secure the good and ward off the bad. This is the fundamental and most nearly universal form of motivation.

An educator whose thinking has been shaped by the centered approach to these matters might be inclined to say that if a learner finds himself in a novel environment, then that is, by virtue of the novelty, a problematic situation. That may be so; there is no good reason to deny him that usage if he prefers it. But have not then give any support to an instrumentalist argument about motivation. An environment created deliberately for educational purposes is, most typically, an environment not of physical presences, but rather of meanings created by language or other symbols. A different way to put it is to say that the environment is created by each learner as his response to the communication through which the environment is instituted. The expression "in his mind," is created by each learner "in his mind" as his response to the communication through which the environment is instituted. The expression "in his mind" is used with some trepidation. It is decidedly out of fashion, and open to attack because it is said to refer to a private event rather than an observable phenomenon. Nevertheless, it is a useful expression. If one were to say that Pestalozzian teachers taught their pupils to perform arithmetical operations in their minds rather than with paper and pencil, the statement would be
readily understandable. Perhaps the same non-philosophically loaded intent will be conveyed when it is said that in a very large part of schooling (beyond the earliest years), the environment which stimulates learning, or about which a learner learns, is not an environment of physical presences, but rather of meanings created in the mind. To teach students about other parts of the world, for example, we cannot transport them physically to the various continents and countries about which they are expected to learn. But there is no need to go abroad for examples. If someone chose to learn about the Supreme Court, he might want to look at the building in Washington where the Court sits and to see the justices in their robes. But he would learn little or nothing from such visual experiences. To learn what the Court does, what its influence has been, and any other matters of importance concerning it, one must take to reading or to some other form of communication. Everything of importance has its mode of existence in realms of symbolic meaning; apart from schooling, much of vital experience is of things and events engaged at first hand. But schooling has a difficult assignment. It is not easy to encourage learning about what lies behind and beyond the environments of immediacy and of sensuous appeal. What is plainly before a person's face is likely to be learned without help from professionally trained teachers. But the larger and more complicated realities, which cannot be seen with the eyes nor held in the hands, are not likely to be learned unless deliberately taught. A loaf of bread may be presented to the senses, its appearance, its smell, and its taste learned thereby, but its value for nourishment may not. Spaces enclosed by the walls of a classroom are not that part of the world about which students are learning. Within that invariant small space objects and events of great magnitude must come and go, but not as physical presences. They have their mode of existence
through communication. When a student participates in communication, as in reading from a book, he may experience difficulty in understanding. But that kind of difficulty cannot be counted as a "problematic situation" in the sense of that expression intended by an instrumentalist. For an instrumentalist, the kind of situations which true problems can arise is an environment experienced at first hand, not a construction of meanings by acts of communication.

There is another difference. In the instrumentalist theory, the mind is said to begin its characteristic thinking and learning as a response to the prior occurrence of a problematic situation. But the kind of thinking and learning which occurs in trying to comprehend an environment created by acts of communication is itself an activity of mind from within which further difficulties for thought may be discovered. Instead of conceiving the act of thinking as a response to a prior and non-intellectual happening, we have thinking as an already occurring process (thinking as required to engage in communication) which then provokes the realization of need for more thinking. It is suggestive, if not quite accurately stated, to say that the kind of teaching which accords with an interpretive theory of mind is a kind for which the responsibility of the school to create an environment for the stimulation of learning is a responsibility to create motivation de novo rather than to rely upon a prior motivation. This is a very brief treatment of a very important topic, but a chapter will be devoted subsequently to a more detailed consideration of problems which cluster around the consideration of motivation for learning.

The second topic for comparing concepts of mind in their educational employment is that of meaning. A presumed strength of educational procedures most favored by instrumentalists is said to be this: learning
which is intermediate in its occurrence between a problem and its resolution offers an experienced situation against which or in terms of which the communicated resources of the curriculum can be meaningful. Previously cited criticisms of that idea will not be repeated here. Instead, this is now an occasion for asking whether educational procedures which could be judged suitable to an interpretive concept of mind can be recommended for reasons that are more likely to survive criticism.

First, let it be admitted that to speak as instrumentalists do of a necessary connection between experience and meaning is to be on the right road. An achievement to the credit of empiricism is the realization that meaning is to be grasped (understood) or clarified only by reference to some passage of experience. That is to say, for a statement to be meaningful, it must be understood as signifying a kind of thing or event as it would enter the first-hand experience of an actor or an observer. If, in trying to give meaning to an expression, a person cannot imagine any situation of experience and its contents that could be an instance of what the expression intends, then he cannot understand that expression. For him, it is meaningless. (In making this claim, there is no intent to engage in philosophic discussion --of, for example, a verification principle--but only to begin with an observation about meaning that may be well enough accepted to be reasonably free of controversy.) For educational reformers to extol efforts by teachers to relate communicated resources to first-hand experience is to be on the side of the angels. But given so much of agreement, there nevertheless remain certain difficulties, the consideration of which may lead toward a better grasp of educational strategy.

Vividness of meaning is a virtue most readily apparent within an experience that is possessed of immediacy; that is, in an episode of a person's life
wherein he is concerned to deal with a situation in its here-and-now qualities as opposed, for contrast, to a concern for something to be gained for future use. A properly tough minded regard for education and its limitations includes an honest acceptance of this fact, that there is a tension between living for the present and preparing for the future. The easiest way for a person to feel alive is to be engaged full tilt in a developing situation where the future to be concerned about is no farther away than the next instant. But this easy way is incompatible with the intent of deliberate education. A concern which dominates deliberately educational acts is a concern that something happening to a person now leaves a trace, a mark, a residue, that it makes a difference later on. The future of educational concern is of greater duration than the next instant. What is to be saved from educative experience includes fullness and reliability of meanings, and these qualities are not to be confused with vividness. For the most part, the kinds of situations which produce the former are incompatible with the latter. The easiest ways of feeling alive and vibrant are generally of little use for education. A person who seeks only the XXXXXX thrills of active immersion in the present moment is not open to educational forces. An educator is forced, with however much of regret from his hedonist side, to care less for vividness of meanings than for connectedness and reliability.

The point to be reached from these remarks is most easily approached by way of an example. Consider, again, a child who learns for the first time about sugar by placing some on his breakfast grapefruit. This is an example of meaning acquired, not by way of communication and abstraction, but by seeing and tasting at first hand. Presumably that fact ought to confer upon what is learned about sugar a maximum of meaning. Actually, if what is learned is limited to what is available to the senses, then only a bare minimum of
meaning is acquired, and that minimum with very little reliability. Eliminating whatever might have been learned through communication, the child learns only that this white granular stuff tastes sweet. That is all. To seem more realistic, however, suppose he is told that this substance is a kind of thing called sugar. From this he may generalize his experience, reaching the conclusion that sugar is white, granular and sweet. He has, of course, no warrant for such a generalization, and if he assumes that sugar is always white and granular he is then doubly mistaken. As for richness of meaning—that sugar is soluble in water, that it is extracted from cane and from beets, that it is a carbon compound, and so on—this is not to be learned from any single passage of experience.

Meaning is reference to something not present in the moment when meaning is entertained. To look at white granular stuff in a certain kind of dispenser and to judge that it is sugar is to predict further contents of experience not now being had. One may follow such declaration by an act of tasting, and thereby cash in on one part of the intended meaning. But the tasting is not a matter of entertaining meanings in the mind. If, while tasting, one thinks further about sugar, the meaning entertained is still a reference to something absent; for it is a characteristic of meaning to signify what lies beyond an immediate presence. To hold meanings in the mind is like Portnoy holding a woman in his arms and, even while engaged in making love, thinking about the next assignation.

That meaning is reference to something not now presented to the senses is a fact that has been much befuddled in educational literature since the sense realism of the 17th Century. Even if, as seems reasonable, we count the illustrated textbooks of Comenius and, much later, the object lessons of Pestalozzi as gains in educational technology, still these and other
developments which emphasized the value of sensation left a heritage of misunderstanding that remains to be straightened out. Granted that the quality of human life is directly evident in passages of experience at first hand, nevertheless the contribution of the mind toward enhancing such quality is a function of communication and of imagination. Life being short and practical demands being pressing, there is too little time within the limits of direct personal experience for the enlargement of awareness that contributes a more interesting world. Formal education is related to the quality of life by virtue of what it adds to the otherwise insular little world and small society of the ordinary human being. Communication and communicable meaning are of the essence, and the active imagination is a part of what it takes for anyone to profit from educational communication. The immediacy of sense experience, with its vivid quality, cannot substitute for the ability to entertain meanings in their reference to what lies beyond.

To suggest, as here, that the enrichment of meaning which schooling provides is a function of what is added to first-hand experience is to risk a certain kind of misunderstanding which a word or two of further explication may help to avoid. Schooling, as thus conceived, is a kind of communication contributions from with cultural productive and creative societies. The danger is that this cultural sharing may be linked in the minds of educators with the presently popular concept of socialization. Socialization is a process of getting persons to think and to act toward one another in approved ways; approved, that is, by representative agents of the surrounding society. Especially when thinking about elementary levels of schooling, many educators look favorably upon socialization; they tend to urge it as a goal for educational efforts. To be aware of such popularity is to become hesitant about
expressing adverse judgments. The truth is, nonetheless, that socialization is not invariantly good in its consequences. It is a process that is always occurring naturally whenever people are together. It takes place without anyone’s intending it, and in full force. Juvenile delinquents who run in criminal gangs are very heavily socialized; it is this fact which goes farthest to account for their bad behavior. To point out that socialization of that sort is not what educators have in mind is beside the point. The point is that schooling would be better conceived as a force which modifies and even minimizes socialization. To become well educated is to become relatively free from determination by the social pressures toward conformity through which the process of socialization is effected. When the influence of education upon the mind is greatest, persons become more likely than before to resist the molding of beliefs and values by immediately surrounding social creatures. Further socialization tends to move away from influences by the face-to-face society and toward influence by a larger and more humanistic society for which the school is an agent. That, plus a tendency toward greater self direction in the further embracing of values. This is mentioned here in hopes of avoiding any supposition that the role of communication in schooling is similar in its effects to socialization. It is not similar.

For the most part (although not entirely; there are exceptions in the case of education concerning the arts) schooling must sacrifice vividness and immediacy in the construction of meaning in order to achieve enrichment and connectedness. The danger, of course, is that school-sponsored learning might become merely verbal, a grasp of symbols connected only with each other in a closed system, set apart from the rest of life and from whatever counts as valuable to a person’s pursuit of goals. But whether that kind of danger
is actualized or not depends upon the goodness or badness of educational communication. It depends upon the degree to which meanings conveyed are connected with one another in manifold ways, and connected also with something in the learner's personal organization of a world and his personal values. Given the stubborn persistence of some learners in keeping their personal worlds uncontaminated by schooling, a seasoned teacher's hope for educational communication may grow dim. But if there is reason for supposing that children and youth have something of value to gain from schooling, then there must be a way of getting them to realize it. Traditionalist teachers seem to believe that finding connections between what is communicated in school and a learner's personal concerns is the learner's responsibility. A modern teacher, on the contrary, believes that communicating the significance—the potential personal meaning—of what is taught is the responsibility of the school. If the responsibility is accepted, then educational communication can be cultivated in ways that are effective.

The third point of comparison between two ways of conceiving the cultivation of the mind relates to epistemic considerations; as a person becomes aware of a larger world, he not only entertains the possibility of extended realities; he also wonders how much and what parts of all that comes before him through educational communication is to be believed. Does this or that construction of meanings represent something real or something fictional, does it possess a claim to truth or is it subject to considerations different from those of truth and falsity?

Educational theorists have tended to suppose that a concern for truth (or, in the case of the instrumentalists, for verification) is a concern applies to which school learning in general, pervasively. Various forces collaborated to promote that supposition. In the past, teachers communicated
to their students ex cathedra. They believed not only in what they were doing but also in what they were saying, and they expected learners to accept and to believe whatever they were taught. This accompanied a nearly universal tendency to think that the essence of schooling is the transmission of knowledge, wherefore the categories of truth and falsity, believing and doubting, do properly apply. A different force which worked in the same direction was the growing prominence in philosophy of epistemological arguments and doctrines. Since the time of John Locke, philosophers have tended to credit the arguments of scepticism at full strength, but to overcome in behalf of the continued security of knowledge. Because educational philosophy has been derivative from philosophy, epistemological concerns became educational concerns.

Epistemological sophistication has contributed at least one result for educational theory which may be considered more positive than not. It permits recognizing that a large portion of what is taught and learned in schooling includes contents for which considerations of truth, verifiability or warranted belief do not pertain. There are, for example, skills like reading and writing, there are cultivated attitudes and dispositions, like a taste for impressionism in painting, and there is a possibly vast amount of curriculum content from the humanities and the arts, to all of which the criteria of truth or of knowledge do not apply. But there does remain a fair amount of communicated materials for which a cognitive claim is made. They include not only the sciences, strictly defined, but also looser structures like history and geography. If education is to be affected through processes which a responsible intellect would approve, then the way by which a learner forms his beliefs about empirical states of affairs becomes a matter for consideration.
The situation which confronts an educational philosopher is muddied by the fact that the domain of belief is larger than the domain of knowledge (if, that is, "knowledge" is used to signify cognitions which are subject to verifying by publicly available procedures.) There are, for example, beliefs about matters of taste. Mrs. Olson "knows" that mountain grown coffee is the richest kind. There are other beliefs in the realm of value which are less closely tied to experience but nevertheless of greatest importance to those who hold them. A person's convictions concerning the greatest good are the subject matter of beliefs which are psychologically as firm, as much beyond the likelihood of doubt, as beliefs about matters of fact. Someone may realize that his commitment to, let us say, that cluster of values which is the essence of democracy is not a kind of belief which admits of proof. If other persons challenge his commitment, he cannot prove to any and all fair minded persons that democratic values are those which most accord with the good of humanity, but he believes that that is, indeed, the case, whether provable or not. A revolutionary radical, who rejects democratic values, is equally firm in his belief that the cause of revolution of change in power is a higher claim upon his allegiance. He is a believer whose faith is beyond the reach of contrary persuasion.

The above statements about belief are offered in hope that their acceptability may be granted without difficulty from a basis in ordinary common sense. However, there is a closely related situation concerning which a common agreement cannot be presupposed. The situation may be phrased as a question: given fundamental cleavages in value commitment, can the rational pursuit of truth and right reason be expected to overcome those differences? Evidently there are some who believe that logical reason and the search for evidence is always capable of triumphing over disagreement, if only the parties
to dispute are willing to uphold logic and scientific method for whatever duration is required. (Perhaps that is an overstatement of a now popular position. Perhaps it should be expressed this way: if there is any chance for agreement, then only by means of logic and scientific method.) There are others who believe that differences in basic value commitment are differences which cannot, in the nature of the case, be expected to yield to logical minds engaged in an unbiased search for conclusive evidence.

On this question concerning the possibility of universal judgment, the available arguments appear to beg the question. Whatever one might venture in defense of his view is probably already biased in that direction. Given a gulf so unbridgeable, what can an educational philosopher do to avoid philosophic partisanship and to get on with the business at hand?

Educational theory can remain non-partisan concerning the formation of belief and knowledge if care is taken to deal with processes of teaching and learning which are not incompatible with any legitimate position. The instrumentalist position is, of course, decidedly partisan. To propose a theory of educational process which puts forward the ideal of verifying as a constant accompaniment of intelligent learning, as John Dewey did, is to close out, unjustifiably, those alternative theories concerning the criteria of knowledge which do not admit the possibility of such ubiquitous, universal verification. For philosophers to argue for one epistemological theory against others is to pursue philosophy as it should be done. But no one knows all that needs to be known about believing and doubting to justify a commitment of educational processes to a favored theory. Schooling has a marked influence upon the cognitive structure of any learner's mind, but there is nothing in the nature of teaching and learning which requires educators to commit their professional efforts to a favored idea about the right grounds.
for intellectual assent.

With that negative position, the issues that call for something insightful have not been satisfied. Learners in school are expected to accept for possible belief a large amount of communicated information about their world. Something needs to be said about this in order to provide a suitable contrast between interpretive and instrumental concepts.

What is given in the nature of the case about schooling in relation to cognition is that learning from first-hand experience is supplemented by communication of much material from the public domain; from physics, social science, geography, and the like. Those materials are roughly of two sorts: some are hypothetical-theoretical; others are accepted as having the status of established knowledge. Concerning the first kind, it seems reasonable to suggest that hypotheses and not yet confirmed theoretical statements should be represented as having that kind of cognitive status, and not masqueraded as accomplished truth. That this has not always been done in school textbooks is regrettable, but the suggestion is modest enough to be offered without need for further discussion. The more difficult problem is what to do about truth claims when communicating the accepted accomplishments of the sciences.

An educator of romantic sensibilities might suggest that learners should be encouraged to accept as true only that which they have, in some sense, "proven" to be true in their own experience, toward all cognitive claims from the public domain, they should maintain an attitude of accepting only provisionally until, if ever, a personal verifying becomes possible. That such opportunities may sometimes arise is not doubted. Whatever is taken to be confirmed by scientists is confirmed by evidence findable in personal experience. Therefore, it is possible that an individual learner
may, on occasion, find in his immediate experience the kind of evidence that favors the probable truth of a scientific law or fact. But, for many reasons, it is improbable that this could happen very often. Granted that evidence is, at some point in an involved process, a matter of first hand experience, still it is not naive experience, not the ordinary experience of a lay person. It is experience under special circumstance. The sensory core of such experience does not come labeled with its evidential status. It has that status only by an act of interpretation, and the interpretation is the product of ratiocination and a conceptual structure. Frequently it involves the use of technologically sophisticated equipment, a knowledge of which becomes essential to interpretation. Taking all of this into account, it may be said that the conversion of hypothetical material into scientific knowledge is not the work of solitary human beings, but rather of specialized personnel who belong to a community of scientists. Ultimately, it is the scientific community which decides what is warranted and what is not, but only some members of that community are active in confirming any particular piece of the domain. Those few are like a committee which works for and reports to the larger community. In any one science, whoever is not a part of the confirming committee is then in a position similar to that of consumers and interested spectators of science: the position, namely, of having to rely upon the committee report, their account of what they did, what they found, and how they interpreted what they found. Presumably, non-committee members of the scientific club have the ultimate power of review, criticism, and confirmation. Concerning knowledge from the public domain, then, all of us are in the same position; we must rely upon scientific communities and their releases to the public of their findings.

There appear to be some educational theorists who are fearful of putting
the public--even a well educated public--at the mercy of scientific experts. They preach a deliberate scepticism. Evidently they hope to influence schools in that direction. Scepticism as deliberate policy may or may not be worthy of a goal, but those who propose it are not to be scorned as nervous nellies, nor as having too little faith in the probity of scientists. There is nothing nor in being a scientist that promotes morality nor a concern for the public welfare. Scientists are, after all, ambitious people, with all that that implies for moral integrity or the lack of it. Because schools are the principal agents for disseminating scientific knowledge, it is not surprising if educators feel a responsibility to protect the public against an abuse of public gullibility.

There is a way of meeting the responsibility, perhaps not to the ultimate satisfaction of a hardened cynic, but, pragmatically considered, well enough to work. That there is a way and that it works is suggested from observing a situation of a sort very similar to that of the schools, from which a propitious model may be taken. In a large business organization there are experts employed at levels below top management. They possess a kind or degree of expert knowledge not known to the top managers to whom they report their findings and recommendations. Although those who make final decisions are not as knowledgeable (nor, some would think, as intelligent) as the experts, they have a way of reviewing and criticizing that which filters up to them. Critical reviewing would probably include looking at the procedures and inferences of laboratory workers, discounting the effect of suspected bias and enthusiasm, and applying in general the implicitly logical criteria of common sense which all intelligent judgment must draw upon. In what happens here there is little difference from what happens in a scientific community where, as suggested above, for any particular segment of findings.
only a small number of intensive specialists do the work which must then be reported to the larger community for critical review. Although the smaller group probably includes those with the greatest interest and the most intensely specialized knowledge of their particular domains, nevertheless, their contribution is open to judgment, criticism, and, perhaps, acceptance by a larger group of the less knowledgeable, less actively engaged in those specifics. Like it or not, that is the reality.

On the positive side, the fact that in going concerns the contribution of experts is open to critical judgment by the less expert suggests a possibility that would appear to be highly probable simply on the basis of practical experience: a generalized capacity for logical processes and for noting departures from criteria of good reasoning may be assumed to exist, at least implicitly, in the human mind and to have jurisdiction, so to speak, over the more limited dominion of the specialized expert. In other words, concerning any given area for scientific inquiry, someone who is not especially knowledgeable nor especially interested in that area may nevertheless be competent to judge the work of those who are. Whether an academic knowledge of logic and scientific method may be expected to contribute to that competency is an open question which may some day be settled by empirical research. In the meantime, logicians may be pardoned if their enthusiasm for the teaching of logic outruns a judicious scientific caution. Whatever the merits of logic as a practical discipline might be, instruction in its materials is different from instruction in the substantive materials of empirical science. The canons of logic, or, let us say, criteria of reasoning and knowing, are not supplied to the learner's mind completely from scratch, as are the contents of physics or geography. These criteria are found by looking within the mind; they are native to it. Research in logic is a matter of bringing to
explicit awareness something already there in the workings of the mind.

That a person is capable of rational thought is a pre-requisite to the study of logic, and if the pre-requisite is not met, then study is doomed to failure. Logic cannot supply a missing rational power.

Now, at last, a proposal concerning how to educate for cognitive responsibility may be ventured. Referring once again to the process by which scientists determine what is to be accepted as having scientific validity, it may be noted that the larger community is given for its deliberations not simply the conclusions reached by researchers; it is given an account of what was done, both inferentially and physically, what was observed, and how the contents of experience were interpreted. All of this is needed for purposes of critical appraisal. The same kind of narrative account would be necessary to anyone else, not in the scientific community, who might care to see for himself the nature of evidence and other aspects of scientific warrant. But such accounts are generally missing from school-sponsored communication. In customary approaches to science education, the most usual way of communicating is to provide only the most important theories and conclusions which scientists have reached. Often, objects and events known scientifically are simply described or narrated as known, in the way that one might tell about an interesting place or happening in ordinary experience. From such accounts it is impossible for a learner to gain insights concerning the ways of scientists and the processes by which they reach confirmed products. Now, in accepting as an educational desideratum the capacity of learners to do that (to gain such insights), the ways of communicating may be changed to include the kind of narrative-descriptive account which scientists provide to the community of scientists, plus whatever additional explanations and simplifications may be needed to reach the understanding of immature
learners. The intent is to place learners in a position where, looking over the shoulders of researchers, they can understand what they see and can participate in the critical processes of assessing and confirming what the specialized experts do. This is the kind of education which would seem desirable in the eyes of one who holds to an interpretive concept of the mind.
Chapter 7
EQUALITY, STATUS AND SOCIETY

To pursue the idea of education as the cultivation of mind is to arrive, sooner or later, at a problem about minds which is serious in itself, and further compounded by several factors which have their roots in history and in democratic ideals. The problem in its barest outline is that minds seem different from each other in their capacity to learn, or to be "cultivated". Given educational circumstances as they now obtain, some persons seem incapable of learning even the most elementary skills needed as prerequisite to any further learning. Others seem able to learn many times faster and, in any given period of time, considerably more than the average person. In capacity for academic achievement, differences which may be observed in public schools are wide and deep. This observation implies nothing whatsoever about the causes of such differences, nor about whether those differences are inborn or subject to environmental changes. It is simply that they are there. A question to which they give rise is: should we conceive education as a commodity to be distributed more to some and less to others, in accord with the apparent differences in capacity to profit from schooling?

Among the compounding factors is the ideal of equal educational opportunity, which many would take to be an essential part of democracy and justice. In its bald essence, the ideal seems clear: everyone should have equal access to education. No one should be denied the opportunity to profit from education. This negative way of putting it reveals by implication a further aspect of the situation, namely, a belief that education makes a significant difference in a person's likelihood of achieving success in the realization of his ambitions. (Whether that belief is justified, or
instead, an exaggeration of what schooling contributes, is a controversial issue. Some of those who are slow to learn in the formal school would explain their difficulty as resulting from their doubts that schooling contributes anything of positive value to "the likes of them." Given at any rate the possibility that schooling is a major factor in making available to persons a range of further opportunities beyond itself, it would seem that a democratic respect for persons is enlarged by equality of educational opportunity. But the apparent clarity of the ideal tends to cloud over whenever one begins to consider the harsh inequalities already existent in economic and social reality. The inequalities are easy to understand. Difficulties arise when trying to determine whether they are just or unjust, and in any case, how they should be allowed to influence or not to influence the availability of schooling.

The particular form which the problem takes is the product of historical forces. Prominent among those forces is the heritage of formal schooling as an advantage offered throughout most of its life span to date (about 25 centuries) to a privileged minority. Originally, schooling, as in ancient Greece, was exclusively for progeny of a favored minority. At various times later on—in the Middle Ages, for example—educational opportunity reached downward somewhat, but still selectively. Attempts to offer schooling freely to all children are quite recent—for only about the last hundred years—and given the slowness to change which characterizes large institutions, the schools of the present are in a transition state; a transition from schooling as an attempt to get the children of the ruling and upper classes ready for their lives of power and privilege to, at present, an attempt to offer the advantages of formal schooling to everyone regardless of status. That schooling has become almost universal in wealthier democratic societies
is now accomplished. But the question of toward what ends schooling is expected to lead has become confused.

When schooling was one of the privileges of the rich, it may have seemed clear to practical minded observers that schooling was a practically useful institution. It helped to provide skills, especially skills in the use of language, of functional value in advancing a person's career in civic affairs, plus a proper indoctrination in the attitudes and values of a ruling class. Later, in the early advent of political democracy, the idea of giving some schooling--just a small amount--to ordinary citizens was added, because it seemed that a democratic society needed a literate (and perhaps docile) body of voters. But this was a simple addition that did not disturb the traditions. Elaborate and extended schooling continued to be understood as that which helps to prepare a ruling class for its role. But now, if the ordinary person, even of the lowest class, is to be extensively educated, it is not clear for what reason, or toward what kind of result, that could be manifest in his life style.

Added to that uncertainty is the inertia of the institution and of many persons' ways of thinking about the school. The curriculum continues to emphasize the study of language, presumably toward a goal of mastering the upper class ideals of propriety in expression, of high level literacy, and even of oratorical and rhetorical skills that used to be (perhaps still are) an achievement distinguishing membership in a ruling class. And the typical liberal arts professor (a stereotype for backwardness in educational ideas) continues to think that education at its best is properly the privilege of an elite; for the unexceptional masses, a briefer and more practically oriented schooling ought to suffice. Liberal educationists, on the other hand, have tried to modify an inherited conception of what is appropriate for curric-
ulum by the addition of materials that are as functional for ordinary people as for an elite. But in those efforts they had to confront the inconvenient fact that the arts, sciences, and humanities do not lend themselves to that attempt, and it is from those materials that curriculum contents have always been drawn. Apart from the arts, sciences, and humanities there is only common sense; although occasionally, a portion of common sense on matters of practical concern does creep into school teaching, there is little or no need for it. Transmitting the common sense within the school (apart from ordinary social contacts of people with people) simply duplicates out-of-school transmission. Therefore the problem remains of how to conceive a proper role for the school in the education of a non-elite.

It is by no means a subject of universal agreement that there ought to be such a role. Many traditionalists conceive schooling as necessarily (or by its nature) geared to an upper level mode of life. The arts, sciences, and humanities are products of striving for perfection of knowing and valuing, wherefore being well educated is incompatible with a coarse and crusty life style. Being well educated, some would say, is not in keeping with being an unskilled laborer or a garbage collector. It qualifies one for vocational and social status of a higher sort; if working class people were to be given a good liberal education and yet were to find employment only in the lowest vocational levels, then, it is thought, they would be unhappy with their lot and feel that they had been cheated. For the sake of social stability, some would say, it is better that this not be allowed to happen.

How do those who think that way conceive equality of educational opportunity? One way of interpreting the ideal is to say that it means making
schooling freely available to everyone who is able and willing to profit from it. In a sense, this formulation is beyond cavil. Why, after all, should education be provided to those who cannot profit from it? But at least some who would endorse that way of putting it mean something further; they mean that a significant part of the population is too low in academic ability or in motivation to earn for themselves the kinds of advantage that commonly accrue to the well educated. If such unfortunate persons find schooling too uncomfortable and therefore leave as soon as the law allows, it can be said that they were given the opportunity but failed to take advantage of it. This failure of some to profit from their opportunity is to be judged as their own, if anyone's, fault. The resulting situation of unequal achievement is to be accepted as compatible with democracy and equality of opportunity. So the argument goes.

Whether such arguments are possessed of any validity requires that the several parts of a complex issue be examined one by one. First, is it the case that formal schooling is, by its very nature, compatible only with middle or upper class status? (Formal schooling of the best and extensive kind, that is.) Those who think so can point to selected parts of educational history to buttress their claim. In late Roman education, and again in the Renaissance, a major reliance of the schools was Plutarch's Parallel Lives, which told moralistic stories about the lives of famous people. The educational intent was to provide for future leaders of society a sense of personal identification with high status and the supposed high moral obligations which people of high station like to say always accompany that status. That educational function was also served by other materials of curriculum. The kind of history then available for classroom use was a prettied up account of the exploits of a ruling class. Even the humanities contributed materials serving
the same end: e.g., essays concerning the seriousness and nobility of high calling. The fine arts also catered to elevated status. Painters and composers earned a living by trying to please and flatter wealthy and powerful patrons. Some of their products reek with class distinction and love of status. Let all of this be granted; does it mean that schooling is therefore geared necessarily to upper level modes of life, and not appropriate for those people who, for any reason, whether deliberate or not, are destined for a common (a vulgar) pattern of living?

In reply, it may be said that the reflection of an upper class taste and a glorification of status which has long been evident in the materials of school curriculum are only what anyone might have expected, given that it was mainly the children and youth of upper classes who were sent to school. It was the wealthy who paid for schooling, and they expected the teachers of their children—teachers being in the general category of servants—to flatter their sense of importance. That heritage continues and finds outlet today in various ways, some of them a little ridiculous. Some educational administrators, for example, as they emerge into power from their erstwhile status as athletic coaches, like to say that they are "leaders" in the educational system. Such reflections of admiration for status are to be expected, given the hierarchical ordering of societies and the gross inequalities which hierarchies support and try to maintain. But they are classifiable not as the essence of schooling, but rather as mere accompaniments of education which function to mirror and to symbolize a part of social reality in the non-school world.

Consider, for example, the fine arts, which have been allied with patronage and servility toward power and wealth. A goblet made by Cellini of gold and encrusted with gems is intended to be valued in part because it is made
of materials which very few can afford. A democratically modest human being might find his possession of such a trinket, if it should somehow come into his hands, an embarrassment rather than a pleasure. But objects of that sort, whose raison d'être is conspicuous display, are more of craft than of art. On the other hand, a painting by Goya, which might be a portrait of someone from the nobility, may be appreciated for its esthetic values by anyone, status considerations being entirely put aside. In music, the major compositions of Beethoven, which were dedicated to wealthy patrons, are esthetically of a high order for anyone whatsoever, provided only that his tastes have been freed from limitations arising from ignorance or social class, either high or low. The greater the music--the "higher" its artistic level, lifting even into the rarified regions of the late quartets--the more universal is its claim upon the appreciation of all.

Concerning curriculum materials in relation to levels in society of lower and higher, it is a mistake to suppose that the arts, sciences, and humanities are geared in their being to the lives and persons of upper strata, and not to that of ordinary people. One can easily see why such a mistake still lingers. Part of the reason for it is that the arts, sciences, and humanities represent a striving for various kinds of perfection: perfection of taste, of knowing, or of valuing. Another word for it that some might prefer is "excellence"; the arts, etc., are the product of aspirations toward excellence. Put that notion together with another that lingers on from a barbaric past, when persons of high status represented themselves as placed there by divinity, and demanded from others all manner of obeisance and groveling before their "majesty", and you have the belief that persons of higher socio-economic status are a "better class of people," for whom the best products of man's talents are not more than they deserve. This attitude is re-enforced in recent times by all who believe in a pyramidal hierarchy
of human worth. Even those who are in a position to observe the greed and corruption of ambitious persons and the decadence that accompanies status are unable to free their perceptions from historic residues. To obtain a better understanding of these matters, however, it is not necessary to discredit any groups who might be called elite. One may keep whatever illusions about people of high status he wishes to preserve, for what needs correction has nothing to do with questions concerning the worth or the merits of social class. It has to do with how the arts, sciences, and humanities "fit in" with the daily living of those who acquire an acquaintance with them and a taste for more.

What is accomplished, in the most general sense, by learning from the upper reaches of civilized culture is a refinement of awareness; that is to say, a keener discrimination of what is good, an enhanced capacity to experience esthetic value, and a truer set of beliefs about the contents and patterns of the real world. It is a pity, and a factor promoting distortion of judgment, that such words as seem needed to describe the contributions of the arts, sciences, and humanities--words like "refinement", "enrichment", "truth"--have connotations in the popular mind with an aristocracy or an upper class. Is there anyone whatsoever who would not gain if he were to come into possession of refined awareness? The point is this: to become well educated is to understand more of what is there in the world to be perceived, to be influenced by, and to try to control in behalf of one's increasing awareness of realizable value. What education can contribute is of positive value for anyone and everyone; it is universal, as appropriate for one person randomly selected from a total population as for any other.

The same point may be made by putting the issue in reverse: is anyone better off by ignorance of the complex reality which is his environment; is
anyone improved by a lack of sensitivity to quality in his surroundings? It would be a strange way of thinking to say Yes, for this would be tantamount to saying that not knowing what is happening, not being able to adjust one's behavior to the surrounding realities, can be better for some people than insight and understanding. A snob may think that works of art are only for the ultra-refined few. And even one who scorns snobbery may feel that a garbage collector is better off not having a taste for the acquisition of original oils by the great masters. But that is different from the point at issue. A garbage collector who has learned to appreciate quality in his life and surroundings is quite as much in a position of advantage as is a rich man haunting Sotheby's. The value of his acquisition is no less great.

Thus the first part of a complex problem XXXX has been settled: the advantages of being well educated are universal, and therefore no greater for persons of high status than for persons of low. The next part of the problem concerns the question of ability. Are persons equal to one another in their ability to be educated? Apparently not. For the issue of equality of educational opportunity, how can differences in ability to learn be interpreted? Is it the case, as some think, that a good liberal education requires more of intelligence than the average person seems to have?

At this point, there must be a division of the problem. Part of what is asked is a question of fact. Is it the case that some significant part of the population is not capable of learning the kinds of advanced materials from the arts, sciences, and humanities which are thought to be the heart of a good education? Since this is an empirical question, it may seem that it is not proper to make much of it for educational philosophy. It is a question to be referred to psychology and to scientific research. Another part of
the problem, however, is not of a factual order, and to pursue it is more clearly within the province of dialectical argument. Supposing that the facts were known about ability to learn, what then should we do about it? Suppose it could be said that, to pick a purely arbitrary figure, the lowest 20 percent of the population in distribution of intelligence is incapable of learning algebra and some other subject matters belonging to a liberal education. Should this fact be used to justify a curtailment of educational opportunity for that 20 percent? Should the best education be offered only to the best minds?

Having distributed this aspect of the over-all problem into different kinds of question, it is next in order to mix them together for joint consideration. The reason for this is that the empirical part of the question is not answerable by way of scientific knowledge at this time, and bids fair to remain unanswerable for at least the near future. Given that we do not know what capacity to learn is there in the minds of a population to be educated, how can we reach an intelligent decision? An intelligent decision would be one which seemed to accord with our democratic ideals on the one hand, and with our ignorance of what it might be possible to achieve on the other. Putting aside matters of technical educational detail, in hopes of reaching a first approximation of a proper decision, there is indeed a suggestion that \textit{equality} comes quickly to mind. It may be expressed as something like this: the ideal of equal educational opportunity requires that an all-out effort be made to educate all who are not known to be incapable of learning. If it cannot be said with assurance of any given person that he cannot learn what is essential to a good education, then an obligation exists to try to teach him. Granted that it needs qualification in the light of practical considerations about available time and effort, this principle
is offered as acceptable.

The practically induced question is: how hard should schools try to educate those who seem to resist learning, or to learn with painful slowness? Is there not a point beyond which the obligation to try has been satisfied, and further efforts to teach can no longer be justified? Someone might suggest that teachers should continue trying to teach any person in their classes until they can be sure that further efforts would be unavailing. As counsel, that is not very helpful. At this early stage in the evolution of behavioral sciences, one can almost never be sure that a greater effort to stimulate a learner to learn—that a more creative approach to the diversification of teaching technique, that more time devoted to encouragement and patience—would or would not pay off with further learning.

A large part of the complex problem is this: until now, school personnel have not thought it a part of their responsibility to try as hard as they possibly could to encourage learning, especially not from those who seemed obdurate in their resistance to the educational process and/or stupid. For the satisfaction of professional obligation, it has seemed enough that a teacher do a little to encourage learning, if only by promising punishment for failure of effort. But, by tradition, the person who shoulders the greatest part of responsibility for becoming educated is thought to be the learner himself. "Give me a student who has a strong motivation to learn, plus enough ability to meet our entrance requirements, and I will do everything in my power to help him," says the liberal arts professor. But here and there a few devoted educators have thought that their responsibility ran deeper than that. They have thought that the value of being educated is too great to allow each immature person to decide for himself, before one those
advantages have influenced his judgment, whether he ought to cooperate in getting it. Progressive educationists have used ingenuity to elaborate a diversity of approaches to learning, thinking that if the school offers sufficient variety of procedures, everyone will find himself reached and helped. Apparently those who have tried hard enough have succeeded. Children who, in the ordinary school situation, might have failed to learn very much and become troublesome have instead become educable in the class rooms of those who cared enough to try very hard. This is a complication of great magnitude. If school personnel, with the support of the public, were to believe that there is probably a way to bring nearly everyone into a capacity to profit from education if enough inventiveness and concern are operating; if they were to think that the cost of invention in educational technology is worth the effort, even if great, then no one can tell how much could be discovered about making educational opportunity a reality. On a large scale, the effort has never been made. Where it has been tried on a small scale, the efforts have produced radically encouraging results.*


All right, some one might say, let's agree that heroic efforts to educate everyone might result in a greater distribution of realized educational opportunity; why should such expense be born by a tax paying public? Is it not better to make schooling available to those who appreciate the opportunity, and not spend public resources on a gamble with those who seem to be uneducable within the usual kind of school circumstance? This is not totally unreasonable nor hard-hearted. It may be that if schooling were to be made voluntary, such that children and youth were allowed to have none of it if they and their parents did not wish it, then schools could become more
effective in providing education for those who sought it. It is a position for which much can be said. But in recent decades, various considerations, rather new in the history of schooling, have emerged to add a new dimension to relevant considerations.

One of the starting points was originally a limited concern for the health of school children. Educators came to the realization that if some children in school are in need of eye glasses or hearing aids which their families cannot provide, then those children are handicapped, as compared with others, in their potential for education. So also for children who are under-nourished by poor and inadequate diet. To make opportunities more nearly equal, it seemed reasonable for schools to accept responsibility for a remedial program, and to remove where possible such gross factors in a determination of inequality. Eye examinations, glasses, and school lunches were provided. From that beginning, further elaborations have continued to grow. How far the schools and the supporting public may be willing to go in accepting responsibility for factors that work against some children who are less fortunate than others is not yet determined.

It was easy for an enlightened public to understand about eye glasses; if a child can't see the chalk board, people said, then how can he be expected to keep up with the class? But a sense of responsibility for factors which effect a child's ability to learn grew larger by a simple and logical extension of the original idea. It is evident now, for example, that a child's home situation is one of the most important variables in shaping his educability. One child's home and its sub-culture can predispose him to look favorably upon schooling and to expect of himself a decent level of effort to learn, and another child's situation, as in a dangerous ghetto, can predispose him to look upon schooling as an unpleasant and degrading
experience. Anyone who gives consideration to these matters and is capable of thinking fairly about them will realize that children differ greatly from one another in predisposition to profit from schooling, and that they are not to blame for those differences. If, therefore, we are serious about equality of educational opportunity, then our responsibility to children and youth extends toward finding ways of overcoming those factors which we can perceive as influencing negatively their ability to profit from the availability of schooling. This responsibility has no simple and clear boundary. It extends to everything we are able to find in the environment that effects educability and which is not beyond any possibility of human control or power to modify.

To be clear about what this means: it means that, thanks to the social sciences, we are in a position to realize the very great numbers of factors--economic, cultural, psychological--that work to help some children in their capacity to benefit from schooling, but which are absent from the environment of many others. These factors, the positive operating here and the negative operating there, are tending by their contrary directions to defeat equality of educational opportunity. Once they are recognized and understood, they are at least potentially within the power of human beings to modify or to control. Therefore to accept the ideals of democracy and equality of opportunity is to become obligated to try to enhance the positive forces of a child's environment and to combat the negative. That conclusion would seem to be irrefutably clear.

What is not clear, however, is a related issue concerning division of labor. Consider, for instance, that part of the problem which is mostly economic: children of the very poor are at a disadvantage as compared with children from families that are more comfortable. Are educators responsible
for trying to eliminate poverty? The question permits of no easy answer. There are, however, some obvious considerations of a practical nature that suggest setting bounds upon the professional concerns of an educator. The forces which influence, either positively or negatively, the educational potential of any human being are spread throughout institutional life and private arrangements in so many ways that almost nothing is entirely unrelated. If educators were to think it their duty to search out and control those forces for optimum effect, their tasks would outrun the labors of Hercules. To try to do everything is to risk becoming impotent and accomplishing nothing except fatigue. Therefore, in behalf of concentrated effort and a reasonable division of labor, it would seem necessary to distinguish between a person's obligation as educator and his obligation as citizen. This introduces the concept of roles; to speak of everyone as having different roles to play is a useful locution because it suggests that the kinds of activities, of applied knowledge, and of obligation or commitment that may be deemed appropriate for each role are different from each other. It becomes possible to distinguish between what a person feels is his responsibility as educator and what he will accept as constituting his responsibility as a citizen.

In his citizen's role, an educator might very well do whatever he can in behalf of a more equitable economy and a fair distribution of opportunities in general. But as educator, his responsibility is to do whatever seems likely to help equalize opportunity by educational means (rather than, for example, by way of political action to change the economic system. This is not a sharply maintainable distinction. In his educator's role, a person may think it important to give political support to politicians and programs that affect favorably the public schools. But this does not blur too much
the basic idea.) A meaning for the expression "educational means" is most easily adumbrated by way of an example. As previously noted, there are forces operating in the milieu of some children which work against their capacity to profit from schooling. There are, for example, drug pushers, and in collaboration with them, a sub-culture of attitudes and values which favors the use of drugs. Some one might try to overcome such forces in behalf of equalized educational opportunity; he may be instrumental in securing the arrest of drug salesmen. He may urge the police to greater effort. These would not be educational means. By contrast, an educational action would be any attempt to modify a child's perception and understanding of those forces which urge him to become a drug user. That could include, not merely teaching about the physiological and psychological dangers of drug addiction, but perhaps even more, in its likelihood of good results, teaching a child to understand how and why he is being indoctrinated by others, and what it is within himself which collaborates with those who are trying to corrupt him.

In general, an educational effort to enhance the educability of school pupils is any kind of arrangement or teaching which increases a learner's understanding of his situation and its potential. This would include, on the negative side, gaining insight into environmental forces which operate to maintain his ignorance and his dependence; and on the positive side, an awareness of how learning what is spread out for him to learn may be of advantage in his search for the realization of value and the control of his life.

If a child lives within circumstances which tend to stifle his intellectual growth, the school is usually powerless to change those circumstances and unable to remove the child from them. What it can do is to help him to understand what is there at work in his environment, and thus destroy its negative potency. For it is the case that adverse cultural influences are effective only so long as those who suffer from them are in ignorance of what has invaded.
their minds and character.

The kind of change which these considerations promote may be stated simply: in the past, teachers and other agents of schooling supposed that the fundamental obligation of instruction is to teach first the 3 R's, followed by other subject matters like history and geography. Now, it may be said that the first obligation is to teach whatever will predispose a child to become educable, and to teach whatever is needed to overcome environmental forces that tend to render a child resistant to education. Until this prior obligation has been satisfied, the routine teaching of regular school subjects is a kind of act which promotes inequality rather than its opposite.

That the first obligation of democratic schooling is to promote the educability of children (that it is indeed first) is evident on the face of it. If a child is resistant to schooling, then, of course, efforts to teach him are likely to fail. When a child in school is confronted with his failure to accomplish what is expected of him, then, even if his failure seems willful—even, perhaps, something to brag about—he suffers humiliation and ego damage. If a person is not disposed to learn and to enjoy (for the most part) his time spent in school, he can be harmed by psychological consequences in ways that could becloud the rest of his days. There is no need to press the point; observations such as these are now commonplace. But now, whoever discovers the moral force of this first obligation is in its thrall, and therefore it may come as a surprise to look a step further and to find that there is a possible danger lurking even here, in this high moral call. The danger is that by allowing his resistance to the educational forces of schooling, a child may have no natural defenses remaining to preserve his scepticism and his own integrity. The danger is that he may become too pliable, too much open to every wave and wisp of educative influence.

To a classroom teacher struggling to sponsor learning against powerful
resistance, it may seem that there cannot be too much compliance. Have no fear, he might say, that educational technology may become too powerful. The sweetest of children is a tough hombre when asked to learn what he doesn’t want to learn. That may be true, and if so, we might recognize it with gratitude. The danger is that if children are brought to a condition where they are disposed to learn whatever is asked of them simply because well meaning teachers think it good for them, they are no longer making independent judgments about when and when not to invest their time and energy in learning. They would be in a condition where a gulf has opened up, separating motivation from critical intelligence. A child is then no longer his own man; his autonomy, his capacity for self-direction, is threatened. That could not be looked upon as a desirable state of affairs.

To call attention to this difficulty is to return to the topic of motivation. What any teacher wants dearly is that learners in his classes be motivated to learn for reasons of their own, for reasons which they themselves think to be good reasons in support of their own welfare. This is a kind of wish and a kind of topic which grows so complex in further consideration that a chapter devoted to motivation becomes obligatory. But there is one part of that complexity that needs consideration in this location, because of its close bearing upon equality of educational opportunity. It is that part of the larger topic which relates to one kind of motivation in particular, that kind called ambition, or a desire to engage in competitive striving to climb upward toward success and reward.

A traditionalist in his approach to equality of opportunity might say that everyone should have an opportunity open to him of becoming well-educated by dint of hard work, spurred on by personal ambition and a quick mind. Those who are lacking in either or both qualities—ability and ambition—and who
are therefore lazy and shiftless, will fail to learn very much and will
fall behind. But those who demonstrate drive, ability, and willingness to
work hard should be given every opportunity to profit from schooling and to
enter the high levels of vocational and social life. This is a way of
thinking which associates together in some kind of necessary bond the advan-
tages of schooling with the rewards of high status. The greater the amount
of schooling received, the higher the status appropriate to that achievement.

An attentive reader will recall that this viewpoint has been rejected on
the grounds that the most general form of the good which education confers
upon a human being is a kind of good which has no necessary connection with
high status. It is a good which may characterize the being and the experiences
of any one whatsoever, whether low or high. This is the recognition that
forces a reconsideration of traditional associations between education and
ambition to get ahead, and with the idea that by getting ahead, one therefore
gets ahead of others.

Those who still adhere to the rejected tradition (they are probably very
numerous) are likely to feel a certain indignation toward those who deny
their feelings in this matter. Are we, they might protest, to reward those
who are lazy, and unwilling to sacrifice for the future, with the same benefits
which are properly reserved to those who deny themselves immediate gratifications
and who work hard for their success? Is hard work and ability to count for
nothing? Expressions of that sort have a certain validity, and it must be
confessed that a part of the argument reflects a sense of justice or fairness.
Nevertheless, this traditionalist point of view would support a greater injustice
than that which the traditionalist is trying to avoid.

The traditionalist viewpoint may seem reasonable and fair only if one
accepts the obviously observable differences among people in ability and
ambition as a given, as a kind of difference that must be accepted as found. (But perhaps not even then. Suppose that the variable distribution of ability, much of it to a few and little to the many, is an ineradicable feature of existence. Would it be fair to praise and reward those who are fortunate in the distribution \textit{in the "lottery"--and to look with scorn and to visit penalties upon those who are deprived? That would be a peculiar sense of fairness.) But of course, differences in human abilities are not entirely a state of affairs forced upon us as impervious to human intervention. To some extent, differences in ability, and to a greater extent, differences in willingness to work for worthy goals, are differences which education itself can modify. Now and then someone of warm heart and great good will has tried to elevate the abilities of children who seemed deficient. When this has happened, it has turned out that ability itself (in particular, academic or intellectual ability) can be raised significantly from whatever condition had seemed to exist before intervention.* Once this


has been recognized, the traditional way of conceiving schooling in relation to hierarchies of status is no longer tolerable.

Up to this point, the trend of discussion has marched toward a conception of equal educational opportunity which proposes that all children and youth (save, let us say, those in the bottom 5 per cent, who seem to be lacking in necessary capability) be provided a good general (or "liberal") education; furthermore, the provision of such opportunity requires strenuous effort on the part of schools to do whatever can be done (which, research shows, can be a great deal) to promote the educability of everyone. That this is a reasonable account of what is required by the ideal of equal educational oppor-
tunity has been recognized by others. Indeed, it has been said that this is the natural evolution of the ideal to the present time.* However, there


is a further consequence which seems to be relatively unrecognized, and is in need of imaginative projection. It has long been supposed that a proper reward for educational achievement is placement within the hierarchy of power and reward at a level commensurate with degree of success in that achievement. That this promised matching of reward with virtue has never come true has not seemed to cast doubt upon the general idea. Anyone who is ambitious, it was thought, could use the educational system as a ladder for climbing upward. Now, if that way of thinking is rejected, as it must be in the light of a modern understanding, what happens to relationships between striving to learn--especially, to appreciate fully the values of a good education--and striving to get ahead in the competitive struggle for status?

In bringing awareness up to date, perhaps the hardest part is to realize that schooling is no longer to be associated with upward status and ambition. To gain an education is to bring one's sensitivity to the human environment into enhanced acuity, permitting one to perceive environmental forces that, to the uneducated, are too subtle to be observed, or that are indirect rather than direct in the force they exert upon the person, and so on. What is gained by enhanced sensitivity is not only a greater capacity to take environmental forces into account in deliberate conduct, but also, while being pushed this way and that, to be more aware of what is happening and more in charge of one's destiny. This is an achievement that has no

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essential connection with ambition or status. Those who have no desire to climb, who place no value upon the status of an elite, who are not motivated to accumulate maximum rewards wrung from a hierarchical social system, may look upon education as none-the-less valuable, to be prized for the quality of life it opens up rather than for the material gains promised in the administrator's advertising.

A traditionalist may be puzzled by this. He will wonder what would happen if well-educated people were not able to find themselves in the upper levels of vocational life. Suppose that everyone had been educated to the equivalent of a college degree, and thenceforth some college graduates were forced to take employment as laborers and garbage collectors. Would they not feel they had been badly cheated of something deserved by virtue of their educational achievement? Perhaps they would become bitter and nihilistic, or else revolutionary? Fears such as these are the result of not really believing in the intellectual advantages of good education. If education helps a person to understand better the realities of his complex world, including the employment picture, then he should be better able to accept those realities as they exist. Let us suppose a society of the future where all people are well-educated. Would those who are in school be encouraged to think that if they apply themselves to learning they will be rewarded by elite status? That would be contrary to the conditions of the supposition. If all are well educated, then all must know that a majority of people cannot assume an elevated status, just as, in a military organization, not everyone can be an officer. If students were to form unrealistic expectations concerning future rewards, this would be mis-education, a failure of the enterprise.

In a society where everyone is educated, what would people do to feel properly worthy, to feel that they are valued positively by others as well
as by themselves? It is said that a need for status is a genuine need, universal for all persons.* Let that be accepted as a reasonable claim.


Perhaps it is true that most people need to see themselves reflected favorably in the eyes of others, if they are to succeed in holding themselves in high esteem. Then a consequence, at first consideration rather strange, is this: where all are well-educated and hence, by virtue of cultivated intelligence, capable of understanding what is necessary for the good life, we must suppose that ways will be found to achieve esteem that have nothing to do with getting ahead of others, that have no connection with belonging to an elite few set against a humble many. The administrator's view of the world, where the few are rewarded and the many are deprived, may not apply. In a democratic and well-educated world, status a function of a person's worth as a cultivated human being rather than as a mark of how far he rises above others in a competitive system.

There is a limitation upon the argument. The force of the conclusion reached above is that in a society where all persons are well-educated, the accomplishment of an education entitle anyone to a status above that of others. This is not to say, however, that those who like to compete and to strive for the upper levels of a stratified society must give up their dream of success. It does not mean that schooling will teach people to find something wrong or evil in the ambitious person's attitude toward privilege. On questions of whether or not the rewards of a society are justly distributed, the school in its teaching must remain non-controversial. To be non-controversial is not, of course, to be unemotionally neutral. It is to lead people into the best available literature that deals with such
matters, and, of necessity, to embroil learners in the many and heated controversies which that literature contains. The assumption here is that to become aware of the literature is to be forced to locate one's self and one's values somewhere among the conflicting schools of thought. Whether the ambitious status seekers will win out in the future is to be determined by the further operations of controversy and the struggle for social justice. In that struggle, the only contribution proper to schooling is an effort to assure that everyone is provided a capacity for intelligent and informed participation.

The gist of the preceding paragraph is that in a democratic society, the public schools do not attempt, as a matter of policy, to indoctrinate children and youth in any preferred social gospel. This is not likely to please anyone who is an active partisan of right wing or left wing doctrine. Those on the left are committed by their political beliefs to saying that the public schools are used serving the interests of the oppressor capitalist war-mongers. Putting inflammatory rhetoric aside, there is some truth in this claim. The ideology of those people who have the greatest power and wealth, and therefore the power to reward and punish others, is given a competitive advantage in the market place. It commands the spotlight, the ring-side seat, the center aisle. Those who want to get ahead will do whatever is necessary to curry favor with those who hold the greatest power; this is just as true for ambitious left wingers as for junior executives. Given any kind of socio-political hierarchy, those in power, no matter not-very-loyal of what persuasion, will command the services of all who are eager to move up in the reward and status system. To say this is not to admit an awful truth about the injustice of the capitalist system. It is simply to note a characteristic of most people as they behave within grooves of
institutionally shaped careers. But there is another kind of truth which accompanies the former. Institutions have their own characteristics, or, one might say, their own careers. Their operations produce all kinds of consequences, and by no means all of those consequences are of advantage to a ruling class. If this were not so, then the steady erosion of kingly and aristocratic power since Magna Charta would be inexplicable. The school, being an institution with life blood of its own, serves not only the ideology of capitalism (or, in a socialist state, of socialism), but also the interests of those many intellectuals, artists and humanists who follow a different star. It is through schooling that Marxists, for example, learned to be Marxists. Other varieties of left wing intellectuals have also been successful in using the school to widen their audience and to win converts. (The only kind of social theorist who has not been well served is the anarchist. This is not because of opposition from an all powerful capitalist state, but because of opposition from socialists and communists, who realize that they have more to fear from those who reject the hierarchical ideal of human organization than from capitalists and fascists, with whom they can establish occasional expedient alliances.) That schooling is the main institutional means for disseminating ideologies and theories which differ even radically from the dominant ideology is not to be viewed with alarm. Quite the opposite. It is one of the great virtues of the institution. Although the concept of schooling as non-partisan, being here newly advanced, has not been adopted by schools or educators (not yet, that is), the very nature of schooling is such that the communication of the intellectual heritage, including radical and revolutionary literature (which is often possessed of humanistic quality) is an inevitable outcome of the institutional presence.

At least superficially, adherents of the right wing have more reason
to be sceptical about schools than those of the left. Of school personnel, only the administrators and the coaches can be relied upon to serve the traditional system. Teachers are unreliable. If they were ambitious for wealth and status they would not be teachers. Hence, the carrot and the stick are of little use. And school libraries contain who knows what globs of seditious material. To an ardent capitalist, it may seem that supporting the school is like nourishing a viper in one's bosom. Now it is said that schooling should be removed from the system of competitive striving. It may seem that equal educational opportunity is a kind of ideal that threatens some of the values and the favored myths of an ultra-conservative.

If that were true, it would be a grievous fault. A public school system should serve all legitimate groups and their interests without bias or favor. The trouble here, in dealing with a possible complaint from the conservative wing, is that any major change may seem, merely by the fact of change, to be anti-conservative. It must be confessed, to dissociate schooling from a popularly presumed connection with ambitious striving for upward status is to weaken the hold upon the general public of the reward and punishment system. That would be a significant change, and it is in the nature of a conservative to resist change.

In reply, two roads are open. One is to agree that the effective realization of equal educational opportunity would be a change of some magnitude. How could it not? The past which a conservative might cherish is one in which unequal opportunities and a general lack of fairness characterized the system in many and pervasive ways. But to note these facts is perhaps an embarrassment for a conservative. He is forced into the uncomfortable position of having to choose between embracing the ideal of equal educational opportunity, and the changes which this would entail, or else being willing to admit a greater attachment to the inherited system, with all of its inequalities built in. The other road is to ask the conservative whether he feels that the.
preservation of his values is dependent upon only some persons being well educated and others being kept in ignorance. It is unlikely that a conservative would agree that his cause is linked to the preservation of poor education for the masses. Until proven otherwise, any conservative must be presumed to be of good will.

When the magnitude of change that seems to be demanded by the ideal of equality in education is called to attention, there is likely to appear a form of argument that has become doctrinaire for revolutionaries. It is an argument which says that any significant change in schooling which is intended to help the many in their struggle for justice is a pipe dream; it cannot be allowed. Sometimes it is persons—capitalist oppressors, for example—and other times it is institutions which play the role of villain. In either case, it is said that the school cannot depart from its role in serving the interests of a ruling class. Not, that is, until after the revolution. Until then, any attempt to improve the institution of the school in its capacity to advance democratic ideals is foredoomed. If it threatens to upset applecarts in more than trivial ways, it cannot be allowed to happen. The intent of the argument is to sell the necessity of revolution, and not to promote the improvement of public education. That is understood. But if it is used, even in passing, to discredit all efforts to cultivate a rationally justified educational doctrine, then it is argument by recourse to dogma in the worst sense.

The heart of the revolutionist's argument is a prediction of what would happen if certain attempts were to be made. If the prediction is believed to foretell events which are inevitable, then those who share such a belief are, in that and all related matters, beyond the pale of rationality and into a kind of religious faith. For them, reasoned argument is beside the point.
But let it be supposed that the anticipation of the future which is central to this discussion is a proposal to be treated critically in the light of reason. It is possible, an advocate might say, with a high degree of probability, that under present circumstances the schools cannot be rebuilt closer to the heart's desire. If an educational theorist were to reason in that way, then he may be presumed to be in search of the most defensible point of view concerning education and the schools. If he were to be presented with an argument which seemed reasonable in all other respects, and to be in agreement with the further interests of the public, he would not then reject it because it seemed likely to encounter a strong opposition. That the school serves the interests of a ruling class has been acknowledged in earlier discussion. But it also serves other interests, including those which are antagonistic to the status quo. If a revolutionary wishes to overlook so patent a fact, then, alas, he is no longer in the court of reason.

In the interests of preventing a possible misunderstanding, one final word seems necessary. There are some educators who seem to accept the ideal of equal opportunity, but who interpret its meaning in a peculiar way. Equal educational opportunity does not mean, they say, the same opportunity for everyone. Accordingly, they recommend a diversified program of schooling, a variety of curriculum patterns, including "alternative" schools for those who do not show a willingness to cultivate academic skills, and many kinds of vocational training programs within the secondary school. What is "peculiar" about that viewpoint is that it is only superficially compatible with equal opportunity. On a more critical look, it is a deceptive form of accepting traditional inequalities and collaborating in their preservation. To secure equality, it is necessary that everyone be brought to a capability of appropriating for his enlightenment the arts, sciences and humanities. Anyone who
CHAPTER 8
THE CURRICULUM: CONFIDENCE AND TENSION

For a liberal education, the materials of curriculum are drawn from those parts of the culture which have been subjected to refinement in cognition or evaluation, and which may be said therefore to transcend common sense. They are, that is to say, materials selected from the arts, sciences, and humanities. Apart from these and from common sense, the only part of culture remaining that could have been considered for curriculum content is technology, or the technical application of knowledge to doing work. Common sense is not a programmed part of school instruction, because there is no need for it; out-of-school cultural transmission is both effective and constant wherever people are together, and what is there transmitted is mainly the common sense. Technology is also not a part of what is taught for liberal education because it is a specialized form of knowledge, essential for some people but not for others, in accord with vocational distribution. A liberal education is not vocationally specialized; it is that kind which is thought to be good for anyone, universally. So, it is from the arts, sciences, and humanities that the materials of a liberal education must be selected.

That leaves very large domains from which to draw suitable content. It being neither possible nor desirable to include in curriculum everything which could be classified as belonging to the arts, sciences, and humanities, a first order problem for curriculum planners is to find a satisfactory reason for selecting some parts from those three categories for inclusion, leaving other potential materials from the same sources outside the scope of deliberate instruction.
Since the materials from which selection is to be made can be divided into two kinds, the cognitive and the evaluative, it would seem reasonable to expect that reasons might be discovered more easily if a corresponding division is made in the task of searching. That a different reason would apply to cognitive materials than would apply to non-cognitive seems likely on the face of it. Hence, unless further examination of the problem turns up evidence pointing in a contrary direction, the first exploration will focus on finding reasons for teaching deliberately a particular selection of materials from the arts, sciences, and humanities which are predominately cognitive, leaving for separate and later discussion the problem of how or why to select evaluative or non-cognitive materials. (It may seem that this discussion rests upon accepting a distinction between cognition and evaluation which is controversial in contemporary philosophy. Although many philosophers would agree that evaluations are not a form of knowledge, there are those—mainly, the pragmatists—who argue that judgments of value are not fundamentally different from judgments of fact. In keeping with a requirement of non-partisanship toward legitimate controversies in non-educational domains, nothing in this present discussion is meant to reflect acceptance of either one side or the other. In speaking of non-cognitive or evaluative materials as distinguishable from the cognitive, the intent is to use a surface distinction without prejudice. It is simply the case that judgments of fact may be distinguished, with sufficient common understanding for present purposes, from judgments of value. Even if it could be agreed that evaluations may be, in principle, a kind of knowledge, we are not in possession of ways of proving them to be true. It seems useful to separate verifiable from non-verifiable materials.)
It may seem that the distinction of cognitive from evaluative materials accords with a distinction of scientific from humanistic and artistic contents, the former being cognitive and the latter non-cognitive. But that is not so. It is true that scientific content consists mainly of materials having the status of knowledge; but there are also hypothetical proposals whose status is dialectical rather than verified. They are subject to evaluation for their service to research and to further theory construction, and hence they are "appreciated" or "valued" just as are the materials from the humanities. As for the arts, much of what is taught concerning art objects is cognitive. A student learns, for example, that this painter uses brush strokes that are swift and broad, whereas that one uses strokes that are delicate and precise. In learning to appreciate architecture, one studies different ways of solving structural design problems, producing different styles and favoring different esthetics. The study of music includes much of a purely cognitive sort concerning, for example, chord structure, the tonic, dominant and sub-dominant, overtone series, and characteristics of compositional forms. Similar observations apply to the humanities. In the study of philosophy one learns what it is that philosophers find especially problematic, and how differing ways of solving those problems lead to the characteristics which define schools of thought or systems. Although characteristic philosophic statements do not assert states of affairs, nevertheless a student must learn much of a factual sort about philosophers and their products: e.g., that Kant postulated the primacy of the practical over the theoretical reason. In the study of literature, one learns, for example, how the Petrarchian differs from the English form of the sonnet, how the short story form originated and evolved, and how to classify meter and rhyme schemes in poetry. Although the having of an esthetic
experience is certainly distinguishable from coming to know, and although the intent of the humanities is to stimulate critical tastes and to expand values rather than to inform concerning states of affairs, nevertheless in the study of the arts and humanities there is a large amount of knowledge to be gained.

As previously noted, the kind of knowledge which schooling transmits is a kind which may be said to "transcend common sense." Hitherto, the expression "common sense" has been used without clarification, simply for its suggestive power. But now it becomes desirable to attend more closely to what it means, and to say how common sense is different from whatever is said to "transcend" it. Common sense qualified for the designation "common" because it is a kind of culture which is shared by almost everyone. Within any group which can be called a society, and in certain kinds of mundane situations, everyone talks and acts in ways that are at least roughly alike. Mundane activities include dressing, eating, greeting friends, lighting cigarettes, answering the telephone, and looking in the refrigerator. To be sure, there are minor differences in how these things are done; some people hold knife and fork one way, other people a different way. This attests to sub-cultures which offer variations upon a common pattern, but the degrees of difference are usually less than the degrees of sameness. Common sense moves toward universality.

One reason for the commonness of common sense is that the possession of it is what entitles a person to membership in his society. It is an entry visa. We can recognize a person as being of our kind because his actions, in ordinary and superficial details, are similar to ours. It would serve no purpose to emphasize too much a sameness of behavior. Within a particular society, especially a highly advanced one, very big differences among people
may be found—differences in tastes, in morality, in ways of spending leisure time, in degrees of civic responsibility—but these differences are not evident on the surface of behavior. In how they brush their teeth or walk the dog, people are much alike. A surface similarity helps to promote acceptance or tolerance. Given enough similarity to others in ordinary little ways, a person may be forgiven for being an individualist in matters of importance.

Another reason for the ubiquity of common sense is that it specifies how to do things in ways that are usually successful, and with a minimum investment of time and energy. To do things in the manner specified by common sense is easier and quicker than to pioneer a new and individualistic way. For the simple routines of daily existence, there is no incentive to be creative. Save the creativity for matters of greater importance. Put the stamp of individuality and pride of achievement on something other than the habitual routines of maintenance and of getting on with the merely inevitable. In short, let the common sense take over in matters which fall within its jurisdiction, and it will serve well enough.

Concerning the commonness of common sense, enough has been said. But what about the fact that it is called a kind of "sense"? The second term of the conjunction would seem to suggest an essential connection of the common sense with modes of perception, with how things appear in sensation. Indeed, that suggestion is appropriate. Although what is called common sense is a kind of culture—communicable ways of thinking, valuing, and acting—and therefore much broader than perception alone, nevertheless it is the kind of culture which deals with things and situations as they look and feel in ordinary experience. Ordinary experience means the kind which happens when a person is dealing with his world in order to maintain a position of advantage; when he is trying to keep abreast of developments in
his environment to avoid harm and to secure his interests. Common sense deals with surface features of the environment, that which has the most immediate significance for liking and disliking, for approach and avoidance, for acting and reacting, for attending or ignoring, for fearing or loving. The common sense deals with the world in its qualitative appearance, in how it looks from the standpoint of sustaining practically advantageous relationships.

The point of all this is to set up a contrast between common sense and the kind of cognition which differs from it by being not only less common—not as universally distributed in the minds or behavior patterns of a population—but also more worked over by deliberate design with intent to improve. The most obvious examples of such improved cognitions are the warranted findings of science, although that does not exhaust the domain of all that may qualify. The objects of scientific knowing are not selected and examined with an eye to their use and enjoyment, but rather with regard for their embodiment of conceptual relations. Consider, for example, the dandelion. To a suburban homeowner, it is a nuisance. It tries to destroy his lawn. To a peasant or to an epicure, it offers a salad green or the material for making wine. But to a botanist it is a biennial herb of the genus Taraxacum, in the Chicory family, having deeply incised lanceolate leaves and flat flowers born on hollow scapes. What distinguishes the botanist's dandelion from the dandelion of common sense is how it fits within a system of classification, and how it may be characterized with the aid of a technical vocabulary. That is not the entire difference, but it is enough to make a point: the world of common sense is a world interpreted for its qualities in relation to needs, pleasures, and other good or bad offerings; the world of higher level cognition is a world no longer dominated by our appreciations and hungers, but perceived

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instead as subject matter for knowing, classifying, relating, and for doing these things above and beyond the call of duty or of immediate concern.

The question for educational theory is this: why should schools be instituted to transmit a kind of knowledge that differs from common sense? Why does the common sense need to be "transcended"? If it is possible to describe the kind of value an educated person gets from knowing scientific and other high level cognitive contents, then from that it should also be possible to determine what kinds of cognitive materials are most likely to belong in a well designed curriculum, and what materials may be left out.

An understandable temptation is to suggest that higher level cognitions are useful in practical conduct, and it is for that reason that they belong in the curriculum. The history of scientific technology in Western civilization would seem to support such a view, at least in this sense: modern life is radically different in how people work, eat, play, and in standard of living from life in pre-modern times. Most of the difference seems to be an improvement. Each person's labor produced more wealth, and health has improved so much that the life span of the ordinary person is perhaps twice what it used to be. All of these favorable differences are the consequence of scientific and technological insights as applied to ways of doing work and ways of relating one's self to environmental forces. Because of that, it has seemed reasonable to some educators to propose that when people are better informed by science and related materials, they are enabled to act more successfully as they realize how to apply what they have learned to the improvement of their practical conduct. From the study of physics, for example, one learns how to control matter in motion, as in driving a car. From the study of biology, how to promote health; from the study of economics, how to plan one's finances; from the study of chemistry, how to
remove stains from cooking utensils or from clothing, and so on, for a potentially inexhaustable list of ways to apply science in practical daily living. Anyone who has a high regard for science might be tempted to accept that kind of argument without close scrutiny; he would like to think that anyone's knowledge of science can make a favorable difference in practical conduct. Unfortunately, the argument is spurious.

What is overlooked (by the person who argues for science as conferring practical advantage) is that our civilization offers the benefits of science and technology to everyone regardless of whether or not he knows anything of science. A person ignorant of physics, and who knows nothing of how a television set is made to work, is as capable of using it for information or entertainment as one whose understanding of scientific principles is profound. The most ignorant of peasants is capable of farming with high yield and with no mind-destructive labor through using modern machines and practices. These are made available to him by farm suppliers and farm agents in the form of easily followed prescriptions, which do not require of him that he understand the reasons why they work. That they do indeed work may be his only concern. In general, the reason why civilization can advance, even in the midst of scientific innocence, is that someone stands to gain or to earn his living by contributing specific practical applications which fall within the scope of his specialty.

Everyone is aware of middlemen in the economy, middlemen being those who stand between the producers of goods and those who sell goods to the consumer. But a more essential kind of middleman is the one who stands vocationally between the "pure" research scientist and the ordinary beneficiary of applied knowledge. The very model of such a middleman is the engineer, who comes in many forms—civil, electrical, mechanical, etc. He is
a high status, high reward person in modern industrial society because of what he is required to know. He commands a knowledge of some (limited) scientific domain at a level more thorough than anyone is expected to reach in his general education, plus a knowledge of technical matters other than the science itself, plus a knowledge of procedures for exercising his creativity in ways that may be kept both safe and testable. It is most fortunate for everyone that only a tiny fraction of the population engaged in engineering can be responsible for industrial revolutions and for continuous miracles of technology.

The engineer is not the only kind of specialist in devising ways to apply science in practical life. There are others whose vocational specialization is not as august nor as precisely defined as the engineer's, but who are also middlemen. Their work finds expression (for the ultimate consumer) in books and articles of the how-to-do-it variety and, for various kinds of vocational specialists, in handbooks and technical manuals. The result is that anyone who wants to do almost anything that has been made possible by science can find available for his use a pre-digested account of what it is possible to do and how, step by step, to achieve his intent.

From these remarks, the lesson to be learned for educational theory is easy to understand. Between science on one hand and practical life on the other stands a vast body of literature which tells its reader how to apply knowledge in pre-tested and ingenious ways. It is a literature which not only saves its users from risky and time consuming innovations, which are rendered needless, but also, it is a literature which is understandable without need to know the basic sciences from which it derives. In so far as educators may wish to enlighten practical conduct in ways which scientific understanding makes possible, there is no need to teach the basic science
itself. The literature which middlemen provide is there waiting to be learned and to be used. If, therefore, the intent of educators is to make science functional in daily living, then for the realization of that intent the curriculum may be planned more intelligently, with greater likelihood of success, by omitting science and going directly to practical instruction.

This conclusion is logically compelling. It is rational, but it is more likely to arouse the wrath than the intellectual consent of a traditionalist. Indeed, almost anyone is likely to feel that there is something amiss. We cannot take pride in a curriculum which never gets to the study of science, and remains stuck at an intermediate station in the literature of how-to-do. One cannot think that a person who has learned nothing of science is to be regarded as well educated. That is so. What is to be rejected, therefore, is not the above argument and its conclusion, but rather the proposal that a good reason for teaching science is that it may encourage a functional application of science in daily living. That is the source of the mischief.

The feeling, shared by those who respect the intellectual heritage, that a good education must include the study of high-level cognitive materials, is still to be trusted. But the rational justification of science in the curriculum is a different matter. Traditional ways of thinking are inadequate.

Also inadequate is a currently popular idea that the study of science is necessary because of what is learned about something called "the method of science." Thos who hold to this position are under the impression that there is a certain way of doing science which is a possession common to all scientists, and that this universal scientific method is also to be taken as a model of cognition (or even of intelligence) by everyone, whether scientist or not. To study science with an eye especially for the method by which scientists do their work is thought to be a way of providing the mind with
insight into the criteria of truth and of knowing which the mind can thereafter employ in further cognition.

As in any viewpoint which has gained wide support, this belief in a method of science which all would do well to learn is not likely to be found completely mistaken. But it takes some sorting out. Is it true that there is a distinct method known to all scientists, and which anyone looking into science from the outside (as a non-scientist) may discern, or see as operating in what he learns about the actions of scientists? Anyone familiar with philosophy and the philosophy of science knows the answer, whether he likes it or not. The answer is simply No. There are many philosophers who think that there ought to be such a method, waiting there to be found, but no one has been able to win common assent to any one of the various and controversial theories about it. Controversy about scientific method is as rich in contraries and contradictories as is any other part of philosophy and its eternal dialectic. It is simply a fact that scientists are not in common possession of a method for doing science. In what sense, then, could those who speak of such a method be not altogether wrong??

Only in this sense: there are implicit criteria of good reasoning and criteria for accepting or rejecting cognitive claims operating in the human mind, some of which may sometimes be caught in conscious awareness and brought into explicit formulation. Socrates could usually tell the difference between good and bad reasoning, although he knew nothing of logic. Had he not been able to do so, the eventual discovery of logical canons could not have occurred. From time to time, and for specific pieces or samples of reasoning, it has been possible to bring the operating criteria into explicit recognition and then to win for them a widespread acceptance. (But not universal agreement. Even the so-called "laws of thought"—like the law of
identity or the law of contradiction—which might seem to be least controver-
sial, are not free from rejection by some philosophers.*) The same observa-

*See, for example, Alfred Korzybski, Science and Sanity, p. 748ff. (Lake-
1948.)

tion applies to knowledge of how to test for truth, or how to verify. The
procedures by which scientists accomplish such testing could not have been
created from scratch. There must have been tendencies toward a proper
scepticism, toward looking for evidence, toward close scrutiny of candidates
for truth, long before science began. Ways of testing possible evidential
material for its weight as evidential have become more definite and clearly
understood with the evolution of modern science, but the foundations for
such developments must have been there already in the mind. By the con-
tinuous application of criteria with increased vigor and with an eye to their
improvement, something that might be called, without straining the language,
a scientific methodology came into being. But whether the teaching of
science is educationally justified by the claim that students are brought to
understand scientific method hinges upon another consideration.

In the professional activities of scientists there are distinguishable
parts. Among them, first, is the intent to employ good reasoning, (some of)
the criteria for which have been made explicit in logic. Another is the
devising of instruments and devices for extending human powers of percep-
tion: like, for example, telescopes, Wilson cloud chambers, and particle
accelerators. Still another is the construction of theoretical entities, like
quarks and reflex arcs, the justification for which is provided by the
assistance they give to further scientific accomplishment. Just those three

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are enough, and no further gain can be anticipated by a longer list. The first, a recourse to criteria of good reasoning, is a kind of activity in which anyone whatsoever, whether scientist or layman, might hope to become as proficient as possible. The second and third activities, however, do not appear to have the same quality of universality. It would seem reasonable to argue that any well educated person should learn something about the physical and ideational instruments that have been devised and used in scientific explorations, if only because they are of great intrinsic interest. But if anyone suggests that all educated persons ought to be proficient in the employment of such instruments, with the degree of proficiency which might be expected from a professional scientists, then he is too far out in a confusion of vocational with general intelligence. Learning about the theorizing and the testing procedures used in science, where learning is entered upon with intent to gain personal control of those procedures, is a specialized vocational concern, having no proper place in general education.

A conclusion which follows for education and the curriculum is that the teaching of science is not justifiable by virtue of what is learned concerning the method of science. Whatever aspects of scientific method may be judged of universal importance rather than of limited vocational appeal—that is, those which specify criteria of good reasoning and of cognition in general—are or should be pervasive in the curriculum rather than restricted to only the teaching of science. For a learner in school, the study of science offers countless opportunities for becoming conscious of logical, methodological and epistemological criteria. But such opportunities are not specialized nor peculiar to the study of science. They occur everywhere in deliberate instruction. We are left, then, still searching for a good reason why science and other advanced cognitive materials should be taught as a significant part of general education.
The problem appears in all its weighty gravity when considering the justification, if there is one, for teaching mathematics beyond the level of arithmetic. The latter subject, arithmetic, is practically functional for everyone. But why should everyone study subjects like geometry and algebra? Although they have functional value in many kinds of vocations, it is the case that the great majority of adults have no use for whatever knowledge and skill they might have acquired in learning those subjects. To be sure, algebra is used in application to more advanced studies in natural science, especially physics, but this is a reason for learning algebra which is imposed by the school itself for its own further schooling. If it is true that algebra has no applicability in the life of most adults, no matter how well educated, then why should it be taught? Somehow, algebra seems to offer itself as a test case, an acute instance of a more general problem.

Sometimes the best way to go forward is to go back into something primitive or fundamental, which, having been examined again, permits a return to the fray with quickened awareness. For the topic at hand, an appropriate primitive is cognition, cognition in the most general sense, as a function of all living things. To be sure of getting to the barest essence of cognition, consider a one celled organism, like an amoeba. As it floats about in its watery world, it has only two responses toward anything encountered: one is to ingest or eat something into which it bumps; the other is to avoid whatever is not to be eaten. To an amoeba, his would contains, other than the fluid medium itself, only two kinds of objects, food and non-food. If anything encountered is not one, it must be the other. It is remarkable that an amoeba can get away with such a simple bifurcation of the universe. A very slightly more sophisticated organism might want to say to an amoeba, You silly creature, can't you see that there are really three (or four or
five) kinds of existents? But an amoeba, if he could reply, would insist rightly that he does not require any further distinctions than those two which he employs. His "knowledge" of the universe is adequate.

The world tolerates being treated with cavalier simplicity because of structural properties of living animals. The simpler the structure of an organism, the more it can afford to overlook differences which, for a more complex organism, must be differentiated for different ways of responding. An organism having a more complex structure is also open to mistake and to being punished for cognitive failure. An animal that eats berries must learn to distinguish those that are aliment for its digestive tract from those that are poisonous. It would be interesting to know whether animals other than man are prone to making more distinctions of kinds of things in their world than would be required for practical success, but at least we can be sure that species which survive are able to differentiate environmental objects and events with as much refinement of categories as need to get along.

Thanks to an intricate nervous system and a capacity for language, human beings are able to learn more about the world than is, let us say, absolutely necessary. They can learn and continue to learn of subtile distinctions between kinds of things, and discover unsuspected similarities among things which seem at first quite different, to the farthest reaches of time and yet not exhaust the capacity to make still more differentiations. There seems to be nothing in the nature of a human being which tells him when to stop in his search for more knowledge. Perhaps that is a result of how the mind works. Because one never knows what might be happening off stage that could offer something of potential good or bad, because of the constancy of change, one is continually scanning the environment, interpreting changes, anticipating trends, preparing for even the possible but
unlikely, and doing all these things with varying intensity but relative constancy. A kind of mind which operates continually cannot limit what is learned to only that which later outcomes will show to have been necessary. One never knows what might come in handy.

This not knowing when to stop in the accumulation of knowledge is what makes difficulty for curriculum theory. There is an inclination to learn all that one possibly can about very nearly everything, which is one way of being prepared for an unpredictable future. In the 17th Century, it was some such inclination which prompted Comenius to advocate an educational program based on the idea of "all knowledge to all men." But there is a principle of economy operating too, a principle of least effort. Why bother to learn what may never turn out to be useful? From a teacher's perspective, it is this principle which has the upper hand in his students. Given these opposed characteristics of being human, an educator longs for some understanding of how to chart a middle road. Realizing that we cannot limit cognition to only that which proves useful, we would like to excuse ourselves from taking all knowledge as our province and from having no rest from labors of learning.

There is a sometimes useful theoretical device which may be helpful in this situation. It consists in the construction of a linear scale, representing a particularly important concept, both ends being unrealistic extremes derived by stretching separable parts of the concept to their maximum exaggeration. The idea of the exercise is to see whether such a deliberate caricature can reveal a newly discernible facet of the conceptual pattern.

Accordingly, suppose the construction of a scale representing adult humanity in its role as knower. On one end of such a scale we posit a person who finds no occasion for any further learning; he is content to
apply whatever he already knows, and finds no occasions which he cannot handle adequately with that previously acquired fund of cognitions. He may be presumed to live the balance of his life without any further additions to his store of knowledge. When finally he begins to forget even that little which he had known, his children place him in a nursing home, an environment in which he is able to cope for the remainder of his days. At the other end of the scale we posit a person who is always learning, finding in each occasion a new demand for the further elaboration of his cognitive structures. On his eightieth birthday he takes his first lessons in sky diving and in Swahili, thinking they might some day be useful. He is, of course, no less than the first a pure fiction. To do either—to stop learning altogether or else to learn incessantly—is impossible. Actual human beings could be plotted on the scale as belonging either near the middle, or as tending more toward one end or the other, but never quite reaching the extremes. The caricature distorts, but that is in its nature.

It would be possible to clothe these end figures in some of the attributes of real persons, and thus shape them in accord with popular concepts of human types. The man who does not learn, it could be said, is an extreme version of a popular folk hero, a person who is good, simple, and happy. He is able to be those things because he lives a simple, undemanding life in a rural setting, living close to nature and the eternal verities. The other person, the one who is constantly learning, is brilliant but also, as popular imagery would have it, tending to be heartless. Perhaps he has sold his soul to Satan in exchange for universal knowledge. He is thin rather than comfortably plump, and keeps his trousers sharply creased. He is never satisfied, and is driven by his searching, inquiring mind to keep moving into the farther reaches and the great cities of a
bustling world. (Such imagery is unnecessary, contributing nothing to the
problem at hand, but it adds a sense of continuity, not only with popular
mythology, but also with the mind set of that most influential of educational
theorists, J. J. Rousseau.)

To realize the point of the exercise, it is necessary to ask what can be
said further about such extremes. Are they alike or different in ways that
were not in mind when establishing the contrast, but which follow as a
natural consequence of how they were conceived?

Starting again with the left hand figure, the one who never learns, it
could be said that he must be presumed to live in a very stable environ-
ment. For some reason—it does not matter what that could be—he must be
conceived as living his life having no fear, not even for a fleeting moment,
that he might not be able to cope. He is blissfully confident that everything
will remain the same, that nothing new is going to crop up, that he will not
be caught short by any happening. His is a world where there are no
emergencies, and for him to continue in the manner required by the initial
construction, he must manage to stay serene, whether by overlooking
novelty, by good fortune in finding a quiet backwash, or by virtue of an
insane capacity to shut out intrusions, it does not matter which. The point
is that the idea of a perpetual non-learner requires a related idea: it
requires us to suggest that he faces his world with supreme confidence,
either in the unchanging stability of the world or else in the ever adequate
store of learning already accumulated, or perhaps both.

At the other end of the scale, the idea of a man who is constantly
learning requires that we construct a different set of circumstances. His is
an adventurous way of life. Perhaps he travels a great deal, without
benefit of advance booking, or else he holds a constantly challenging job,
like president of the Western world. His environment is always throwing up something novel which cannot be ignored. Because he can never relax from confrontation with challenge and the demand to learn something new, his is a more or less hazardous world—exciting and stimulating, perhaps, but with something of possible danger always lurking. If it were not so, he would sometimes let down his guard, put up his feet, and take a little holiday from the stress and turbulence of the daily grind; which is, of course, contrary to the construction. To support the idea of constancy in learning, we must suppose that he lives from moment to moment in a condition of uncertainty; he fears that something not previously encountered will come along and reveal an inadequacy to environmental demands. Hence, he must be forever overcoming novelty and reducing it to something tried and surmounted. This condition, of living in an unceasing demand for further learning, and therefore in fear that if he does not learn again he may not be able to cope, is best described by the word "tension". A constant learner is a person who confronts each new situation under some degree of tension.

Thus we arrive at two concepts, those of confidence and tension, which turn up through exploitation of the linear scale. A non-learner is able to remain so because of his confidence in the continuing simplicity of his world. He is confident that everything to be encountered can be assimilated to schemata previously learned. An incessant learner, on the other hand, is one who cannot rest from learning because, fearing that his repertoire of past cognitions may prove inadequate to the next situation, he lives in a continuing state of tension. Part of the purpose of such an exercise is to be able to locate reality of human existence somewhere along the scale, short of either extreme. An actual person must be conceived as having within him a mixture of both confidence and tension, either trait alone, without an
admixture of the other, being unrealistic and impossible. A complacent and phlegmatic kind of person is one whose level of confidence is high relative to the level of tension that is characteristic of his day-in, day-out style of living. A keenly intellectual kind of person is one whose level of tension is kept rather high, no matter how much tendency he might have toward confidence, as he learns about the hazards of a world where that which he values is always somewhat precarious. A person who would be described by his friends as especially adventurous is a person whose normal share of tension is always threatening to run low, and who therefore must seek to heighten it deliberately.

Such examples are useful for suggesting a generalization about people: everyone sustains some sort of balance between confidence and tension, but individual differences are as plentiful in this aspect of personality as in any other. Ideally, a person may be presumed to seek a level of tension sufficient to keep him alert toward his world and ready for novelty whenever it happens along, but a level of tension that is kept in balance by confidence that, all things considered, one is capable of meeting challenges adequately. Although tension is awareness of difficulty or danger, and so tinged with negative feeling, it is just as necessary to a proper personality formation as its opposite. A mode of life in which there is little of tension would be found dull, lacking in zest. To prevent such glumming, most people choose leisure time pursuits which deliberately stir up new tensions, thereby enhancing one's sense of being alive and kicking. This deliberate search for tension is quite as characteristic of sendentary pleasures, like reading murder mysteries, as of the most strenuous of pursuits, like mountain climbing. As for confidence, which is associated mostly with positive and pleasant feeling, too much of it could be a dangerous attribute.
if it overwhelmed a person's readiness to perceive challenge in his environ-
ment. In any situation where an important part of a person's response is
the learning of something new, there can be said to have been initially a tilt
toward more of tension than of confidence, and the execution of learning, its
accomplishment, effects a restoration of balance between them.

What kind of thing are these two opposites? Are confidence and tension
to be classified as emotions like, for example, desire, joy, fear or rage?
Probably not. What are typically called emotions are feelings of which a
person is aware, with a conscious recognition of their presence and of the
direction toward which they are pushing or propelling. But confidence and
tension may be psychologically operative, having their influence upon con-
duct, yet without conscious awareness that they are there and being felt.
It is only now and then, in particularly dramatic moments, that a person
feels an emotion that may be called either being confident or being tense. A
person approaching the execution of a very difficult task may feel either or
both as emotions, in the same way that a person feels emotions like, let us
say, exhilaration or melancholy. But generally, confidence and tension are
continuous threads running through the episodes of experience as back-
ground, varying in relative proportion to one another in different situations,
but rising to the status of felt emotions only one in a while, when action
takes on a win-or-lose kind of status. It would seem more in keeping with
usual ways of speaking to say that confidence and tension are persistent
attitudes that accompany one's approach to the world and one's trying to
manage a safe passage within it. One faces each new moment and situation
with a background level of confidence and tension, both together, but in
proportions that keep changing relative to one another as one works his way
through the opportunities and hazards of successive environments.
The kinds and proportions of any person's background attitudes toward the world are a function of his cognition. As a person's beliefs about his world are changed by new learning, the possibility arises that differences in confidence and tension and their proportions may take place. (Someone might object that this exaggerates the place of cognition at the expense of feeling, but the intent is simply to note that feelings are not free-floating events, detached from awareness of something or other in the surrounding world.) Because schooling effects a considerable modification of anyone's cognitive structure, it must be presumed to have some influence upon a person's confidence in himself, upon his tolerance for tension, and upon relative degrees of the phlegmatic or the zestful in one's approach to various kinds of environment. Whether by deliberate intent or as by-product of other intentions makes no difference to the fact that schooling exerts an influence upon those persistent attitudes toward the world which are here labelled as confidence and tension. To become sensitive to this is to become responsible for it.

The responsibility of schools concerning confidence and tension is first of all to make sure that its influence upon those persistent attitudes is a healthy one. That is too obvious to need elaborate justification. Further, the obligation imposed upon an educational theorist is to find those kinds of influence upon confidence and tension which are appropriate to schooling; that is, which are related in our understanding to something distinctive about schooling as a deliberate activity. For it must be the case that many fortuitous events impinge upon a person's general orientation toward his world. Whether a person looks upon his environment as a scene within which to find the good life, or, contrariwise, wherein to find occasions for lamentation, is a predisposition in which many prior events have played their
part; very little of those prior events were deliberately created or deliberately pursued, and they are subject neither to credit nor blame. But schooling is not fortuitous, is not a mere happening.

There are certain kinds of confidence and tension which are uniquely appropriate to schooling. (To say that there are "kinds" of confidence and tension calls for explanation. There are not really differences of kind except in this sense: differing categories may be created for the different kinds of objects or situations which provoke a person's confidence or his tension. Thus, a person may be confident of his ability to do mathematical computations, and tense about his ability to drive safely on icy streets.) To introduce what follows, consider a very simple example. An educated person, whenever confronted with a newspaper, has no moment of embarrassment or fear that he might not be able to read the printed words and interpret their meaning. In this he is different from a semi-literate person, and the difference, such that in the presence of print there is confidence in one person and tension in another, is one for which schooling is responsible.

Anyone could easily add further examples, but a mere cataloging of all such differences would accomplish little. The question to be pursued is, are there a few broad categories of confidence and tension that between them sum up or account for the influence of those cognitions for which deliberate schooling is responsible?

There are. There appear to be three kinds of confidence and tension which are related to the impact of schooling (but whether there are more than three is difficult to say.) To facilitate ease of reference, it is desirable to give each one a name, preferably, a name suggestive of its character. In what follows, three kinds will be established and described: confidence of location, confidence of command, and confidence of oppor-
tunity. These are somewhat arbitrary name tags, meaningless in themselves, and in that respect they are like proper names. For each kind of confidence there is a corresponding kind of tension, but that may be understood without having to give proper names to those.

The expression "confidence of location" signifies a persistent attitude toward one's capacity for coming to grips with the world and managing by and large to get along with it; it signifies confidence that one is properly located within the world as it is and is becoming. This surrounding world, the world of one's own time and place, is one's own kind of world, the kind of place in which one is pleased to live. The opposite of it, a corresponding tension, is more easily described. As adults go through middle age, changes in the community, in social life, in mores and in technology seem to occur with increasing speed, leaving some of those who observe such changes in an emotional condition of being left high and dry on the shore, no longer a part of the stream. If a person to whom this happens feels that he ought to be participating but lacks the knowledge, skill, or necessary attitudes to get into the swim, he suffers tension; his confidence of location has been eroded. The example of persons growing older may seem inappropriate for a theory of education which is concerned primarily with the schooling of children and youth, but it could be used to point up an observation that is being encountered with increasing frequency: there is need for continuous schooling opportunities, at all ages, for life-long learning. However, the relationship between schooling and confidence of location is a special one for persons of any age, even for the very young.

Children are up to the minute simply by virtue of their recent entrance. To be young is to feel that one's life is mainly ahead, and one's self is a bundle of promise. A middle class child born into a loving family, cared for
and sheltered in his early years, may grow up with an expectation that the
world is warm and welcoming, ready to unfold before him many new delights.
No doubt that eager anticipation and readiness for what lies ahead is more
beneficial than otherwise, and whoever feels it is indeed fortunate. But the
cuddly world of the nursery is mostly fiction. The trick is to learn about
reality and not be soured by it. In school, a child begins to learn that the
world is bigger, wider, and more complicated than he had supposed.
Gradually he comes to realize that it does many things other than nourish
and cherish him, some of which are not very ducky. The world and its
human societies make demands, offer threats, impose punishments, and
corrupt one's finer sensibilities. If the world were to be represented as
other than a mixed bag, that would be misrepresentation. To educate truly
is to help in the perception of reality, which in some of its aspects provokes
tension as an appropriate response, and which requires to be balanced by a
corresponding growth of confidence in one's readiness for this intriguing and
stimulating world of the present and the immediate future.

A critic might ask: is it realistic for all children and youth to grow up
feeling confident of their capacities to meet the demands of a modern world?
Surely, he might say, in this matter there is much of individual differences,
some persons being adequate to environmental demands no matter what, and
others being relatively weak and stumbling, scarcely able to find a case
worker who can arrange a welfare check. In a world of prying computers,
lying governments, evil corporations, ambitious administrators, and atomic
weapons, perhaps only the especially quick and clever should feel able to
cope. Would it not be deceptive and mis-educative to instill in everyone a
confidence of location?
In reply, it should be noted first that schools have no business to teach any particular evaluative attitude toward the world. It would violate the non-partisan characteristic of democratic schooling to teach children and youth that this world is or is not a good place, is or is not a vale of tears, a bower of delight, a test of fortitude, or a meaningless mess. That it is any of those things, or any other broadly evaluative summing up, is not a matter of knowledge. What kind of evaluations an educated person makes of the scene of his existence is up to him and his tastes. Perhaps it is inevitable that some will be optimistic and some pessimistic, some rushing out happily to greet novelty, others disposed to avoid potential challenges. This is a matter of individual variability, which education, no matter how extensive, is not likely to overcome. Should we expect, then, that everyone who is properly educated ought to feel confident of his placement in time and space?

The answer—an affirmative answer—follows reasonably from a consideration of knowledge, what it is and what it makes possible. To come to know something or other about one's environment is to become better able to establish a favorable relationship toward it. It is not necessarily the case that knowledge conveys a power to control all that one might wish to. One is not always empowered to regulate environmental forces such that all harmful potentials are averted and only the good is allowed to prevail. But knowledge does enable a person to alter his relationship toward the objects of his knowledge and thereby increase the odds in his favor. A person's knowledge may enable him to predict that the neighboring volcano is about to erupt. The danger cannot be forestalled, but it is surely better to know what is coming, however undesirable, than to remain ignorant. One is enabled to get out of harm's way.
The example is peculiarly apt. If general education encourages knowing about environmental forces that are to be found beyond the obvious and the local, the advantage gained by knowing is not necessarily a power to manipulate the environment in accord with one's wishes. But the herioic attitude—an attitude of seeking to make the good prevail and the bad to be vanquished—is by no means the only attitude that enlightened intelligence might approve. It is conceivable that a shrewdly perceptive adult might try harder to get out of the way of modern evils, or to blunt the potential power of environmental forces to cause him harm, than to fight for an utopian vision. This is conceivable, and so are many other possibilities. There are many ways of using informed intelligence in the search for a way of living that is in harmony with one's standards of morality, of esthetic taste, and of capacity for the realization of value. If schooling succeeds in promoting the role of informed intelligence in the conduct of each person's life, then it cannot fail to promote confidence of location. To be educated is to be in an improved position from which to engage the realities of one's time and place.

An historian might resist that conclusion. He might point to Renaissance education, which had the peculiar effect of teaching people to look back upon an ancient time of more than a thousand years previous as the great, the good, and the best of times to have been alive. One remembers also a well known humanist scholar who wished that she had been born in Greece of the 5th Century B.C. Literary humanists in general are marked by nostalgia and by a regret that one's own time is not like that of a favored era in the past. On superficial consideration, it would seem that humanistic education works against confidence of location. But there is a better interpretation. At its best, the humanist penchant for looking backward fondly
is an effort to find somewhere in the past a cluster of values to bring into and rejuvenate the present and future. It is an effort toward reform of one's own world, and as such, compatible with confidence of location.

The second kind of persistent attitude which schooling might help to instil is named "confidence of command." It signifies confidence in one's ability to "command", or put to use, the resources of civilization in behalf of one's personal values and goals.

A scientific humanist might welcome this concept as of use in formulating educational aims. He would interpret it to mean that schooling out to teach everyone as much of scientific knowledge as possible, in hopes that whatever is learned may be applied by each person to practical human concerns. From his knowledge of sciences, for example, an educated person could join with others in finding solutions to problems of creating nuclear energy, conserving natural resources, and controlling fluctuations in economic cycles. This is not a bad idea, but in its most optimistic form, it meets with certain objections cited previously: first, the technological application of science is an especially demanding kind of vocational activity. It requires thoroughness in knowledge of scientific and related materials which exceeds the reasonable levels of achievement that may be judged appropriate for general education. And second, personal uses of high level knowledge have been made simple and easy through the presence of a literature which simplifies and pre-digests the most likely ways. For these reasons, a person's ability to command the scientific and other high level cognitions of an advanced civilization must be taken to mean something other than a thorough personal mastery of those resources (which, in any event, would be impossible.)
The problem here is to achieve some idea of how a person may be said to "command" knowledge in a way which does not require of him that he gain personal mastery of that knowledge at a profound level. Here, again, the construction of a conceptual scale would seem a likely way of proceeding. In this case, the kind of scale needed is one which arranges in a linear order possible ways of using knowledge in one's own behalf. The extremities of such a scale are determined by amounts of knowledge which a person must possess (in his own mind, so to speak) in order to achieve his goals, from a minimum of understanding or of acquisition at one end to a maximum of personal mastery at the other.

Consider, first, the minimal end. To conceive what this would be like, suppose a person who, suffering some illness more serious than the common cold, goes to a medical doctor from whom he seeks help. The patient is saying, in effect, that he hopes his doctor will be able to use the resources of medical science in his, the patient's behalf. He hopes that whatever is known to medicine concerning the diagnosis of his infirmity, and whatever is known concerning prescription or treatment, will be applied to his situation by a knowing doctor. In this example, the mastery of cognitive resources is the doctor's, not the patient's, but it is hoped, nonetheless, that the resources of modern medicine will be applied in a tailor-made fashion to the unique requirements of the patient. The example may be generalized to any kind of problem or plan for which a person consults an expert. At this end of the scale, the resources of civilization are placed at the disposal of a particular person or group by specialized application, in a knowing way, to the particular plan or problem for which the specialist is consulted.

Although the person whose viewpoint we are taking need know very little, the demands made upon the expert are quite heavy. It is assumed
that he knows, at the level of personal command, whatever resources are available for the kind of situation about which he is consulted. But in addition, it is assumed that he is able to determine a correct adjustment of that expert knowledge, or a correct interpretation of its true bearing, upon the particular situation; this may be a demand for something in addition to the knowledge itself, the additional element being a kind of creativity or intelligence that is sensitive and responsive to variability and novelty. Because what is demanded is so much, the cognitive burden placed upon the patient or the client may be very little. A patient need know little or nothing more than the existence of the specialist or expert. He need not even know precisely which sort of expert to consult; if he goes to the wrong kind of specialist, he will be referred to the correct kind.

It would be a mistake, however, to minimize to the vanishing point the capability of a patient or a client. He cannot be a total ignoramus. He must, of course, know something about the availability of experts, and if one considers the great range of problems and projects for which expert consultation is available in the modern world, then a "good" client may be presumed to know somewhat more than we were predisposed to give credit for at first glance. And he ought to know enough to place himself in the expert's hands with an appropriate degree of credibility, trust, or perhaps scepticism. In this case, knowing what is an appropriate degree of trust or of scepticism may be a valuable and not at all insignificant kind of knowledge. It is a lack of such knowledge that allows charlatans and quacks to flourish. There are some situations, as in listening to the contradictory advice of experts about the hazards and benefits of nuclear power plants, where knowing what to make of the expert's services is a difficult and cognitively challenging task.
As the other end of the scale is the command of knowledge at the highest level of personal mastery. An example is that of, say, an electrical engineer, who is required to know certain parts of physics and mathematics at an advanced level of depth and thoroughness, and required further to be able to apply that understanding, himself, to whatever problem he encounters as part of his professional life. Here, both the having of a problem and the mastery of cognitive resources for dealing with it are in the same hands. This is not a common occurrence. Even in vocational life, only a very few operate at so high a level. Those who do, do so because it follows from the profession they have freely chosen. For others, the ability to command by personal appropriation of cognitive resources, where such resources are of the kind which characterize a mature science, does not rise to that level.

For most persons, including the well educated, ability to command complex knowledge in behalf of one's own concerns is an ability nearer to the left hand end of the scale—the end exemplified by a sick person consulting a medical doctor—than to the right. But there are degrees of movement away from that extreme toward somewhat more demanding intermediate states. Only a slight but still significant degree removed from the left end is a different kind of consultation, also exemplified by going to a doctor, but in this case, to a psychiatrist. What makes it different is that a psychiatrist's patient is required to know more of the kind of knowledge in which his doctor is an expert than is true for consulting a medical doctor about an organic illness. In the later case, a patient need only follow his doctor's advice—take one pill every six hours—and perhaps know enough about medicine in general to have a hope that if he does as prescribed he will benefit from it. A different situation confronts the patient of a psychiatrist. He must achieve some degree of sophistication about mental
and emotional states if he is to be helped by treatment, for it is his understanding which treatment must modify. In some measure, he must acquire for himself the kind of knowledge which his doctor has learned for his professional preparation. Not, of course, with the same degree of fullness and depth as needed by the professional, nor as extensive concerning as many forms of mental difficulty, but nevertheless some of that same knowledge. If all relevant knowledge about a patient's difficulty is possessed only by the expert—in this case, the psychiatrist—then the patient cannot be helped. It is for this reason that some psychiatrists are rumored to refuse to accept potential patients from the working class. Presumably, working class people lack a requisite background and degree of sophistication. They cannot understand themselves through the lens of Freudian or other theoretical concepts.

The third kind of confidence, named "confidence of opportunity," signifies a persistent attitude toward one's life which approves the range of opportunities it has offered to explore together both the world and how one's interests and talents are stimulated or put to use by such a world. A person who enjoys a high level of such confidence is pleased to observe that he has been given many chances to explore relationships of self to world and therefore to have learned about his strengths and weaknesses, his interests and disinterests, with a result that no significant potential has been left undiscovered. His developing self is becoming whatever it might have become at the upper end of realization. By contrast, to be lacking in confidence of opportunity is to regret a failure to find out how well or not well one might be able to relate to certain situations and values which characterize this world. "Given different circumstances," such a person might say, "I might have been a good singer or a successful artist, but I never had a
chance to find out." It is the kind of complaint that, in popular literature, housewives are said to express in a reproachful manner to their husbands.

A difficulty with this kind of persistent attitude is that a person's opportunities to exploit his interests and talents are subject to many conditions over which schools have no control. A potential concert artist, for example, must have financial backing for years of intensive study with a rare good teacher. If he can find neither the money nor a teacher to accept him, he cannot learn how far he might have been able to go in the cultivation of a favored skill. A child of poor parents growing up in a sub-tropical region cannot learn about his potential, if any, for the enjoyment of downhill skiing. An educator who is overly sensitive to this kind of difficulty might think therefore that confidence of opportunity, unlike confidence of location or confidence of command, is not a kind of attitude that schooling is especially responsible for. But that would be a mistake.

No matter how limited or circumscribed a child's circumstances, no matter how poor his environment may be in the range of opportunities it offers, the school plays a special part in providing the kind of exploration that results in confidence of opportunity. It is a school's specialized task to represent to each learner those facets of the world which, although related to his welfare, are not obviously there to be experienced in the learner's out-of-school life. Schooling brings what is otherwise distant or hidden into the learner's immediate ken. The result of that specialized enterprise is an enlargement of domains which are able to provoke from a person a personal response. A student learns what kinds of non-immediate environments are appealing to him, so that he may direct his subsequent life toward securing them, what kinds of situations demand abilities he does not have in high enough degree, and what ways of earning a living are appropriate to his
enlarged and tested self understanding. All of these are crucial in determining how much confidence of opportunity a person comes to feel.

This concludes the presentation of confidence and tension as persistent attitudes toward self and world. Confidence of location, of command, and of opportunity are those which are especially subject to modification through the influence of formal schooling. Although non-school factors are also important, even with respect to these three kinds of attitude, they are not influences for which anyone is responsible. They are fortuitous, contingent, unplanned, and uncontrolled. Nevertheless, the time of growing up in a society which provides extensive schooling is a time during which the accidental influences can be largely swept away in a tide of controlled experiences. The confidence with which a person faces his world, and the degree of tension that keeps his confidence in an appropriate condition of balance, can be determined primarily through schooling by deliberate intent.

Lest it be forgotten, the point of this construction is to explain why anyone might find it worthwhile to learn certain cognitive resources of his civilization. The need for such an elaborate account arises from observing that the kinds of knowledge we speak of are generally not of practical utility in daily life. There is a difficult problem of saying what the functional value of knowledge from the arts, sciences, and humanities could be. Also, this is a sore point. Many educators are not willing to admit that anything which is important enough to be taught deliberately could be lacking in practical relevance to daily living. They will reach out desperately for some way of claiming utility, leading to exaggeration and to false claims. The truth is that, by and large, one uses upper level cognition in practical ways only in specialized vocational pursuits, and perhaps, for a majority of persons, not even there. Most people work in banausic jobs wherein the
application of informed intelligence has been supplied to the economic structure by someone else. In spite of this hard boiled realization, the kinds of knowledge we are concerned about do indeed have functional value. They build the persistent attitudes called here confidence of location, confidence of command, and confidence of opportunity.

To illustrate the idea, consider a test case: why should everyone who aspires to become well educated be expected to study algebra? In reply, let it be noted that a child cannot go far in exploring the civilization which surrounds him without becoming aware of a certain branch of mathematics called algebra. What he cannot easily escape noticing is that algebra has been a tool used constantly and almost everywhere in science. This omnipresence of algebra is a fact about his world which he could scarcely miss seeing. Indeed, the only way he could escape the observation is by having nothing to do with science as object of scrutiny, and anyone who never takes a close look at scientific materials is hopelessly out of touch with his world. Given an essential sensitivity to science, and seeing how frequently algebraic language occurs in scientific contexts, a person who then refused to explore the nature of such an important domain would be in a peculiar and untenable position. Realizing, albeit only vaguely, that algebra is everywhere around him, occupying an important place in the world, he would be a clod or a dolt who did not feel obligated to look further into the nature of this entity. To discover algebra as something of consequence is to be moved by the ways of the mind to want to satisfy a curiosity about it.

What he becomes curious about is first of all what sort of thing it is; for what reason are numerals and letters of the alphabet combined in placement above and below lines? What is it that algebra enables a person to do which he could not do if ignorant of algebra? If he learns enough to answer
those questions, he may then restore a confidence of location. He knows at least somewhat about this important part of the modern world. But that is not all. For confidence of command, he must learn to be able to "read" algebra, to enter the language system and enjoy a capacity to communicate, at least a little, within the domain. And, finally, for confidence of opportunity, he must have had occasions to try his hand at doing algebra, to find out whether he has any talent for that sort of thing, or to learn with what degree of ease or difficulty he can encounter it.

We are now permitted to say, as above, in what sense a knowledge of algebra is functional for every man. That is not a small achievement. Still, the central task for this chapter is not yet accomplished. The initial question was, on what basis can educators choose a limited array of materials from the sciences, humanities, and arts for inclusion in school instruction, such that what is not included can be thought, reasonably enough, to be of less value for educational purposes? It was for this application that the concepts of confidence and tension were constructed. The question now is, how does the construction work in the role for which it was designed?

To promote confidence of location, a principle for guiding choice of curriculum contents emerges readily from contemplating what the expression means. The principle is this: choose from the sciences, arts, and humanities that material which describes features of the contemporary scene, contemporary life, and modern society toward which a perceptive human being is required to make a broadly general adjustment of attitude.

Perhaps a further clarification of this principle may follow more readily from the consideration of an example or two than from further discourse in abstract terms. An example of cultural materials which the above principle would select is any such that transcend a common sense level and which

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bespeak an emerging new status for women. If women are to be treated as equals of men in most respects, this new characteristic of the current scene requires from everyone, both male and female, a consciously structured attitude toward the fact of two sexes which is different from inherited attitudes, different from inherited common sense, and which has enough of definition (of definiteness) to guide behavior in ways that are appropriate to a newly emerging kind of society. Another example, popular with historians, is the situation which confronted educated persons in the 17th Century concerning the world as physical object and as the home of man. To learn that the earth is not flat, and not the center of the universe, is to be challenged to cultivate a new orientation toward nothing less than the universe itself.

Especially to be observed in such examples is that, where confidence of location is concerned, a curriculum maker chooses only those contents for communication which give insight into features of the world, human or otherwise, which demand conscious recognition and the shaping of one's behavior and values not toward a specific emergency or a particular situation, but rather which call for a general readiness to make adjustments of behavior in the future, this way and that, as particulars arise. The "particulars" are the relatively unpredictable happenings which, when they occur, are interpreted to be manifestations of a general trait characterizing the modern scene. For example, as sexual morality changes, an attitude toward new achievements by society is required; what is required is not necessarily the adoption of a new fashion, and certainly not any particular act, but a way of relating one's self toward that aspect so that whenever a specific situation crops up in which sexual morality is a prominent part, one knows how to behave in a manner that is, at one and the same time, both sensitive to
current social patterns and also consistent with one's own morality and one's demand for personal integrity. Perhaps these examples and generalizations are sufficient to indicate in what manner the concept, confidence of location, is employed in selecting for curriculum a limited amount of material from the arts, sciences, and humanities.

What about the second concept, confidence of command? The kinds of instructional contents which are most likely to influence confidence of command are, first, a survey of the various kinds of resources which are provided for possible use or enjoyment in the arts, humanities, and sciences; and second, the special languages, technical concepts, and distinctive symbols--like the notations used in musical scores--which are employed for the communication of parts and branches of those domains.

A reason for mentioning first a survey of potential resources available for use or enjoyment is probably obvious. A person can feel confident of his ability to command for his own purposes the higher level materials of civilization only if he is aware, at least in rough outline, of what is there waiting for his possible further exploration as taste or need may dictate. Many educators are fond of observing that schooling is not intended to be both beginning and end of a person's studies and acquisitions. Further learning and cultivation of mind are or ought to be continuous enterprises. This familiar observation is probably beyond cavil. Who would care to deny the expectation of further avenues opening up, more lands to conquer, for the long stretches of adult life? But if this notion is taken seriously, then it might occur to an educator that there is only one part of a life span during which exploration and cultivation are done under professional guidance, and that is the brief period while attending school as one's full time occupation. This is the time for a person's awareness of the length and breadth of civil-
ization to be advanced by deliberate intent and under day-long guidance. Otherwise, if a person embarks upon his career and becomes absorbed by the concentration it demands, and has not previously noted the kinds of riches which his world offers in potential, then his choices for further personal growth will be choices made in ignorance of what the cupboard contains.

The conception of curriculum as survey may be sharpened by noting how it differs from another idea that has gained some currency. Concerning science, in particular, it has been said that schools should aim toward teaching only some portions of any given science, rather than a general survey of an entire domain. The purpose of such a limited endeavor is to permit concentration upon a segment small enough to allow for learning the ways of working, or the methods of science, which are used in treating scientifically "the familiar materials of ordinary experience."* Concerning that viewpoint, one part at least is acceptable within this framework: a well educated person may be expected to have learned something of scientific method. A further consideration, however, is whether one should learn about scientific procedures through a survey of professional techniques, or instead through personally immersing oneself in them, such that one becomes capable of working professionally in science. It would seem clear that the latter is asking too much from a liberal or non-vocationalized education. As pointed out in earlier discussion, not everything that scientists do in their vocational capacity is appropriate for general education. Some of "scientific method" is

actually a kind of specialized vocational skill. Therefore the resort to a
survey of science, both of its content and its ways of inquiry, is the more
rational choice.

For the construction of curriculum, and in behalf of confidence of
command, two suggestions are forthcoming. Concerning the communication of
scientific materials, choose to teach a survey of the various sciences, how
many there are, what it is that defines the province of each, representative
major achievements for each science, and relative stages of maturity or
recency. The second suggestion is, teach the special language or the
technical vocabulary which distinguishes each of the sciences. It should be
evident that this is needed to promote confidence of command. To acquire
such confidence, anyone might think it necessary that he be able to read or
otherwise communicate with scientific material, either to be able to locate
particular resources for particular problems, or to be able to communicate
with comprehension with any scientist who is consulted on some problem as
an expert.

Finally, we come to the last of the three concepts, confidence of
opportunity. For this, what is needed is an opportunity for each learner to
relate personally to the main forms of activity which contribute the advances
of civilization. Here a distinction may be helpful: the arts, sciences, and
humanities may be approached either with an eye to participating as a con-
tributor or, instead, as one who enjoys or uses the contributions of others.
For the entire satisfaction of what might contribute confidence of opportunity,
anyone might think it necessary to find out about himself how well he can
manage in both respects; how well, that is, he might do as a contributor,
and how well he can participate as an enjoyer or a user. For both purposes,
it seems necessary to give every learner some amount of two kinds of
experience: first, experience in trying his hand at doing art work, engaging in scientific research, and contributing to the humanities; and, second, other experiences in trying his hand at putting the achievements of these domains to personal use or enjoyment. Both kinds of experience, whether as contributor or as consumer, are in effect "samples" of work in the arts, sciences, and humanities.

Introducing the notion of samples or of sampling leads readily to a further principle. Whatever is chosen for learners in school to try their hand at doing or using should be chosen, ideally, to satisfy together two criteria: one is that the sample be representative of the domain from which it is chosen (rather than unusual or far out) and the other criterion is that the samples be on a level of difficulty that is not so great as to be altogether beyond the possibility of satisfactory performance from a neophyte.

This brings to a close the consideration of a problem for curriculum theory that would seem to arise first; first, not in order of importance, perhaps, but in the sense that it is a problem which requires resolution before going on to any more detailed consideration in curriculum building: the problem, to wit, of how to pick from the arts, sciences, and humanities a limited amount of cognitive materials. Anyone approaching the construction of curriculum could easily be overwhelmed by the problem of choosing, there being so much of accumulated material and the time available for schooling being so relatively short. With help from the constructs of confidence and tension, the problem of choice assumes a reasonable proportion.
Chapter 9

Experiencing Value

The preceding chapter, devoted as it is to a consideration of knowledge in the curriculum, may seem to fall into a pattern of thinking about education that has become traditional. Tradition lays stress upon the transmission of knowledge, as if that is to be seen as the chief end and business of schooling. No doubt some part of this heritage comes from a confusion of "learning" with "coming to know;" learning, a psychological event, is assimilated to its object—to that which is learned—and it seems to follow that what is learned is (especially in schoolrooms) some kind of knowledge. The expression, "a man of learning," is taken to mean one who has acquired large stores of knowledge, and for a thoroughly traditional traditionalist, knowing how to spell "Constantinople" is a test case for thoroughness of instruction. If, however, this treatise too were to give further support to that tradition of emphasis upon cognition, it could be judged a grievous failure to appreciate recent advances toward a better balance in awareness of schooling and of how many bases it touches.

"Recent" is perhaps a misleading term. As long ago as the 18th Century, Rousseau had proposed for Emile a cultivation of the whole person, of his feelings no less than his perceptions, and Kant had criticized adversely an ancient Greek account of the human mind for emphasizing too much the search for knowledge as its highest function. Only a little later, under the influence of Kantian philosophy, Pestalozzi urged his contemporaries to think of schooling as responsible for the cultivation together of head, heart, and hand. The intellectual, the emotional, and the executive.

In light of those events, the more recent influence of John Dewey may seem to be a case of retrograde motion. It would be fair and not misleading
to say that his educational writings were directed in the main toward a conception of schooling as the stimulation of knowing, and of knowing as the characteristic outcome of intelligence in action. But his analysis of knowing was a different sort of conceptualizing from any in tradition. It could be said to have absorbed into itself the emotional and the executive (along with the intellectual) for it was after all a kind of pragmatism, and pragmatism is a philosophy which places the knowing process in the midst of caring, of being concerned, and of trying for the realization of good. Whether those many educators who accepted the leadership of Dewey on theoretical matters were fully sensitive to this, or whether, instead, they continued in their own understanding to conceive of knowing in a more traditional manner, is not a question which we need try to answer. What remains important, however it might be expressed, is a proposal that knowing is not a "pure" phenomenon, not a kind of process that goes on in a disinterested pursuit of uninvolved insight. To know is to do something that matters, that touches the heart.

So it seems to a pragmatist. There is a further and related part of the pragmatic philosophy which arises at this point. It is the contention of pragmatists that judgments of value (or simply, evaluations) are a kind of empirical knowledge. As they intend using it, the term "knowledge" refers to that which guides action. Whatever it is that can be said to provide an ideational aspect for deliberate conduct is subject to some sort of testing by the consequences of action, including verifying or disverifying an expectation. That is to say, when a person does something deliberately, he does it because he wishes to bring about a certain state of affairs, and his action is posited on a prediction that, given this course of conduct, certain results will follow, among which are those which he intends to bring about and for the sake of which the action is launched. If knowledge is that kind of thing,
having relations of that sort to expectation, action, and consequences, then evaluations may indeed be called a kind of knowledge.

Thus to accept a pragmatist's claim concerning evaluations may seem an abrupt departure from that non-partisanship toward philosophic doctrine which is required by democratic ideals for the construction of educational philosophy. There can be no doubt that the question of whether evaluations are a kind of knowledge is subject matter for legitimate controversy, some philosophers saying Yes and others No. Therefore it is best to consider the issues carefully, and to take any kind of stand only with the utmost circumspection, and with obligation acknowledged to show why this is nonetheless non-partisan.

That little slice of pragmatism which has been accorded here a kind of acceptance is a part (so it is hoped and believed) which remains very close to experience, and to the sort of observation which anyone might make, no matter what his philosophic proclivities. It is philosophically naive, and prior to those troublesome issues of value theory and epistemology over which philosophic argument waxes. What is being asserted is simply that the deliberate actions of human beings are intended to realize some outcome, and that at least some portion of that outcome is thought to be good. It is because of that believed-in goodness of outcome, and to secure it, that action is undertaken deliberately. (Sometimes the sole purpose of deliberate conduct is to avoid a threatened bad outcome rather than to secure a positive good, but recognition of this does not require any change in the preceding account. The avoidance of something believed to be bad is judged to be a good.) A person's expectations of good as something which may be achieved by deliberate intent are a reflection of how he interprets his experience. It is by interpretation of experience and by generalization and projection that anyone may have a reason for guiding his acts toward an anticipated future. To these facts it
is necessary to add one more: a person's expectation of good to be achieved may be rewarded with success or disappointed by failure, and these experiences are those from which further or revised beliefs and expectations about good and bad are fashioned.

These few related conceptions are nothing more than an explication of what is included in the idea of deliberate action. An habitual sceptic need not fear that if he were to raise no objection at this point, he might later be trapped into more than he should be willing to accept. To be sure, it is the pragmatists who make the most of such beginnings. They are the ones who start their philosophic constructions from such ordinary facts of life and especially from examination of what it means to be deliberate. But for them it is a starting point from which further construction proceeds, and whatever is distinctive about pragmatism is not those familiar facts—in any case, philosophy is not the assertion of facts—but rather the further constructions. In behalf of the non-partisan ideal, it is the further and controversial constructions of pragmatism which are to be avoided, not the familiar materials of the preceding paragraphs.

Perhaps it is not yet clear that anything of this sort is needed. Would it be best to avoid even that presumably safe account and go on to matters which are above suspicion?

It cannot be done. Given that not all of schooling is the transmission of knowledge, that other and non-cognitive experiences are a necessary part of school encounters, then there must be at least some which contain a large element of valuing, or of learning about good and bad. If educational acts are to be guided by rational doctrine, then those non-cognitive parts of schooling may also benefit from a soundly constructed philosophy of education. It is not necessary to settle philosophic arguments surrounding the
issue of evaluations as cognitive or non-cognitive. But there does exist an obligation to say something about valuing and the experience of value.

What makes this a requirement for educational philosophy is a need to consider how learners in school are influenced by their educative experiences in domains of value, so that these may be brought under control and directed toward reaching properly understood educational aims. We suppose that if learners are sometimes involved in experiences of a markedly valuational sort, and that such experiences happen through activities proper to schooling, then a rational educator, who may be presumed to have clear ideas about what he is doing, will have some understanding of the effect upon human development (or the effect upon some more specific part of the person such as his mind or his selfhood) of the valuative experiences which are a part of his education. The question to be asked is: in what way is a person better prepared by his schooling to direct his own life freely?

In the preceding discussion it seemed necessary to speak about kinds of educative events in which the experience of value is an especially prominent part. The reason for such locutions is that any experience whatsoever is marked by value judgments and value findings. A school child who engages in the tedious task of memorizing multiplication tables is engaged in an experience inseparable from value. That is to say, he has reasons of some kind for doing what he is doing, and his reasons include as their essence a judgment concerning values to be realized. This is true even if the only reason he could offer for what he is doing is that he was told that he tench. In short, the point here is that all episodes of experience are evaluative in some degree. But it is also the case that some experiences are distinguishable from others by a preponderance of value as a having or a finding. Such experiences are different from those which are predominantly cognitive or predominantly pract-
A child reading a story and being engrossed is experiencing values as a predominant part of his activity.

A group of issues come together here. One is the question of how much of school experience is or ought to be of the predominantly valuative sort. If very little, then perhaps there is correspondingly little need for serious theoretical activity about education in those domains. But questions of what ought to be the case in the budgeting of school curriculum are dependent upon another: what are the conceivable educational goals which predominantly educational experiences may help to secure? If, upon reflection, it appears that either great or little good may be realized by valuative experiences within schooling, then it may be rational to propose a change in whatever has been characteristic, increasing or decreasing as advisable in the light of such findings. But there is still another consideration. If it should turn out that a case can be made for a realization of positive educational goals from evaluative experiences, then there is a question of comparative educational values to be settled. Supposing that time devoted to value pursuits takes away from time that might have been available for other sorts of educational activity, then how can we establish relative importance to all possible ways of spending time in a school program? These issues are related in such wise that an answer to one may imply answers to the others.

There is also a matter of terminology to be settled. The word "experience" has been occurring with some frequency in this discussion. It has been used to signify an episode of human activity from which ensues a more or less abiding result of the kind called "learning". In that very loose and general form, it is continuous in meaning with educational tradition. Traditionally, educational reformers have advocated learning "from experience" as being, first of all, a kind of learning that is one among other and different kinds;
and second, a kind of learning that is more desirable for educational purposes than other kinds. But the tradition has not always been consistently maintained.

Under the influence of empiricism, it was said that all knowledge comes from experience. This had the appearance of being a flat descriptive assertion. But it was also taken to be a recommendation, an expression of preference for the warrant of experience, and then somehow applied not only, as in the original intent, to knowledge, but also to learning. All learning is learning from experience. This prompted some educators to become advocates for that kind of learning, suggesting thereby that there can be other and inferior kinds. All learning is from experience, they seemed to be saying, so let us not promote or accept any other kind.

Another part of the tradition called for using the expression with a further qualification, either expressed or implied: learning from experience means learning from first hand experience. (As different, that is, from learning vicariously, or learning through communication.) This had the virtue of acknowledging more than one kind of learning. But it prompted some educators to place a high value upon learning from first hand experience and a low or even negative value upon learning from books. Even John Dewey was sometimes guilty, as when he contrasted traditional with progressive educational practices in this manner: "...to external discipline is opposed free activity; to learning from written texts and teachers, learning through experience..."* This


was perhaps the most unfortunate part. A school which does not place in the hands of a learner a capacity to engage in communication with cultural resources, as by the reading of books, is no school at all. It fails the kind of mission
for which schools exist. (Dewey would have agreed.)

In hopes that such confusion may be avoided, let the following conception be proposed: an experience is a sequence of behavior which, no matter how diverse in activities or other parts which it may encompass, possesses a unitary identity by virtue of domination throughout by a continuing concern, a continuing purpose, or a continuing focus of attention. This is intended to be a neutral rather than a commendatory definition; experiences may be good, bad, or indifferent. In common parlance, the term is used in that way; an experience marked throughout by horror is an undesirable but nevertheless a vivid experience. To speak of learning from experience is not necessarily to speak of something good. Therefore, if one wishes to speak of certain experiences as desirable for their educational effects, one must specify what it is about such experiences which accounts for their educational value. The mere factor of experience alone is not sufficient.

Kinds of experience that may concern educators can be differentiated from one another by whatever it is that provides a continuing concern, purpose, or focus of attention. That could be, for example, the pursuit of a practical objective, like getting an olive from the jar. Or it could be a concern for trying to understand a puzzling event. But the kind that is of concern here is that kind of experience which is focused upon an immediate having or enjoying of intrinsic value. This is a kind of experience sometimes called "consummatory" to indicate the character of being relatively complete or self-contained, as opposed to occupying an intermediate stage leading to something else for which it is instrumental. Using the term "immediate", as employed above, is common to such discussions, as when it is said that some experiences are vital or absorbing in their immediacy, in contrast with experiences that owe their character to ways in which they are continuous with other matters,
fore and aft. But the simplest way of identifying the kind of experience which is especially the subject matter of further discussion is to say that it is the kind of experience marked by the having or finding of value as its most essential nature.

A natural tendency when given this subject is to think of experiences with fine art or music as those in which the having of value is dominant over other concerns. Perhaps this is because a concentrated viewing of a good painting or listening with absorption to good music are indeed exemplars of value experience in the purest sense. But for this discussion to be of maximum service it is best to expand and to modify the scope which exemplars of that kind would suggest.

Modification is needed because, in school practice, much of what is done to influence a learner's ability to experience value in art is accomplished by emphasizing cognitions rather than immediate havings. If a music appreciation teacher plays a phonograph recording, the purpose is primarily informative; he chooses to play a movement from a symphony to illustrate an analysis of musical form. In teaching the appreciation of painting, small printed reproductions of poor quality are used to give some indication of what the originals look like. This is acceptable, not only because the originals cannot be brought into class, but because the analysis of formal elements in a painting can be made readily from the reproduction, with only a small loss, even though the loss of esthetic quality is great.

This observation about emphasis upon information rather than upon the having of value is not intended as criticism. There is very little else that a teacher can do but inform. He cannot have an experience on behalf of his students. The actual experiencing of an esthetic object with realization of its quality is up to the learners themselves. Any degree of such realization
is a measure of their responsiveness and sensitivity, and these are their own possessions or their own lacks. Nevertheless, instruction can make a difference. Those who think that nothing is required of a teacher save that he bring his students into the presence of art are themselves philistines, albeit of a different sort. A capacity to experience quality is a variable, subject to many factors, and especially subject to learning. One does not have it without tuition of some sort, and the most likely occasion for the cultivation of perspicacity is the good fortune of encounters with teachers. But what teachers can do in the matter of appreciation for values is limited, and what they can do is mostly a matter of informing their students' minds.

On the matter of scope, or range, it is perhaps obvious that the occasions in school for exerting an influence upon a learner's awareness of values are not limited to instruction in the arts. Anyone might think also of the humanities, which have had their ups and downs in curriculum over differing historic eras, and are now in an indeterminate state. There are reasons for thinking that only a little urging may regain for the humanities a more secure place in general education. In the United States it is a time of general distrust directed toward major institutions, especially the state, and toward persons in positions of power, who are thought to be corrupt and self seeking at the expense of public welfare. Many persons, feeling a loss of attachment to old verities, are ready to do a bit of thinking directed toward the kinds of questions and concerns which dominate the humanities. They are ready to contemplate ideas about the human condition, human destiny, and other ultimates, and to enjoy well considered and elegantly expressed views on the apprehension of good in diverse matters, both of greater and lesser scope. From philosophy, for example, the literature of ethics may be found appealing, even if there are no universal answers about right and wrong to be found.
Both the arts and the humanities offer opportunities for experiences that are predominantly valuational. But so, in lesser degree, do the sciences. From time to time in his learning about science, anyone may find himself caught up in relatively strong fascination, or in delight to be learning about matters which have no other apparent significance for him except that they explain and organize coherently his awareness of things and processes. There was a time when learning of that kind, which was likely to be called "pure", and to be described as "learning for the sake of learning itself," was thought to be the highest use of the mind, inherently superior to learning for which practical utility could be claimed. No doubt there are many who continue to think that way, but whether rightly or foolishly and archaically need not be decided. It is enough to note that the experience of learning science may on occasion become a kind in which the experience of value becomes dominant. This can take various forms: awareness of something awesome, for example, as may occur in the study of astronomy; an especially strong feeling of intellectual adventuring; an esthetic satisfaction with the discovery of organized form in the natural realm. When and where these experiences may happen for any given scholar are unpredictable. But a teacher may be either more or less aware that such experiences can happen, and teaching may be directed toward taking advantage of them when they do.

In the preceding, two observations have been made: one is that deliberate instruction by teachers in realms of value is most frequently devoted to informing the learner's mind. The other is that occasions for predominantly valuational experiences may occur not only in learning about the arts, but also in the study of the humanities and the sciences. Assuming that the second observation may be found acceptable as stated, the first would seem to demand further consideration. Why is a teacher's role primarily a matter of giving information
rather than of setting up situations in which to experience value as an immediate having?

A primary reason is that the having of consummatory experiences by children and youth is not made likely simply by making available the possibility of its occurrence. A teacher may arrange for learners to attend a symphony concert or to visit an art gallery. Even if such an arranged concert happened to be excellent, the best of music played by the best of orchestras, or the paintings on display in a gallery included representative works by the best of artists, these excellences would not necessarily impress their quality upon the receptivity of learners. The possibility of boredom and inattention by youngsters who are not properly prepared for the concert hall or the gallery is greater than the possibility of a fully appreciative response.

On the other hand, tickets to a concert by youthful pop musicians who have made a few gold records would be eagerly sought by avid fans. The appeal of music aimed at the acne generation is an appeal so evident on the surface of sound and rhythm that no one needs to be taught how to feel it. Responsiveness comes naturally and, it seems, inevitably. The same is true for paintings by Norman Rockwell or for buildings designed to promote the sale of hamburgers. Indeed, surface appeal is usually the only appeal, which explains why any particular piece of popular music has such a short life span.

Esthetic and other qualities which are immediately evident to untrained eyes or ears, like the appeal of popular art, are different, at least in degree, from those which are subtle or which for other reasons are hidden from ordinary perception. The esthetic cognoscenti are apt to insist that the difference in degree is so great that it merges into a difference in kind. Whether that is so or not, it is the case that schooling has no responsibility for educating to appreciate the kinds of quality which the world offers openly
and freely on a popular level. Without benefit of schooling, youth will gush about the popular arts. Such effusions need not be derided. They are truly a response to value. But the responsibility of schooling lies elsewhere, with the cultivation of taste for qualities which are not superficial, nor obvious, and which therefore are not approachable, not findable, except through teaching.

The point is that the kinds of value experiences which belong in the province of schooling are those which learners are not likely to find simply by making them available or, let us say, possible to happen. Of course, teachers share a responsibility for arranging environments in which learners may experience values; such must be prepared and be had. But the most important work for schooling is the preparatory part, the part of instruction in which a learner is prepared for perceiving value where, if unprepared, he would fail to perceive. And the preparing part is not one wherein a learner is immersed in the direct having of value. It is, instead, a kind of school experience in which he learns facts, forms, connections and associations. Preparing a learner to find values which are not readily perceived is mostly a function of cognition. Instruction is communication, and what is communicated is the existence of something in the world which had escaped notice before. If not that, then why the time and expense?

This previously undetected presence may be any of many possibilities. It may be, for example, a predictable consequence of human action which the perpetrator had not anticipated when deciding what to do, and which, when taken into account, changes a moral question from something simple and undemanding to something more complicated, difficult to decide, and demanding of ethical acuity. In the presence of music, it may be a recurring pattern of sounds where to untutored ears there is only a jumble of discrete tones. It may be, in the
design of a building, an elegance of proportions that is different only slightly from proportions commonly found, but in the slight degree that makes a difference between ordinary architecture and superior design. It could be the discovery in nature of cunning ways by which living things protect themselves or in other ways satisfy their needs in an often hostile environment. It could be the unsuspected satisfaction a person finds when he combats his slothful inclinations in order to drive himself to the completion of a difficult but worthy task. Further examples could run into infinity. In each one, what is to be taught by teachers is a presence, a relationship, a connection of forces, or a pattern which learners might have missed if not instructed.

An awareness of environmental presences is not the same as having a predominantly valuational experience, but it is one of the conditions necessary for the occurrence of such experience. A teacher's responsibility is to build the environmental presence or to point to sequences among events, and then to let happen whatever may. To speak of "building an environmental presence" is to suggest an act of construction, like a carpenter building a house. But what is intended is not primarily a construction in the physical sense, not a making of something material and in three dimensions. More often, construction is a creation inseparable from the use of words and other symbols. In order to increase the possibility that a learner may find value where otherwise he might have missed it, a teacher may elaborate a cluster of meanings, manipulate ideas, surround something already experienced with a mass of connections and associations, and in all such ways enrich the contents of a learner's mind. A teacher's purpose is to change the way a learner perceives and conceives his world, because then it becomes possible for a learner to find value. But whether he does or not is left in the lap of the gods.

This limitation of a teacher's responsibility is not commonly recognized.
If a teacher is aware that he has some responsibility toward values and valuations, he is likely to suppose that his success is measured by how much of the values that concern him are actually experienced, or how much of appreciation for new values is cultivated as a positive achievement. A teacher of literature or of music, for example, may think that he succeeds only if a positive taste for literature or music is established through his efforts. Perhaps that is partly right. It is right at least to this extent: the long range objective is the acquisition of new values. But a failure of any particular learner to become appreciative is not necessarily a sign that his teacher has failed.

The reason why not is that the apprehension of value is especially variable as a function of individual differences. As every modern teacher knows, individual differences are to be respected. That in these matters there is great variability is an inescapable fact of anyone's experiences of his fellow humans. Some people are fond of poetry and others, no less well educated and culturally sensitive, have very little regard for poetry, especially in its contemporary forms. Some who value serious music are not especially interested in chamber music, finding it pale and anemic, whereas others find it a medium of relatively pure musicality, appropriate for the tastes of a connoisseur. There are those who find struggle against the elements, against biting wind, wave and salt spray a challenge to be sought after deliberately, and others who prefer to take their risks stepping into a warm tub. For purposes of theorizing about education, it does not matter why this variability exists. It is enough to recognize that it does, and that we are unable to prove conclusively that any one's favorite values are or ought to become every right thinking person's favorites too. Whether, if we could actually prove the universal truth of beliefs about what is good, right, or beautiful, we would then
have a right to expect universal assent from our students is moot. The fact is that in the domain of values we cannot prove the truth of even those evaluations which we are most certain in our subjective feelings. If only for this reason, we cannot expect schooling to inculcate in everyone the same values. To respect individual differences is to realize not only that homely truth, but also, if the matter be thought through, to realize that a teacher's success is not measured by how much of the values that concern him come to be shared by those he teaches. If here and there in his classes a teacher of literature fails to cultivate a positive appreciation for Jane Austen, this result may be accepted with equanimity. Perhaps, even in the best of all conceivable worlds, not every one would appreciate Jane Austen in the same way, or to the same degree.

In this discussion, there has been a skirting of philosophic issues, and many who are aware of what has not been said about related topics of a controversial kind may think it cowardly, or even incomplete. But the troubled issues of philosophic controversy concerning values and value judgments are the consequence of asking kinds of question which an educational philosopher finds no need to ask. It is possible to decide whatever is required for a rational approach to education without any need to settle, or to take sides on, the controversies of contemporary value theory. For anyone who thinks otherwise on this matter the obligation is his to show that such questions cannot be avoided. However, a reader might wonder whether the avowed skirting of such issues has been entirely successful. Preceding remarks assume, for example, that we cannot prove true our beliefs concerning what is valuable or right. Is this philosophically neutral?

Let it be acknowledged that some educators would not admit such an incapacity. A sincere conservative may insist that his most cherished beliefs about what
is good and right are not mere opinions, and if challenged, the depth of feeling may rise to the surface. He knows, by thunder, what he knows! But such an excess of zeal is not philosophic, and any who maintain it are non-participants in contemporary inquiry into such matters. As noted somewhat earlier in this discussion, there is a philosophically respectable position which insists upon the cognitive status of value judgments, but those who hold it would not find it necessary, for self consistency, to deny what has been said above. Their position is that it is theoretically possible to develop techniques of value research to a point where, some day, we may be able to approximate a kind of proof for value assertions. That is compatible with agreeing that at present we lack the research technology that could overcome subjectivity in such judgments.

The most likely point where an educator's suppositions concerning value may seem to be philosophically loaded is in suggesting, as above, that the values which anyone may come to accept and to believe in are findable through his experiences of environments. There may be some who would insist that value findings are a purely subjective event, and therefore not discoverable through empirical experience. But if that is so, they must be speaking in a Pickwickian sense. For, if experience revealed nothing about value—nothing that is reliably recurrent in the world—then all deliberate human conduct would become pointless. To repeat an observation made earlier in this chapter: behaving with foresight rather than in the manner of an automaton is generally to be preferred because such foresight and deliberateness frequently leads to the securement of values which otherwise might not be had. In short, deliberateness and rationality in behavior presumes the possibility of value as related in a more or less regular way to action and environment. And, because schooling is undertaken in hopes of influencing conduct in the direction of rationality and
foresight, certain presumptions about value as predictable and findable are necessary to the enterprise. These presumptions may be considered as pre-philosophic.

Note, however, the kinds of issues about value which are, indeed, controversial. There is a controversy, central to much of modern literature, about whether the finding of value is a finding so entirely subjective, so variable from one person to another, that all value judgments are to be regarded as mere expressions of how a person happens to feel about something. In so far as that position does not preclude recognizing the conditions necessary for deliberate conduct, it is a position which is neither supported nor rejected by anything to be said here. That same indifference of educational theory toward philosophic argument is evident concerning the question of whether a value judgment, especially in the domain of ethics, is itself a motivator of appropriate conduct, or whether, instead, ethical assertions may influence conduct only when some other and non-ethical source of motivational force is brought into play. This is a philosophic issue of considerable importance and great interest, but for reaching a defensible educational posture, it is unnecessary to decide which alternative to adopt. Educational theory remains properly aloof. So also for esthetic theory and a controversy concerning the locus of esthetic value; does such value reside in an art object, or in the eye of the beholder? Concerning this kind of question, an educator's concern is limited to maintaining only that the esthetic experience happens when person and appropriate environment are brought together, and that its happening is a variable dependent upon states of the person as well as upon presences in the environment. This much seems necessary to maintain, but questions of whether values inhere or not, are intrinsic or not, may be avoided.

So, the complexities of philosophic argument may be put aside. But there
is controversy of a different sort which cannot be avoided. Educational tradition is especially critical in the matter of ethical or moral value, for it is felt that children and youth must be inculcated with a sense of right and wrong that is shaped by the higher ideals presumably upheld by a parent generation. They must be taught to be honorable and decent citizens with a disposition to support public mores. Presumably, failure in this would threaten the fabric of society and the preservation of a civilized community. Now, to point out, as in preceding discussion, that we are unable to prove true whatever beliefs about right and wrong we may happen to hold is, some would say, to introduce a nasty thought and to jeopardize the public morality of a future generation. How could we impress upon our children the forcefulness of moral commands sufficient to generate obedience and a sense of obligation if we admit that our moral standards are not engraved in stone, that we are not absolutely certain of rightness in allegiance to any particular substantive morality?

In a treatise devoted to rationally defensible educational doctrine, there is at least one kind of answer which is appropriate. Democratic schooling—in contrast with schooling in a totalitarian society—aims to increase the probability that educated persons will guide their conduct by informed intelligence and in the light of reason. If, therefore, a well educated person finds that in questions of what is good and what is right he must think of alternatives and possibilities, consider options, and make up his mind with an awareness of fallibility and its attendant risks—the risk, even, of not being right—these accompaniments of rational behavior are precisely what is to be anticipated and to be accepted as part of our best intent. By contrast, if supposedly educated persons approached moral difficulties and morally ambiguous situations with an immediate certainty of what rightness in conduct demands—if they felt that the dictates of morality are simple and clear in their message—one could only
reject the suggestion that they are well educated. The loss of moral certainty which accompanies a perceptive awareness of the modern scene is not to be noted with regret or apprehension. It augurs well for the future. Only when simple certitude vanishes is it likely that intelligence will operate, and in the matter of right conduct there is good reason, in the uncertainties of our time, to expect that people will become more truly ethical. In a sense, if they are to be well educated, they scarcely have any other choice.

In the moral or ethical sphere, individual differences are to be expected in the same way, and for the same reasons, as in the formation of esthetic evaluations or in the building of abiding interests. For many educators, this may be more difficult to accept, in questions of ethical conduct, than in matters usually assigned to the realm of variable personal taste. If not everyone likes the esthetic of Mies van der Rohe, the poetry of Robert Browning, or the challenge of Mount Everest, that is to be expected, and even the most conservative administrator may remain unruffled. Not so for morality. If an adolescent should seem to challenge the purity of American womanhood, he may expect umbrage from some quarters. But for teaching, variations in how learners accept or modify an inherited morality are to be anticipated as right outcomes.

How, then, may a teacher know whether he is meeting success in his professional endeavors? If success is not measured by how much of what a teacher sells is actually bought, then how else?

The criterion to be satisfied may be expressed in the form of questions that any teacher of values and appreciations may ask himself: have I arranged environmental circumstances in a way that seems likely to bring about a new awareness of values that are potentially findable; have I guided perception to increase that findability, and have I removed barriers and obstacles to perception that otherwise might have inhibited learning? If a teacher can say Yes
to these, then, no matter what his learners come up with in their individual choices and preferences, he has been successful.

Finally, the most important of questions concerning education and values may be raised. If schooling is acknowledged to have a necessary connection with the formation and refinement of values, then what educationally desirable consequence does this kind of educational influence tend to produce?

In the not distant past, those who dealt most directly with values--teachers of art, literature, and music, specifically--sometimes suggested that the most important of their educational objectives was something other than an enhanced capacity to perceive value in the materials they taught. A favorite kind of "ultimate" was "good citizenship." As a result of learning about the arts and as a further consequence of esthetic experience, learners were expected to gain in the virtues associated with citizenship. That such claims were made is understandable; even, perhaps, reasonable, for it does seem that any part of schooling ought to contribute to achieving the most universal of educational aims. At a time when citizenship and democratic values were frequently offered as fitting that description (being the most universal of aims), teachers of any subject matters whatsoever felt obliged by self interest to claim that they played a part--if possible, a unique and irreplaceable part--in reaching those goals.

However understandable, there was a difficulty in that position which soon became evident. To claim valuational experiences are educationally desirable because they lead to good citizenship seemed to infer that values to be apprehended in the experience of literature, art, and music are instrumental only, that they are valuable because they lead to something else of value, and therefore are not valuable in themselves. The inference was not forced, and it is doubtful that anyone really meant it to be drawn. But to
bespeak an instrumental role for education in the arts was something like a cowardly lack of confidence in the capacity of a public to realize that experiences with art are a positive value in themselves, quite apart from anything else to which those experiences might lead. More recently, with a return of courage, some educators have proposed openly that their principal concern as educators is to cultivate a capacity to perceive value in the domains of their special concern; of music teachers, for example, to cultivate an awareness of musical values.* This is a marked improvement. It does not betray the arts nor accede to the crude utilitarianism of administrators and philistines. If any one is fortunate enough to find a fulness of value in experiences of art and literature, he realizes that no further and ulterior justification is needed. Such findings are good in themselves. Still, that is not the last word that needs to be said.

The last word must come from trying to illuminate the contribution of predominantly valuational experiences to the major objective of education. Assuming that the major objective is to cultivate the role of informed intelligence in human conduct, then what kind of contribution to that end does this part of a school program make? To ask this question may seem inconsistent with preceding remarks, but it is not. The direct having of intrinsic value—that is, the immediate experiencing of something good in itself--needs no further justification; it does not call for an extra added instrumental role to make it truly worthwhile. But to speak of such experiences as belonging properly to deliberate education is to make their inclusion also deliberate; that is, done for a good and sufficient reason. Now we are called upon to say what such a reason is.

A recommended approach is to recall a pertinent part of the description
of schooling. What schooling does for its learners is to increase their awareness of forces in the human environment which may escape notice if not deliberately taught. These are forces which are subtle rather than obvious in their mode of existence, or indirect rather than direct in their impact, or beyond the reach of ordinary sense perception. Ordinarily, such forces do not cry out for recognition, nor can it be said that a person must take them into account. What happens if he fails to note their presence, or if he remains insensitive to them? Usually, nothing of immediate or drastic consequence. The sky does not fall, the rod does not smite, the environment does not punish the dull and oafish clod. That is why, in spite of educational opportunity, so many clods remain. If they fail or refuse to learn, nothing untoward seems to happen. Outwardly, poor learners seem little different from those who learn much more. In industrialized countries they live in the same neighborhoods, enjoy roughly the same incomes, and never understand that something is missing. To be sure, they buy motorboats rather than sailboats, and they use double negatives in their speech, but there are not many such differences evident to a casual glance.

There are differences, of course, and however slight they seem on superficial perception, they are significant for the quality of life as lived day by day and year by year. But one is not likely to pursue the kind of quality which education makes available unless one learns that the richer qualities of human experience are there to be had. One must have tasted or sampled what it means to become aware of the subtle, the hidden, and the indirect environmental forces. Otherwise, one would sink back into the drab and uneventful but presumably safe and easy life of the insensitive and ignorant.

There is no way of describing in detail the qualitative advantages which may accrue to a person by virtue of his being well educated. Because of school-
ing, great diversity of options and tastes are opened up; that is to say, patterns of living may become more variable rather than less, life styles more diverse; individual differences in taste and inclination are more exploitable by the well educated than by the poorly educated. One is tempted to say that the main advantage which school learning makes possible is a more interesting life, a life in which there is less of boredom and monotony. For most persons, that is undoubtedly the case. But it is conceivable that a well educated person may choose a quiet and routine life, having no care for excitement and the stimulation of novelty. But if he had that option. He was freed by means of learning to find a mode of existence suited to his tastes. A poorly educated person has little choice. He fails to learn what is possible and available for active pursuit, and he fails to explore the ranges of his own potential tastes. If there is anything better than a night out for bowling and a night out for poker, he has not been made aware of it.

The conclusion is simple, though no less important on that account: the educational role of experiences that are predominantly valuational is to give reasons for remaining open and perceptive to an extended environment. The achievement of that condition is a matter of earned credit rather than of spontaneous growth; it has to be motivated. For it must be confessed that a good education builds not only one's confidence in his capacity to navigate a complex world, it also builds tensions from heightened awareness of risk. Not everything to which one becomes sensitive is an unalloyed good. If one is to take chances and increase the risks, there must be reasons why it is nonetheless worthwhile. The only reasons that could justify the effort and the hazards are the predictable securement of value or quality. Given a person whose mind is more than commonly filled with learning and whose sensitivity to the subtle and hidden forces of his environment is at a peak, his life must reward him for the possible pains that such growth may occasion by the added
qualities of experience, as accounted over the long run.

It is possible that this conclusion may seem not as conclusive as it might be. Nothing has been said about feeling or emotion, a lack which some modernists would be quick to note and to charge as a serious omission. The subject has been broached in another place—in discussions of non-partisanship in an earlier chapter—but some further attention in this context may add a modicum of insight.

Schooling, if rightly conceived and executed, opens up awareness of having to choose among alternatives; it increases both the number of alternatives and also the occasions for making choices. This is inevitable in the nature of schooling. To learn about the heritage of arts, sciences, and humanities is to learn, among other contents, about the diversity of viewpoints, of theories, beliefs, values, and tastes and to be forced by coming to understand the nature of these differences to locate one's self among them, to choose sides in domains of controversy and to find one's own allegiances, one's own tastes, causes, and commitments. Gradually, over a long period of time, each person learns where he stands and what kind of person he chooses to become. His emotional life is a function of how he makes his choices and establishes his personal configuration.

This observation about schooling is brought forward from an earlier chapter to call attention to the fact that the life of feeling is not suppressed by academic learning, nor in conflict with intellectual development. The growth of understanding is as much a growth in what kinds of situation stir up one's feelings as it is an increase in available conceptual structures and cognitions.

It is time to draw together a conclusion for education. Deliberate instruction in the domain of values—that is, teaching which aims above all
to influence a learner's values—is the most important part of the school enterprise. It is more important than instruction designed to assure an accumulation of pure knowledge, and more important than the teaching of immediately practical cognitions and skills. The reason is that a person's values are that which determines what he does with that part of his life which is subject to his willing control. How much of knowledge is acquired, and what meaning it has for shaping a way of life, is a function of values. The kind of life that is lived with a great deal of knowledgeable intention and awareness (which is the kind of life to be expected from the well educated person) becomes a more likely occurrence as a person learns to value the act of learning, which is sometimes difficult or laborious, and to value the added risks of an adventurous spirit. An increased awareness of values is the essential ingredient which allows educational effort to make a positive difference.

It is obvious that some parts of a comprehensive curriculum are more directly concerned than others with value in its various forms. One thinks especially of the arts and the humanities. Given the conclusion as stated above, it may be that an increased proportion of a liberal education ought to be devoted to the arts and the humanities, and correspondingly less to pure information, science, and to the immediately practical parts of school programs as they now exist. The tentativeness of this suggestion arises from realizing that the relative proportions of these ingredients are different in some schools from prevailing trends in others.

There is, however, another consideration. It would be erroneous to think, as some do, that learning about science (either with emphasis on its content as pure cognition or on its method) is of little influence upon a learner's values and emotions. There is positive value to be found in learning how the world and its operations can become more understandable and more coherent. Such learning stimulates a variety of feelings, plus a generalized
sense of intellectual excitement. And if one learns about science as a social existent, as having consequences in human life and society, then here is value consideration in purest form. Traditional humanists in education—those who emphasize above all the teaching of literary classics—are mistaken in their supposition that science is value free and therefore not supportive of whatever is distinctively human. In contrast with a traditional Renaissance style point of view, science instruction earns a greater rather than a smaller place in a properly conceived liberal education.

For its practical bearing, one more idea needs to be recalled for concluding emphasis. What teachers are able to do in behalf of a deliberately educational effect upon a learner’s values and feelings is not so much the setting up of circumstances for immediately vivid experiences of value; it is instead a matter of instruction which achieves its educational goal by a kind of pointing, a directing of the attention, to qualities of the world which otherwise might have been missed. Education in values, like education generally, is a matter of informing the mind and of opening up perceptions.
Chapter 10
REASONS FOR LEARNING

Let it be accepted from previous chapters that there is good reason to teach the materials found in a well made school program, and that such good reasons may become known and acknowledged by educators generally. It would still be necessary to pursue a further and separate question about why children and youth should be expected to learn those materials, be they ever so admirable in the minds of their elders. Those who have only recently entered the world and the school cannot be expected to value their cultural heritage in the same way as those who have already profited from schooling and from maturity. (You cannot say to a child "Do your homework because it will modify your confidence of location.")

Long ago, teachers did not much trouble themselves about motivation. They were given institutional authority to enforce commands, and with canes to back them, they simply required learners to learn in accord with some mixture of a learner's academic ability with a readiness to do as he was told. Schooling is different now. Authoritatively enforced learning is not so acceptable. One good reason for the change is that the aim of education is to promote a reliance upon informed intelligence in the guidance of one's conduct, and obedience to command and respect for authority are not particularly good reasons for a long-term investment of time and work. It would seem that if persons are to learn to act intelligently, their conduct in school should be marked by those characteristics which are to be fostered. This would mean learners having good reasons for what they do, and therefore reasons which
they themselves take to be good reasons; good, as we would say, in their own eyes. This applies most obviously to what learners do in their efforts to learn, especially when learning is not the easiest and most pleasant thing to do.

There is a way of expressing the problem to be pursued which may seem advantageous because of its simplicity: how should learners in school be motivated to learn? However, the word "motivate" may be misleading. The deliberate and scientific study of motivation is a psychological study, and the results of inquiry are descriptive of what does in fact motivate people under differing circumstances. But in this chapter the problem to be considered is not a problem in the domain of psychology, and facts about motivation are not central to the issues encountered. Facts, if they are pertinent, are not to be ignored; nevertheless, what is to be determined is a question of what ought to motivate learners, and for this, scientific psychology cannot provide answers. What is needed is a criticism of possible motives, and a rational justification for choosing some motives as being more appropriate than others for the realization of educational objectives. We want to be able to say what reasons for learning are to be judged good reasons. To speak thus of "reasons for learning" rather than of "motivation" is to make clear that the domain of inquiry is educational philosophy, not psychology. However, the phrase being less convenient than the single word, we may be excused if the word "motivate" continues to find favor. It is less awkward than to speak invariably of "reasons for learning."

A good place to begin is with a consideration of educational doctrines of recent or contemporary popularity. Educators of a liberal or
progressive persuasion have tended toward using either or both of two broad categories of reasons for learning. The two are, first, learning because of a need for learning, and second, learning because of a prior interest. These two, need and interest, have been dominant on the popular front. Both are immediately appealing. If a learner in school memorizes the multiplication tables because he needs that kind of knowledge and is himself aware of his need, this would seem to be an ideal pedagogical situation. In his labors, the learner is self-directing in accord with his having a good reason for what he is doing. If, however, the appeal for investment of energy is not to a recognized need, then the other category of reason will emerge: let the learner be motivated to learn by his realization that the materials of his "lesson" are either interesting in themselves, or else related to previously recognized interests in such manner that learning will serve to support and augment his interests. This, too, is appealing, and for reasons that seem laudable. Motivation by being interested seems likely to be an especially effective kind of motivation; it goes hand in glove with self direction and intelligence, and it works by a continuous expansion of interests outward into the world. What could be better? Or wrong?

There can be little doubt that if a learner recognizes a need for learning, or is interested in learning, then he may be said to have good reasons for doing so. But the popular literature on these matters is overly simple. The basic fault is a failure to appreciate the institution of schooling as a unique agency for the stimulation of learning. Because of its unique place in the life of learners, the school poses difficulties in winning the cooperation of children and youth that are not easily surmounted.
The most radical form of popular doctrine is to motivate by need, and to teach materials of a school program only when a genuine need for them arises in the life of a learner. This is not only the most radical doctrine; it is also the widest departure from acknowledging the uniqueness of the school.

What is unique about the school, and of the very essence of schooling, is that it must teach cultural contents which are not needed, in any obvious and simple sense of "need", at the time when they are taught. Consider the life of a child during the years of his attendance at school. His obligations, responsibilities, and active pursuits fall into two broad categories: those that exist in his life because of the school and its demands, and those that are his apart from the school and, therefore, determined by his physical and psychological needs, by his relations with parents, family, and friends, and by his leisure time pursuits (which are, for the most part, play and games). In that non-school life, whatever is obviously needed is provided for him by those responsible for his well being (parents, mostly); as for those of his needs which entail some form of learning or the acquisition of skill, the environment of other people, and of a common sense level of culture of which they are the purveyors, generally teach him on the spot and as the occasion for learning arises. This is in the nature of human existence. If a need, either for some physical objects like food or else for some new awareness or capability, becomes a present reality, then to say that there exists a need is to imply that, in most situations and for most needs, there is no brooking of delay. The child cannot wait until an organized program in instruction, professionally planned through prevision and preparation, can get around to providing what-
ever he had needed. Children cannot be allowed to go hungry until they can be given a school-taught course in how and what to eat.

These remarks have been worded in a manner which assumes that we can speak meaningfully of people having needs, as if the reality of needs can in some cases be taken for granted. If a hard working laborer has been sweating profusely on a hot day and begins to feel faint, a doctor might say that he needs salt to replenish whatever had been lost through transpiration. In such a case, the meaning of a statement about need may be accepted without quarrel, just as, if a patient is found to suffer from pellagra, a need for B-complex vitamins may be asserted. But very frequently, in ordinary discourse, the idea of need is applied with less assurance. A housewife insists that she needs a new coat, not because she has no apparel to keep her warm, but because her old coat is not in this year's style. In cases like this, applicability of the term "need" is tied to variable judgments concerning wishes, values, and subjective interpretations. This kind of situation would seem to be more common and representative than those in which a tissue need is scientifically demonstrable. To say that a person "needs" something or other is generally to mean that if a number of conditions may be granted concerning the wishes, intentions, and values, either of the person in question or of the speaker, then the first mentioned person may be said to be in a condition of need.

Returning to a consideration of a school child's life, it cannot be said with simple assurance that he "needs" to learn the kinds of skill and forms of knowledge that schooling exists to teach. To say that he needs anything that schooling offers is to presume that a number of "ifs" are satisfied. For example, if a child is to be capable of deriving
pleasure and information from written materials, then he needs to learn how to read. Some children live within out-of-school environments which make this connection between reading and pleasure known to them. Where that combination of circumstances obtains, children are likely to learn how to read without waiting for deliberate instruction in school. But most children do not inhabit environments of that kind. Their preferred forms of activity and recreation in out-of-school life give them no reason for thinking that they need to learn how to read. From their points of view, learning how to read is not the sort of thing for which they recognize a need. An outside observer may insist that if they were to know where their own best interests lie, they would then realize that they really do need to learn. That is probably true, but if so, only by virtue of knowledge and intentions that are not yet within the children's ken. Not knowing that which somebody else might say is their need, they cannot be motivated by an unfelt, unrecognized need.

The point of these remarks may seem to be singular, but actually there are two distinguishable ideas. The one, as above, is that a learner cannot have a reason for learning--his own reason, that is--if he is not aware of the advantages which learning might bring him or of the power to reach goals which learning would confer. From the standpoint of an older and wiser person, a child may be said to need to learn quite a few facts and skills, in which case the meaning would be that if he were to learn, he would gain in capacity to satisfy his wishes and to secure his values through his own power. But this would be sufficiently accurate for acceptance only if one presumes that he would like to increase his power and independence if the possibility of doing
so were known to him, and that such a presumption may be taken for granted. (That would be in some cases reasonable, in others not.) In any case, the idea here is that a learner cannot be motivated by someone else's realization that, in a manner of speaking, he "needs" to learn.

The other idea, which is sufficiently important that it ought to be separated from the first, is that a child cannot be presumed to want the kind of life that a good education would help him to acquire unless and until he first learns of its attractions. The issue here is which comes first, a reason to learn some particular school-taught materials, or a knowledge of those materials together with their role or their potential value. Progressive educators of the recent past had supposed that motivation could come first, and the style of life for which the resultant learning is of value would come later. In the clear light of day, it should be evident that the sequence on which they were betting is all wrong. The mistake made by progressive educators was to suppose that a learner could understand why he ought to learn before he had moved onto the stage of living for which the learning in question could be an appropriate and meaningful activity. To make this point clear, let it be noted that, going beyond simple cases of tissue need, a person may be said to need some form of knowledge, information, or skill only if he is presumed to entertain the kinds of wishes and goals which the acquisition of that learning may help him to attain. Before a person may become aware of a need for sophisticated knowledge, he must come to recognize new possibilities in his world and new ways of behaving toward it which, if he cares to explore further, could become occasions for the advent of learning. And that observation comes close
to the essence of schooling: an obligation to reveal possibilities in the world which, if it were not for the intervention of the school, might have been missed, and the opportunity for growth closed off. This means that the simple proposal of radical educators to teach only as needs for learning become actual is tantamount to turning one's back upon the tasks of schooling.

A less radical approach favored by some educators is, instead of waiting until needs become actual, to create a need for learning in advance of what might be called "real" needs. The deliberate arrangement of fabricated or artificial needs is justified, presumably, by a faith that some day in later life the materials learned will indeed be needed. Everyone remembers a teacher who occasionally told her pupils, "Some day you'll thank me." In some forms of school programming it is her kind of faith that is operative, but the method is different from saying, in effect, "Learn this now because some day you will need it." The simplest version is to hold out a promise of reward or a threat of punishment. For example, a young man is told that if he gets good grades, he will be given a new sports car upon graduation. To whatever degree the reward is desired or the punishment feared, a learner may be said to "need" to learn. But it is a need which has its being by virtue of an artificially contrived situation. The artificiality is thought to be justified because it works--the desired learning is accomplished--and because what is learned is that which will be needed in truth at some later date.

A different form of what is essentially the same technique is to make a game of learning, or to smuggle a bit of learning into a child's play. The child, motivated by his eagerness to play, has no objection
to learning whatever is required (provided that it does not destroy the emotional continuity of the play or game). Thus, Emile, while playing at being Robinson Crusoe, learns how to do carpentry. The idea is that the contents to be learned are admittedly not needed, at this time, by the learner in his normal engagements with his surroundings, and therefore they are made intermediate and instrumental to reaching a goal which has its character as goal by virtue of something having immediate appeal. In that respect the technique is different from using rewards and punishments, but in another respect, it is the same: learning results from the artificial contrivance of a need.

For anyone of liberal and progressive spirit, the use of play, especially with younger children, to stimulate learning some of whatever it is that schools are expected to teach is an appealing idea, and has been so at least since the Philanthropinum of Basedow in the 18th Century. But what about the concept of need; does it play an essential or a useful part in a modern educational theory?

The trouble with any form of artificially contrived need is that what is learned—the content, whether in the form of skills, of information and knowledge, or of attitudes and values—is learned in that kind and to that degree which will satisfy the demands of the contriver or of the contrived situation; and that kind or degree of learning is not always appropriate to the realization of educational purposes. Consider an example: suppose that children are motivated to learn historic facts by being given jelly beans or other desired counters for each correct response in a question and answer game. This places a premium upon speed and brevity in response. Given a stimulus, like "1492", a successful child comes forth automatically with a response about Columbus.
The educational technique is one which favors simple associationist learning, or a committing to memory of simple cues with simple responses. There are places within a school program where that kind of learning is acceptable, as when fixing in memory the symbols used in chemistry for basic elements, like "Fe" for iron. But there are not many such. Given that in the study of history it is desirable to establish connections of a few key events with the dates of their occurrence, nevertheless it would be only the most stubborn of conservatives who would believe that such automatic associations are the meat and potatoes of good learning. For the most part, what we want in the teaching of history is to stimulate a thoughtful and sometimes critical consideration of events and their multiple relationships, which requires mulling over in thought rather than simple, quick, and automatic associations.

Of course, not every instance of motivating by an artificially induced need is one in which simple associations are the content of learning. But in a more general way, the contents of learning which result from this sort of teaching technique are likely to be different from those which would be judged desirable in the light of educational objectives. Even in relatively simple forms, an episode of learning is a complex affair; it results from a number of factors coming together. There is the consciously held aim or reason for learning, plus the facts, skills or other contents to be learned, which make varying demands according to their nature, plus the objective situation or environmental forces which determine the rightness or suitability of what is learned. Any lasting result of interaction among these factors—that is, whatever ensues by way of something learned and capable of being
taken away as survivor of the episode--has its character determined by those factors. Information learned to satisfy requirements of a game may be different in significant ways from information, presumably of the same genre, learned for a different reason and to satisfy a different set of requirements.

A conclusion to be drawn--not the only one possible, but one which commends itself most favorably--is that the concept of "need", whether of real or artificial need, is not useful in educational theory. It is conceivable that a creative dialectician may prove this conclusion to have been hasty, but there are other considerations which lend support. Chief among them is the observation that schooling bears a special relationship to human need. It is not the simple one of helping a learner to satisfy his needs, neither those of his needs which are immediate nor those which are eventual, in the future. Concerning the future, it is sometimes remarked that schooling has a preparatory function. It helps to prepare people for successful encounters with situations that may arise in their futures. There are those among the more progressive educators who oppose this conception of education as preparatory, but it is not part of their thinking to intend a denial of the fact. The fact is that schooling has its fruits--its outcomes by way of differences it makes possible in the quality of life--more in the later adult life than in the ongoing children's life or, God help them, in the lives of adolescents. Let it be admitted, therefore, that schooling prepares for the future. Although obviously true in some sense, it is a risky admission. It would be downright foolish to add the further claim that schooling accomplishes that preparation by teaching whatever will be needed (by way of learning) in the learner's future. For any
particular bit of curriculum content, we cannot be sure that any particular learner will come upon a need in his subsequent experiences for that bit. The future is not foreseeable in that much detail. Whether, for example, any given child will ever need to know algebra for application in executive conduct remains to be determined, and the child himself is no more able to predict this than is the curriculum expert. For these and similar reasons, we cannot expect to motivate schoolroom learning by awareness of need for it.

This conclusion, however, compelling, may be greeted with at least a measure of discomfort. There ought to be some kind of connection of what is taught with human needs. That is to say, the materials taught in school ought to have some degree of relevance, of ultimately practical significance for the conduct of one's life. If not, why then should they be taught? If school sponsored learning were to make no difference in the subsequent life of the learner, it would be difficult or impossible to justify the time and expense of schooling. And if it can be said that schooling does have relevance, that it does make a difference, then there must be a connection of some kind with the needs of a learner. Why, then, could we not try to stimulate learning by a learner's awareness of his need to learn?

The answer is that schooling is a kind of exploration of the world and of possible ways by which a person might relate himself to it. In any usual manner of speaking, it does not make sense to say that a person "needs" to explore. A learner in school is finding out what there is, and finding out about himself with respect to his tastes and capabilities, so that he can work out an appropriate way of living. This description makes schooling to be an institution of considerable
importance even though, for any given part of school taught materials, the question of whether it is really and truly needed cannot be easily determined.

An analogy might help. Consider a young man learning about carpentry. Lying in wait in hardware stores are many intricate and ingenious carpenter's tools by means of which various jobs can be executed with efficiency and precision. One approach to learning carpentry is to wait until a job is confronted for which specific tools are helpful and to teach about the existence and uses of those tools only in those circumstances. Another way is to review the kinds of tools there are—a survey of the hardware stores and their resources—in advance of what could be called a need for that knowledge. Which way is best? A decisive observation here is that the first method—teaching about a tool only when it is needed for executing a job—requires that a teacher be present constantly to decide, in each newly confronted job, what tools are best suited, and then to inform the learner that a tool appropriate to the situation is available. For as long as this method of teaching is employed, a learner remains dependent upon someone else to see what is needed and to supply appropriate instruction. The other method—the advance exploratory—promotes a gradual freeing of the learner from his teachers. It promotes growing toward greater degrees of self reliance. If a carpenter is one who can go out to a job without needing to take along a teacher, then the exploratory method is the one which prepares a person for his vocation.

The example has further applications. If a prospective carpenter is guided to a preparatory survey of tools and their uses, he becomes ready to examine the demands of jobs encountered and to decide for
himself upon ways and tools that are suitable. That is the most ob-
vious virtue. But there is another. He is also capable of deciding
how big an array of specialized tools to acquire, and, by contrast, how
far he might be willing to rely upon fewer and more universal tools,
hankering less often for highly specialized ones. This capability could
be described as one of bringing mind, consciousness, and decision into
the process of self formation. A person acquires capacity to shape his
own kind of person through informed choice rather than by unintended
happenstance. That too is a major educational value.

Not every part of the example is equally praiseworthy. It is quite
possible that a prospective carpenter might learn about tools and opera-
tions for which he will never have need in his subsequent vocational
life. He prepares for eventualities that may never happen (assuming,
that is, that carpentry is a vocation possessed of many and intricate
possibilities). This is unavoidable. The same unavoidable character-
istic applies not only to vocational preparation, but also education in
general. In learning what kind of world he inhabits, anyone learns
facts and values which cannot be judged essential or necessary for any
specific conduct. To put it paradoxically, in schooling everyone needs
to learn some of that for which he has no need. This is not only
unavoidable; it is a good. A self directing human being can choose
what he shall pursue as his own preferred way only if he has learned
about that which he decides against as well as that which he decides
for.

If the concept of motivation by awareness of need is useless, as it
seems to be, for the determination of pedagogy, what about that other
popular concept, interest, and the hope that learners will have good
reason to learn because they realize a connection of materials to be learned with the pursuit of their interests?

Much of what has been observed about motivation by need applies equally to motivation by interest. Indeed, in some expressions frequently encountered, the two concepts are used interchangeably. If a teacher suggests that a learner should be willing to "apply himself" because what is to be learned is something that he "needs to know," the same intent could have been expressed by saying that "learning this material is in your own best interests." But there are ways of appealing to interest which are different from appealing to need. Such is the case, prominent in educational thinking, when to speak of a learner as motivated by interest is to signify that he feels a kind of emotion which may be expressed as "being interested," as when it is said, for example, that a particular person is interested in chess, or in ballet, or in some other object or activity toward which he maintains a positive or welcoming stance. It is this concept of interest as signifying a feeling or emotion that needs some further consideration, and for the obvious reason that if a learner is interested in the materials of instruction, this factor increases the possibility that he will learn well. There is also the better feeling a teacher has about his work, which is of no small value to educational enterprise. Could we hope that, at least in large part or for most occasions, school learning could be motivated by positive and active interest?

One thinks immediately of difficulties which stand in the way. Many children would feel that any display of interest in school materials is a violation of the mores, inviting retribution from the peer group. But that is a problem which needs to be overcome: for, if children are
not educated away from cultural pressures which minimize their edu-
cability, instruction will fail in any case.

A more telling observation is that interest in the materials of
instruction is a matter of individual differences. This fact introduces
practical considerations of some magnitude. For determining pedagogy,
it may be the most significant of all.

In any given group of learners as they approach the study of any
particular subject matter, it is reasonable to expect that some learners
will be interested keenly, others interested a little, and others not at
all. Each person has his own pattern of likes and non-likes. One
child will confess to liking history somewhat, to being fascinated by
biographical literature, but bored by mathematics and fearful of
physics. Another child exhibits a different set of likes, fascinations,
dislikes, and fears. This is to be expected. At least, when one
thinks about adults, it is to be expected. If an educated adult who
may be accepted as an exemplary product of good schooling admits to
an abiding interest in only some of those subjects about which he had
learned in school, and to a disinterest in others, we accept this as
right and proper even for so cultivated a person. If an altogether
admirable scholar and humanist admits that he cannot sustain an in-
terest in the details of natural science, we think this to be compatible
with his general goodness as human being. But this acceptance of
differences in adults seems not to extend to children and youth in
school. In several ways, school procedures and expectations seem to
reflect a different attitude.

Judged by a reasonable interpretation of what is done in school,
we seem to be asking that all learners be interested in all subjects; the
patent absurdity of this expectation is concealed by educational custom. By custom, we adopt the attitude that in this (any) class, in the study of this (any) materials, good and intelligent learners will manifest a definite and positive interest in learning. Even if they fail to find themselves actually liking the contents of instruction, they should nevertheless be motivated to study and to learn through sheer determination to make good. They are to be rewarded with high grades, and high grades must be kept sufficiently rare to maintain their capacity to signal exceptional achievement. Similar expectations are held about teachers. A good one is characterized by his ability to stimulate interest in the subject matters he teaches. The more of interest stimulated, the better. As for those learners who fail to respond with strongly motivated effort, it is thought that they probably fit one or more of several uncomplimentary categories: lazy, stupid, indifferent, dull, disturbed. Their low grades are meant to signify to themselves and the world that such derogatory categories apply. These educational customs are so well established that most people are unable to see fault or be ready for change.

This situation is part of a larger tradition: the tradition, namely, of interpreting the educational significance of individual differences in a different way, according to which schooling is thought to vary in its suitability to persons, more suitable to some and less to others, and correspondingly variable in the values to be gained. (There is no reason, it was thought, to provide an extensive education to a garbage collector.) The values which schooling secures were thought to be those appropriate to an elite, and, therefore, there should be a concordance between amount and quality of education received and merited

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status in a hierarchical ordering of human beings. In accord with the principle of non-partisanship, beliefs about hierarchies and meritocracies are not to be disputed. But it is necessary to point out that some parts of that tradition are not compatible with equality of opportunity. If, as here, it is supposed that schooling can be of great value for everyone rather than especially valuable for an elite, then several conclusions about interest as motivator of learning may be established.

One conclusion is that a teacher can expect only some of his learners to be motivated, or even to be capable of being motivated, by strong prior interest, and others will not share that degree of interest and cannot be expected to. But it is not simply the reasonableness of that expectation which is important; many traditionalists and elitists could expect the same. What counts is how this state of affairs is to be treated pedagogically. Where schooling is conceived as good for everyone, without regard for status levels and their associated differentials, then an absence of prior interest in some particulars of a school program is to be accepted without negative bias. The custom of using grades to stigmatize performance that is less than aggressively superior is simply not compatible with universal schooling. Whether the practice of grading is continued or not is of less importance than how grades, if continued in use, are to be interpreted. For example, suppose that, in schools of the future, grades are used to measure relative achievement in learning, but are shorn of their erstwhile role as either praising or punishing. In that case, many learners who might be counted as very good scholars would show a pattern of grades different from the straight "A" average which is now the sign of superior intelligence and
dedication. The superior learner might very well receive a mixture of high with not so high grades, reflecting the pattern of his interests in accord with pedagogical respect for individual differences. His receiving only some of highest grades, along with others that are lower, would be interpreted as meaning that in domains where his interests have been stimulated to a high level, he learns in quality and quantity to accord with his having good reasons for learning. But in other domains, where he does not have such strong reasons for learning, he then behaves consistently with a lesser interest. This latter behavior should not be interpreted as a failing, or as lazy refusal to apply himself. On the contrary, it should be interpreted as intelligent behavior, as just the kind of behavior one might expect from a person who respects himself and is intelligently self directing.

Traditionalist schooling, based on an assumption that the values of schooling are appropriate mainly to an elite few, gave its honors to those who accepted its premise and, in accord with degrees of ambition, invested time and energy in competitive striving to get ahead of others. Democratic schooling of a more ideal sort would not eliminate those who are motivated in that way. There being no reason to think that an aggressive competitive spirit is necessarily incompatible with intelligence and human goodness, an ideally structured school would continue to help ambitious persons to realize their ambitions. The sort of change which an improved perspective might provide would occur with respect to all those others who do not look upon their careers as foot races to win the golden apple. The majority of persons, who are not exceptionally aggressive and competitive, are none the less to be treated as capable of using schooling to advantage, and, therefore, to be re-
spected for behaving in school in accord with their personalized patterns of interest, greater in some materials of instruction and less in others. The point of these observations is that, for the non-aggressive, an up and down fluctuation of one's performance and achievement in learning, compatibly with a degree of interest, is precisely the sort of behavior one might hope to see.

Another sort of conclusion about interest as motivator is that, because a teacher may expect a high degree of prior interest from only some but not all in any given class of learners, he might feel that he ought to plan his teaching for an eventuality in which the strength of student motivation to learn is minimal rather than maximal. If a teacher gears his efforts especially toward those who seem to have little of prior interest, a justification for doing so is that learners who feel little reason to learn are those who may profit most from a teacher's efforts. Those, on the other hand, who are already motivated may be counted on to pursue their interests with only a little (relatively) of help from instruction. This idea about instructional effort is a departure from tradition. Since, traditionally, educational values were thought to be more realizable from the "better" learners (those who were strongly motivated and especially capable), it seemed sensible for a teacher's efforts to be directed primarily to that group. But it should be evident that those who are aware already of having good reasons for an investment of time and energy in order to learn are those who can be most independent of teachers; they stand in no need of instruction to reveal something about the world which should not be overlooked. For them, what is needed most is the ready availability of cultural materials, plus occasional help in reaching an understanding, and a gen-
erally encouraging atmosphere. These are relatively easy to provide. The difficult tasks of schooling are those which require teachers to stimulate learning from those who have no prior interest.

A further observation about interest as reason for learning is that, where no prior interest or awareness of need is operative, the stimulation of interest or of a reason for learning must come from the presentation of instructional materials themselves. The ongoing process of teaching and learning must generate its own momentum from within itself. Learners learn to be interested as they learn the contents in which their interests are building. Superficially considered, it is much like pulling one's self up by one's own bootstraps. That the deliberate stimulation of an interest in materials being presented for acquisition is close to the crux of schooling is an insight once widely acknowledged (during the wave of Herbartian theory in the second half of the 19th Century) but then forgotten, evidently under the influence of resurgent Rousseauian浪漫ism.

What kind of deliberately aroused interest is appropriate? For that, the answer is easy: in any school situation where interest in learning must be generated through presentation of materials to be learned, a most appropriate reason for learning is the exploratory reason. It is an interest in seeing what comes next, in learning what lies over the hill, or in finding out what ranges of things and events the world has to offer. If a person who knew nothing about, let us say, Gregorian chants were to be asked if he had an interest in them, it would be not altogether correct for him to say no. Although it is the case that he does not have such an interest, it is not the case that he is disinterested. It is possible that if he were to hear Gregorian
chants, he would then be interested. That is the kind of situation everyone inhabits with respect to everything in the world and its cultures which he has not yet encountered: he may or he may not be interested, and until he learns enough to find out which condition obtains, he is--he ought to be--readily stimulated to learn that amount necessary to decide the issue.

If this idea of an exploratory motivation is to gain currency, it will be necessary to think of pedagogical procedures in some ways different from educational doctrine of the past. One such difference is a difference in criteria for judging relative degrees of depth and rigor in learning. In school traditions, it has been supposed that whatever is taught deliberately is to be taught for a maximum of quality in learning. The term "mastery" has been used most often to signify such a maximum. For various reasons, educators of differing educational philosophies tended toward the same goal. Cartesian, for example, supposed that knowledge is a logically articulated structure wherein each portion must be exact and "right"; a failure or a sloppiness of learning at any point would invalidate the entire structure. Empiricists were likely to think of learning as that which moves toward the status of "knowledge", an honorific term with connotations of thoroughness, of testing, and of systematic connectedness. As for educators of no particular philosophy, it was thought that whatever is taught is of sufficient value that it is to be cherished in every morsel. When testers in the 20th Century found that most of what is learned in school is soon forgotten, traditionalists were shocked; their response was to urge a redoubling of efforts toward thoroughness. Perhaps now it is becoming possible to look upon quantity and quality of school-sponsored learning in a different way.
To conceive of schooling as an exploration of the world that lies beyond the immediate environment, and motivated by a need to establish one's own personalized way of relating to its vast reaches and accumulations, is to realize that exploratory learning does not require mastery, nor thoroughness, precision and depth. Those are admirable qualities, to be sure, but they become appropriate only after the exploration, when personal choices and identifications have been made. Before then, motivation to explore is a relatively low level motivation. It does not support an intensity of effort nor a determination to work hard for mastery of new materials. Confronted with a novel environment, a person responds suitably, intelligently, by exploratory learning. By contrast, to go at it with determination to learn everything possible at a top level of performance would be inappropriate, even unintelligent.

These observations, so obvious when they are finally permitted to emerge, have been concealed from educators because they have been employing models of learning of the wrong kind. The kind of learning they took to be exemplary, and, therefore, to be held as setting standards for performance in school room learning, was the kind which characterizes a person who has serious and important goals in mind, who confronts obstacles in his path or needs to be met, and whose behavior might then be a vigorous, all-out effort to push through to achievement and resolution, ending up with problems solved, obstacles vanquished, and needs satisfied. The fact that a majority of learners did not approach their school imposed tasks and demands in that spirit was taken to be a fault of childhood, youth and laziness. Even very recently, progressive educators had in mind a model of children absorbed in the execution of a self-determined project, like building a wigwam in a corner of the classroom. These were misleading models.
For the schooling of an entire public, a more appropriate model may be found in the idea of a person reading or hearing a story, and in the reasons such a person might have for becoming involved in the unfolding of a narrative. To construct a model with some concreteness, suppose that a traveler in an ancient culture stops at an inn, and finds that for entertainment of guests while at dinner a storyteller spins a yarn. While the traveler sits quietly eating his bowl of lamb and rice, a storyteller creates an environment, mediated by symbols and their meanings, in which imagined events are happening. For this traveler the environment created is fortuitous. It is a scene and a happening in which he had no prior interest; to whatever extent he becomes involved, it is only because the story generates interest from within itself. It is the unfolding of a narrative—an event meeting some kind of counter force, an opposition of forces creating further events leading to some kind of climax—which generates involvement. The motivation to follow and to participate in the construction is simply an interest in finding out what happens next. This can be a sufficient motivation. Whatever is learned from the experience may be more important than mere entertainment; it could be that the traveler becomes aware of new possibilities in the world and its values. He may become more open to the environment around him; the smell of burning wood, the taste of curry, and the creaking of shutters blend with the droning voice to create an aura that is not less valued because its creation was unplanned and unsought. But what he feels is not by virtue of a powerful motive. If the dancing girls make their appearance before the story is concluded, he is easily diverted. And given our natures, it is right that he should be so.
Although relatively weak in its motivational aspect, the narrative model has much to commend it. Unlike those that have been popular in the past, the model of a person who participates in the unfolding of imagined events is appropriate to schooling, because the environment to which learners respond in school is not merely the four walls, the chalkboards, and the scholars' desks—not the physically present scene—but rather, an environment of constructed meanings, just as it is in the telling or hearing of a story. But the principle virtue is what it says about reasons for learning. A library patron looking for something to read cannot tell whether a novel he picks up for consideration is suited to his liking or not, and so he starts to read. If there should develop a motivation to continue, it is then a motivation generated internally. Neither a prior interest nor a need is presumed to be operating. What gives a narrative its power to command attention is that it offers to the mind what the mind is always, by its nature and function, looking for: namely, a pattern of intelligibility, a connectedness, a destruction of mere isolated factuality and of things discrete or self-contained. A narrative exists by virtue of connections understood, of one thing leading to another.

As one begins to appreciate the virtues of narrative, one wonders whether or how far those virtues can be made into pedagogical process. And then it turns out that almost any materials that a teacher might want to teach can be arranged for presentation in narrative or narrative-descriptive form. (Descriptive passages are usually a necessary part of narrative.) The teaching of history, of course, comes immediately to mind as a prime candidate, and from there one jumps directly to geography and the description of settings within which historic
events have happened. History and geography seem ideally suited to narrative treatment. But what about, say, arithmetic? Narrative in this case might be about a person confronting a problem involving the manipulation of quantity, who works out a technical and repeatable solution. As for the natural sciences, like, say, biology, the opportunities for narrative technique are infinite. One tells, for example, how life is maintained in a complex organism by the combination of specialized functioning of the various organs, in the same way that the workings of a machine may be described as a connected succession of events happening to integrated parts. But there is no need to offer further examples. Whatever it is that we might want learners to learn concerning their world is in some ways related, connected, established in a pattern, rather than discrete or standing alone in pure, bare fact; the existence of relationships offers the germ or the possibility of a narrative.

Interest in a narrative, or interest in exploring a presented and novel environment, these are the reasons for learning upon which school procedures may be established. They are reasons for learning which a teacher may expect to find operating in his classroom no matter what—no matter what the variation in prior interest from one learner to another, no matter how different learners may be in their degrees of ambition and aggression, and no matter how variable in academic aptitude. Narrative and narrative-descriptive techniques of pedagogy have the unique virtue of being suited to the realities of schooling. They are compatible with a conception of learners as self-directing human beings who can be expected to learn only when their minds become engaged for reasons which are adequate and which are their own.
Narrative techniques do not assume an artificially stimulated "need" to learn nor an unjustifiable, sometimes false, prediction of a future need; nor do they presume on the part of all good learners an already established and prior interest in the materials to be presented. The narrative interest is sufficient to motivate learners to explore the world which lies beyond the immediate environment, and thus to make further and more involved learning an eventuality in accord with the operations of intelligence.

In summary, three kinds of reasons for learning have been considered: learning because of a need to learn, learning in support of a prior interest, and exploratory learning generated by instructional materials. The first is rarely to be found in the early stages of schooling. It is primarily because, in advanced civilizations, there is much to learn for which an obvious need is not apparent that the institution of the school becomes necessary. Because of this fact, teaching procedures cannot be chosen on the unrealistic expectation that children and youth will come to realisation of their presumed need to learn. However, in advanced stages of maturing, after important discoveries about one's self and the world have been made and personal choices about one's vocational and other commitments have been established, learning does tend increasingly to be motivated by awareness of a need to learn. That is why professional schools may demand and get from students a high level of motivated study. It is only after the values which are to be accorded a continuing importance in one's way of living have been embraced that one can be said to "need" learning at a level beyond that of ordinary common sense.
The second—learning by operation of a prior interest—does appear, for any particular learner, in spots and places here and there within a diversified curriculum, and when it is found to be present, it is obviously good policy to capitalize upon it by all manner of pedagogic encouragement and environmental enrichment. But for any given group of learners, a prior and operative interest in the materials of a well constructed curriculum cannot be counted upon, and a teacher who plans his actions upon a hope for that kind of learning is likely to be prejudiced toward a favored few, and to be an ineffective teacher for the majority. For the most part, and with respect to the entire public, teachers must forego a romantic hope for learners, all of whom come to their classes already interested and eager to learn. That leaves the third category, motivation generated from instruction itself, as the principal reliance of democratic teachers.
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