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## The Role of Educational Philosophy in Teacher Education\*

“The Art of Teaching” was the title of the first course in education ever offered in the United States. Since then the title has fallen into disuse, if not disrepute. Courses in “The Philosophy of Education” have waxed and waned, although after their introduction they never were entirely abandoned and during the last quarter-century have enjoyed a distinct return to good standing, if not to overpowering popularity. Between 1910 and 1930, the phrase *science of education* achieved eminence and has since become established in confirmed usage.

It would seem that each of these terms — *art*, *philosophy*, and *science* — has a significant role to play in a study of problems confronting teachers. Each term involves conceptions essential to such study and, since occasions frequently arise that call for their use, we shall proceed at once to their definition.

*Science.* Since the turn of the century, research in the field of education has been active and fruitful. Even though some of us may not be quite so overcome as many of our colleagues with the significance of the supposedly scientific findings in the field of education, I think for the most part we readily grant that valuable information has been gained. Such a body of information — howsoever obtained, and organized in such a way as to be readily available to educational workers — we shall call the *science of education*. This means that we define science as *organized, dependable knowledge*.

It will perhaps be well to distinguish between science and the scientific method — between product and process. And, perhaps also, we might note for the record what seem to be two major misconceptions regarding the nature of scientific method. The first is, as pointed out by Conant many years ago, that “the [mere] amassing of data does not constitute advance in science,” meaning that the Baconian-Newtonian process of “induction” is not to be confused with the hypothetico-deductive-experi-

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mental procedure that, in theory as well as in practice, is overtly and explicitly espoused by 20th-century scientific investigators.

The second misconception is that “scientific method” and Dewey’s “complete act of [reflective] thought” are terms that have identical meaning. It should be noted that Dewey’s characterization is a more inclusive expression; scientific investigation is *one kind* of reflective study, the kind in which the *scientific* criterion is to be applied in judging the truthfulness of a hypothesis under investigation. Many investigations there are — and highly significant ones in terms of human welfare — that cannot possibly be conducted under the aegis of the scientific truth-criterion; such, for example, as the entire category of determining how we *ought* to define the multiplicity of words that constitute human language.

We take science to be “organized, dependable knowledge,” deemed dependable if and when it satisfies the scientific criterion of “adequacy and harmony of outlook or conclusion *in light of obtainable data.*”

*Philosophy.* It is often said that “knowledge is power,” but it is so only when its possessor, a flesh-and-blood being, acts in such a way as to take advantage of the assistance that its possession can give. Knowledge misused may promote weakness rather than power. A program for living is not implicit in knowledge alone. No science of education, regardless of its adequacy or its validity, can by itself provide a program for teaching. A teacher has to work out his own program. But, in so doing, he should doubtless make the fullest possible use of whatever educational science is available. And when we talk about “program for living” we are talking about *philosophy*. Before embarking on an undertaking having a degree of significance, it is always well if not necessary to have a rather clear notion of what the enterprise is to accomplish, what circumstances surround it, what materials are available for use, what obstacles may be encountered, what procedures are to be followed, and what outcomes may be reasonably expected. In short, it is nothing more than good sense to think out beforehand the ends, ways, and means. Otherwise, the undertaking may go awry. Such may be spoken of as the *program* for the undertaking, and this is what we mean when we use the term, *philosophy*. That the term has been given other meanings, I am well aware, but my topic calls for what *I* mean and this is what I am trying to tell.

*Art.* The proof of a pudding is the eating. Science or knowledge is of value if it may be and is successfully employed in the formulation of a program for action. In turn, a program for action or a philosophy is of value if it may be and is successfully employed in carrying out the proposed action. The term *art* may be used to denote the final step — *action*. Philosophy thus refers to the conceptualization of a program; art to carrying it out.

However, maybe we should hedge a bit. Are we justified in applying the term *art* to *any* act or series of acts? In common usage the term carries a connotation of excellence. In other words, art commonly means artistry and artistry means high-grade action. We hesitate to think of low-quality performance as art; certainly not as artistic.

What constitutes high-quality performance? Let me hazard the suggestion that it is performance that achieves its end or ends thoroughly, but with minimum expenditure of materials, energy, and time. A task is artistically done when the successive acts or actions progress toward the mark with "no lost motion"; when no energy or time is wasted on useless moves that do not contribute maximally to promoting the end. Artistic action, therefore, *appears* to be effortless because an observer gets no impression of undue stress and strain. The action possesses balance, rhythm, harmony; and it "gets the job done."

When well done, teaching is an art; indeed, it is a fine art and a complicated one. Though many teach who are not artists and much that is given the name of teaching is not artistic, there is as much opportunity for creative artistry in teaching as in any field of human endeavor, and a great deal more than in most. Is not the molding of humanity into finer and nobler forms the chief objective of an artist-teacher? There was after 1910, and especially during the twenties, a distinct attempt — the science-of-education movement — to sell education to the American public and even to teachers as a science. It carried such stress on objectivity (dare I say dehumanization?) that study of measurement, statistics, and research appeared for a while to be the major professional preparation needed by teachers. Maybe we have recovered somewhat since then.

Thus, with no disparagement whatsoever, we may say that science is the handmaiden of philosophy and philosophy of art. With the help of our science we formulate a philosophy and, guided by philosophy, we teach artistically. Theory and practice form an integrated whole. Without practice, theory is meaningless; without theory, practice is blind. A statement closely akin to this can, I think, be credited to Immanuel Kant. So all three — science, philosophy, and art — work together to make up the personality of an artist-teacher. Let us now, as educational philosophers, take a close look at what we seemingly ought to take into account in formulating a respectable philosophy of teaching; a full-fledged teaching program.

*Formulation of an Educational Program: What must be taken into account?* To be workable, it would seem that a program of action — any such program — should satisfy at least four judgmental criteria. (1) It should be clear; it should communicate to a user, enabling him to determine rather readily what he must do in order to carry it out. (2) It should be pertinent; it should deal with matters that need to be dealt with and, conversely, it would seem best that it be confined

to such matters. (3) It should be adequate; it should cover *all* that needs to be covered. (4) It should be harmonious; it should hang together, avoiding especially the hiatus between theory and practice as well as the dilemmas introduced by failure to note whether and wherein one part or aspect may oppose, negate, or nullify another.

Because our fourth criterion, harmony or consistency, is so often overlooked and unhonored, it needs to be given special attention by those who would formulate a *teaching* program. Joint consideration of all parts of a program, however, means that when a given part is to be examined it is brought to the fore and thrown in relief against a background of the other parts. It does not mean that particular aspects may not from time to time be isolated for special study. The principle of "divide in order to conquer" is as important for us as it was for Napoleon at Austerlitz. The essential point is not to lose sight of the whole when one part or aspect is being studied. Attempts to treat the whole of knowledge at one and the same time, as some of our so-called "integrators" or "core-curriculum" protagonists seem to intend, do not give promise of success. They may be much like Stephen Leacock's general who slammed down his phone, bolted from his tent, mounted his horse, and rode off in all directions.

A teaching program is a human formulation or invention; hence, the process of working one out has to move forward without benefit of full and settled knowledge of all that is or will be involved. To proceed on the basis of partial knowledge, however, means that we have to take fliers on the rest; that we have to assume what we should find the rest to be if we indeed *should* come to know it. What are some of the assumptions on which a teaching program has to be based?

*Regarding the nature of society.* Does the form of socio-governmental organization of a society make any difference to the *manner* or the *materials* of teaching? Why are we making strenuous attempts to eliminate racial segregation in our schools? Maybe we also should ask why we have waited so long to do it. Why do we outlaw holding religious rites or ceremonies in public schools? Why is indoctrinative teaching a real issue in educational theory in the public schools of this country, yet not one in parochial schools or in the schools of certain other nations, such as the U.S.S.R.? Why is the student unrest of today not simply squelched out-of-hand, by the show or use of whatever force is necessary to do it?

What a teaching profession assumes society stands for makes a real difference to its teaching program. Method and subject matter, objectives and administrative procedures, and all else that relates to the program are affected. Therefore, we seemingly must give high place, in formulating a full-fledged teaching program, to assumptions regarding the nature of the society in which the teaching is to take place. This we may call *socio-political theory*.

*Regarding the nature of learners and of learning.* Psychology has long been recognized as an important component in teacher-education curricula. In fact, not many decades ago it appeared to be about all that most faculties of education thought necessary as a basis for teaching method. Obviously, in order to promote learning effectually, it is necessary to understand the learning process. To promote such understanding, it would seem, is the first and major obligation of instructors in educational psychology, but educational philosophers have to take psychological assumptions into account if they are to develop a full-fledged teaching philosophy.

Nor is it enough merely to consider certain accessory-like aspects such as the advantages of logical over rote learning, the advantages of spaced over continuous learning, the fact of retroactive inhibition, the fact of individual differences, the need for motivation. Such matters are important but, in terms of genuine assistance in helping teachers promote learning optimally, they are definitely secondary to a thorough understanding of the basic nature of the learning process.

The vital issue at present appears to be whether learning shall be considered essentially a process of "conditioning," whether operant or classical, or as a process of developing insight. This question is fundamental. Answering it one way means one kind of teaching; answering it another way means a thoroughly different procedure. Around it hinges the question, for example, of whether to have "drill" in the time-honored sense of sheer repetition, or whether to have "practice" in a thoroughly different sense — the very antithesis of repetition. We see and hear repeatedly that a certain amount of drill is necessary. But almost universally the makers of that statement fail to be definitive as to what they mean.

Moreover, since learning is only one aspect of the total behavior of an individual, in order to be adequate a psychology for teachers should also include consideration of behavior in general, of the factors necessary for transfer, of the psychological versus the logical, etc. What factors should be taken into account in order to interpret and predict behavior successfully? The answer to this question is of prime importance for teachers and for the formulators of teaching programs because they seek to influence the behaviors of pupils so that genuinely educational objectives shall be achieved. Scientific influence or control is achieved only through prediction based upon understanding, and on action based on such prediction. This is *psychological* theory.

*Regarding the nature of truth, value, and existence.* Many of you recognize these matters as the epistemology, the axiology, and the ontology of *philosophy*. What do we mean when we say something is true, or something is false? What do we mean when we say, "I know"? Just last summer, I tried introducing the study of the nature of truth by using this very question. And the surprise, almost chagrin,

of the class members, almost all experienced teachers, at their inability to say definitely what they meant when they said "I know" was interesting to say the least.

Then there is the question of what we mean when we ask, "Is that right?" So often do I have to answer in some manner such as, "Well, I can't just say whether it's *right* or not, but I am quite sure that it's *true*," that some of my advanced students get almost put out with me because of the repetition. But the distinction between right and wrong, on the one hand, and true and false on the other, between axiology and epistemology, is certainly an important one for teachers. What are our assumptions regarding the nature of truth, and of how it is to be obtained? What are our assumptions regarding the nature of value, and of how we can decide what is of value and what is not? Are there truths other than what are scientifically obtainable? And what is the scientific way of obtaining truth? Are "real values," fundamentally basic ones, essentially cosmic in nature? If so, and if we indeed "know" what they are, how can we deem teaching to be at all successful if it fails at all in fixating them in the minds and hearts of children and youths? And what shall we deem to be the *is-ness*, the essence, the "real" reality of things? What do we mean when we say something is "real"? Questions such as all of these — epistemological, axiological, ontological — have hardly even been thought of by the bulk of those who come to us for instruction in the art of teaching. Yet how can one be an artist-teacher without having come to some pretty clear assumptions on all these matters?

*The purpose of teaching.* Whether you find the proposition acceptable or not, my experience has been that, once we have become fairly clear on the foregoing sets of assumptions, we have deducibly clear sailing into the formulation of a statement of educational purpose. And I mean *logically* deducible; for after we once have a full set of premises out in the open, then (as you well know) we are logically stuck with certain conclusions. We can break out by committing logical fallacies, but this is illegitimate break-out. Why go to all the previous trouble, if we are going then to walk out on it? This is why I am greatly distressed by so many of us who claim in seeming seriousness that between high-level theory and ground-level practice there can be no logically deducible connection. If there can't be, then what can possibly be our justification for asking that instruction in educational theory or philosophy be required in the preparation of teachers? That with certain philosophical stances or positions such logicity will force one into patently untenable conclusions, hence one has to break with his premises in order to maintain any semblance of credibility, I do not deny. This is the plight of those who are constrained to conclude their theoretical presentations with the observation, "Well, that's my theory, but don't take it too seriously." Naturally, my rejoinder (usually not audibly stated) is, "If you can't take it seriously, then why take it at all?"

On the other hand, one can legitimately break out of the logical bind between premises and conclusions *only* by going back and altering the premises. And I am convinced that, if philosophers would once make up their minds to do just that, we would be blessed with a great diminution of disagreements among them. William James once defined philosophy as an unusually serious attempt to think straight, but years later Bertrand Russell (with tongue in cheek) paraphrased it by characterizing philosophy as an unusually serious attempt to think fallaciously. My own commitment to truly logical connection between premises and conclusions should endear me to the analytic philosophers, but my quarrel with them is that their energies are expended finding flaws in other fellows' syntheses with none left for building their own. If we are going to be helpful to teachers, we must sooner or later get busy and help them *build*.

*Criteria for choice of subject matter and of method.* Finally, growing deductively out of a statement of educational purpose are the basis for choosing subject matter or curriculum and the basis for deciding upon method. If a statement of educational purpose does not make this possible, it can hardly be a clear statement of such; for the Peircean test of clarity is its efficacy in clearly indicating lines of action that a given proposition may entail. The function of any statement of purpose, end, or objective of any enterprise is to make clear what has to be done in achieving it, so we let the matter stand there. I think the third and final section of this paper will serve to elaborate, to a degree at least, what is meant by criteria for choice of subject matter and of method.

*My own program.* With the foregoing sketch, I have covered the essentials of what I'd like to see professors of educational philosophy deal with in classes on teaching theory. But, so far, you will note that I have refrained from indicating the conclusions that I myself have reached in connection with each of the aspects for which study and conclusions seem needful. Such refrainment, I hope, will serve to emphasize the point that, for democratic education, curricula should be planned and described in terms of *issues to be studied*, rather than of competencies to be achieved. (More on this in just a moment.) What a given professor's conclusions are is indeed grist for the mill, for how can a teacher justify asking his students to try to reach conclusions if he himself does not show that he has done so and, in addition, show what the outcome of his study has been? Rather than being indoctrinative, this is a means of protecting students from it, for it gives them fair warning as to what the teacher might try to indoctrinate for and thereby shows them what they must guard against. So now, in the interest of clarification, let me give a hasty sketch of what my conclusions, up to now, have been.

As to social setting, I am assuming public education in a democratically committed nation. It seems reasonable to assume that the U.S.A.

is a democratically committed nation, but what we mean by democratic commitment is not at all clear. Hence, through study, we must work out a definition of democracy and that requires tentative agreement as to what criteria the worked-out definition must satisfy. These, I suggest, seem reasonable: a definition of a word (any word) should (a) clearly indicate lines of action that may be involved, (b) sharply differentiate among alternatives, (c) avoid self-contradictions, and (d) without violating the foregoing, represent as much of common usage as is possible. These criteria are based on the expectation that a word, when used, should communicate readily and clearly.

Applying these criteria to the various possible definitions that I have come across or have occurred to me, I reach the following: a form of governmental organization in which all members of a sovereign group have equal opportunity to participate in arriving at decisions on matters deemed to be of group concern, and equality of obligation to abide by such decisions until they have been amended or repealed. This, of course, means government by and with the consent of the governed, as well as "one man, one vote."

Along with much else, this means that education of the young for democratic citizenship logically requires development of the ability not only to work *with* others but also to be intellectually independent in so doing. This means reflective teaching, in which the teacher serves basically as the chairman of a deliberative body, seeing that deliberation moves forward fruitfully but not that conclusions predetermined by him shall willy-nilly be the conclusions of the body. In other words, equality in decision-making means that a teacher's ideas shall be subjected to the same critical scrutiny accorded to all others. And, to do this, previously adopted criteria have to be employed for in no other way can all proposals under consideration be accorded equal opportunity to be heard but also equal obligation to stand criticism.

Criteria for determining psychological assumptions have to be different from those for determining word-definitions, for psychological assumptions (which are mental concoctions) have natural objects — people — as referents whereas word-definitions (mental concoctions) have as referents only other mental concoctions — words. To test our *ideas* as to how people behave, we have to try them out on people, and this is a scientific procedure; hence, scientific criteria should be employed. Since anticipatory or predictive accuracy regarding what a person will do under specified conditions is the scientific test of a psychological principle, this seemingly should be our criterion for determining psychological assumptions. And, when I apply this test, I am forced to the psychological point of view known in general as "field theory" and variously called Gestalt, configurational, organismic, goal-insight, etc. This includes (1) the principle of least action, that a person will act in such a way as to achieve what he wants or intends (his goal) in the quickest and easiest way (least action) that he senses or comprehends (his insight) under the circumstances (the confronting

situation); (2) learning as development of insight; (3) transfer as occurring when and only when an opportunity (to use a learned insight) occurs, when we see it as an opportunity, and when we wish to take advantage of the opportunity; (4) habit-level behavior, not as repetitions of previous actions, but as fluent, non-hesitant, successful getting-a-job-done by virtue of sensing at once what the immediate situation requires and proceeding to perform as required. This means that, on habit level, later behavior *may* be much like earlier behavior not *because* of the earlier behavior, but *for the same reason that* the earlier behavior was as it was; in other words, the three factors (goal, insight, and confronting situation) were essentially the same as before and the principles of least action and transfer were at work.

In suitably comparable ways, we reach our philosophical assumptions, basically relationalistic or pragmatic in nature: (1) truth as a quality of a humanly concocted idea, the quality being that it enables its user to make accurate predictions regarding the behavior of whatever is under scrutiny; (2) value as what a person is willing to settle for, hence self-determined; and (3) reality as what does make a difference to one, or could conceivably do so if given the proper conditions. The existence of absolutes — eternal verities, cosmic values, ultimate reality — is neither asserted nor denied; it is merely not taken as a working principle in formulating a program for living or philosophy of life, for “how do you know what you would know if you knew what you don’t know now?” Taking the position that we seemingly have to take the world as we find it and have to deal with it essentially on its own terms — we can’t make objects or events appear or disappear merely by wishing them or thinking them —, we can say our position is ontologically *reactive*. Taking the position that in final analysis values represent human dispositions — *de gustibus non est disputandum* —, our position is axiologically *active*. Taking the position that truth is humanly concocted but tested by asking nature whether our concoctions are accurately predictive makes our position epistemologically *interactive*.

Coming to our statement of educational purpose, we have already noted that democracy requires the development of intellectual independence in arriving at our own convictions or value-judgments, hence independent learning ability. This in turn means that curricula need to be planned and described as issues to be studied rather than as knowledges, skills, and attitudes — competencies — to be attained. But *what* issues? Obviously, we have to pick and choose; we cannot cover all; we have to decide on what’s important. What’s important would seem to be that which pushes and pulls us about, the life of which we are or foreseeably will be a part, our *world of effect*. We want to know as much about it as we can, so that through such knowledge we can design plans for dealing with that world of push and pull, that world of effect, in such a way as to make it more to our liking.

But, when we look at our epistemology, the scientific way of obtaining truth, we note that we need to do more than merely add new insights. To develop a world view, a *Weltanschauung*, that will be scientifically sound, we need to be sensitive not only to coverage but also to consistency. *Adequacy* and *harmony* of outlook or conclusion, both are considered essential by scientists as they seek to achieve better control of the world as it confronts them. To develop a *systematic* outlook, one that not only covers the world but also makes it "hang together," is very much of scientific concern. Then the right hand knows what the left hand is doing and their combined actions are coordinated or integrated; mutually supportive.

Hence, we conclude that the issues to be included for study in a democratically oriented educational system are those that will contribute most, at each step up the educational ladder, to enhancement *and* harmonization of student outlooks on the world of which they are or foreseeably will be a part. So, combining this with the objective of intellectual independence, we find our statement of educational purpose to be *to develop enhanced and more harmonious student outlooks on the life (or world) of which they are or foreseeably will be a part and heightened capacity to reconstruct outlooks independently.*

Finally, what does this statement logically entail in terms of educational procedure? What are our criteria for choice of method and for choice of subject matter? Method has obviously to be basically reflective; reflective teaching; conducting reflective studies of issues or problems, of matters not yet entirely settled first in the minds of students and sooner or later in the collective mind of the world at large. As to content, if we wish to achieve greater coverage, we must choose for study matters that are not yet covered; to achieve more adequate outlooks, we have to begin with inadequacies (or gaps) in outlook. On the other hand, if we wish to achieve more harmonious outlooks, we have to begin with disharmonies in outlook; with inconsistencies or self-contradictions within their own thinking that students at their various levels of intellectual maturation can be brought to see as such and can do something about. Therefore, our criteria for choice of subject matter (of issues) for study are problems that represent not only inadequacies but also disharmonies in student outlooks. And the full statement of educational procedure (pursuant to our statement of educational purpose) is *to conduct reflective studies of problems that represent not only inadequacies but also disharmonies in student outlooks on the life (or world) of which they are or foreseeably will be a part.*

This then is in capsule form the educational program as it has evolved in my own mind after many years of the kind of study that has sought to take into account these factors that I feel each and every educator should take into account in working out his philosophy of education.