# Three dimensions of education

Considering that our brains have a two-sidedness to them, it is fairly easy to accept that education should be conducted in two modes. But three? Seckinger advocates the "Broudy triad" as the basis of our practice, finding connections in it between modern and ancient thought, and asserting that only a proper balance between modes in education can protect us from the many forms of reductionism prevalent today. Thus even a just combination of the two cognitive modes, the didactic and the heuristic, which has been the major preoccupation of official curricular reform in our time, ignores to our peril the affective, existential mode of teaching and learning; and he explores both fallacies and remedies in the present tendency to stand pat on that reform. There is more than our brain that needs educating.

The three modes of education known as didactic, heuristic, and philetic, which I applied to the teaching of social foundations in the McGill Journal of Education in 1974, have continued to receive investigation by others. In Magsino and Couvert's The Modes of Teaching of 1977, Couvert called the three-fold scheme the "Broudy triad", for Broudy himself wrote on the triad in the early to middle 1970's.

Broudy seems to be restating in modern terms a classification of human nature and conduct at least as ancient and universal as that used by Plato and later by Kant. The **didactic** would seem to correspond with Plato's education for philosopher kings, at least in its higher reaches; the **heuristic** would seem appropriate to the education of courageous warriors or political activists; the **philetic** in its higher aspects is not unrelated to the warriors and statesmen, but in its lower or perverted forms it

seems appropriate for the people of animal appetites whom Plato felt required discipline and control.

Writings such as those of Broudy and his allies point up our contemporary need to give full credit to all three modes of human being and knowing. They reflect the concern of many modern philosophers and psychologists that the human being not be reduced to an object of technical manipulation. They confirm the suspicions of educators such as George Kneller that a social science or physical science model for human learning is highly inappropriate, owing to the limitations of science and a vulnerability to descent into scientism. I propose in this paper to pursue a little further the notion of a threefold conception of education, as well as to explore some of the dangers of allowing one or two dimensions to dominate at the expense of the other important facets of a truly human life.

# Two cognitive modes

Didactics, the cognitive-intellectual mode of teaching and learning, appeals to our human need to make sense out of our world. It involves the organization of experience into classificatory schemes whereby we may gather, refine, and transmit theoretical knowledge. This is second order knowledge and knowing, abstracted from cultural experience and possessed of explanatory power. It is the sort of knowledge glorified by Plato in his **Republic** and by Hutchins and Adler in the Great Books Program. It is the primary emphasis in traditional philosophies of education and the stock in trade of most formal schooling, and is sometimes reduced to a "Back to Basics" travesty of itself.

There is a cold beauty in the didactic procedures of testing hypotheses, gathering evidence, developing arguments, and reaching conclusions. At its best, as in the dialogues of Socrates and Plato or the dialectics of Hegel, the cognitive intellectual mode of educating generates thoughtful and stimulating debate. Unfortunately, in its debased reductionist form didactics becomes the memorization of given truth for its own sake, divorced from its original contexts of argument and experiment (Seckinger, 1977, pp.322-325).

Heuristics, the cognitive-problem-solving mode of teaching-learning, appeals to the equally valid human need to act on the world. It requires holding knowledge to be tentative and subject to change, in the best argumentative traditions of didactics. Heuristics employs what Dewey called the method of science, but what I would term applied science, as a necessary complement to philosophical and scientific theorizing. It is the primary emphasis of progressive philosophies of education, the

basis for much informal and alternative schooling, bearing the slogan "Learning By Doing in a Social Setting."

As I have pointed out elsewhere (1974, pp.240-241), didactics and heuristics need and complement one another. Human societies require didactics to organize, interpret, classify, and administer academic knowledge, law, custom, and tradition. To avoid stagnation, at least in the Western view, we also need heuristics to test, experiment, explore, and change our ways - assuming as we do the tentative nature of knowledge and the contingent, relative status of values. Didactics provides the basis of judgment, expressed in traditional subject matters, against which we measure progressive innovations in contemporary life. Heuristics involves us in methods of inquiry which may yield unforeseen or undisclosed knowledge.

### An emphasis of radical philosophies

Philetics, the affective or existential mode of teaching-learning, appeals to yet a third essential human need. We require not only sense-making and acting-upon, but also a sense of gratification and well-being. Philetics means a love of human knowing and doing, a joy and satisfaction in the use of knowledge and in the exercise of skill that are intrinsic in performance and of a different order from cognitive content. This is the kind of personal knowledge glorified by Rousseau and the Romantic poets and used by Rogers and Neill as the basis of their critique of contemporary education. It is a primary emphasis of radical philosophies of education.

Recognizing strong overtones of affect in both didactic and heuristic dimensions of education, radical and existential critics have asserted the need to focus upon the non-cognitive and the pre-cognitive. While traditional and progressive philosophies seem to take the view that what is good and constructive in the affective domain derives from intelligent and wholesome developments in the two cognitive modes – something like Aristotle's definition of happiness consisting of exercising one's abilities in a life affording them scope – radical philosophies and psychologies find it necessary to take seriously such phenomena as intuition, precognition, and the subconscious.

The battle cry for breaking through the reductionist tendencies of the cognitive modes of explaining the world is sounded by Nietzsche when he says "... a specialist in science gets to resemble nothing but a factory workman who spends his whole life in turning one particular screw or handle on a certain instrument or machine." (1924, p.39) For the radical philosopher the modes of sense-making and acting-upon are simply not

sufficient and do not render justice to the fully-functioning human being.

All three modes or dimensions of education have come to the forefront at one time or another, in cycles of educational theorizing and curriculum development. Around the turn of the present century, educators were highly concerned about the academic standards and accreditation of secondary schools in the midst of a high school population explosion that brought in a great diversity of American youth. In the aftermath of the First World War, the learner's subjective, affective needs became a source of concern in much theorizing and some alternative schooling, while didactics was extended to encompass a rationalized business model for educational administration.

As we moved through the Depression, the Second World War, and the early postwar years, it seemed as if the heuristic, social-problems curriculum, keying into the needs of "All American Youth", would make of our educational system a social-democratic, learning-by-doing model. Yet the 1960's saw a Post-Sputnik, didactic, subject-centered revival, designed by specialists in academic disciplines. To this was added a heuristic, social-problems emphasis transformed in terms of Civil Rights and Multi-Ethnic Studies; to be followed as we turn into the "Me Decade" of the 1970's with so-called New Humanism, focusing on the mode of affect.

#### Modes in partnership

A number of philosophers of education in recent years have proposed partnerships between the two cognitive modes of teaching-learning, and even working alliances between the cognitive and affective dimensions of education. Hugh C. Black, for example, writing in **Educational Theory** in the mid-1950's, equates the cognitive-intellectual with the social tradition and the cognitive-problem-solving with individual learning-by-doing. He sees them as complementary modes of the educative process.

The social heritage, the structure of Civilization (the art of living together) constitutes the resources for the development in the individual of a personal structure which enables him to live best and to cultivate life at its higher levels. (1954, p.117)

Put another way, the social heritage takes the form of the essential, time-tested subject matter in the school curriculum, a didactic or cognitive-intellectual conception of social knowledge. The process of individual learning, on the other hand, follows a heuristic bent, rediscovering human social knowledge from a

personal standpoint. The two cognitive modes of teaching-learning are naturally related to one another on the basis of the idea that "social experience is individual experience writ large," with the repeatable lessons of humanity discovered anew in each generation.

A problem with this method of reconciling the two cognitive modes of education is its slight tilt toward tradition or the learning product, but its major difficulty, from the standpoint of existential philosophers, is the assumption that the affective domain will naturally follow in the footsteps of success in the first two dimensions of education. Cognitive educational theorists at least from the time of Aristotle have shared the belief that proper attention to knowing and to doing will yield, as an indirectly sought after good, human happiness. The presence of irrational, intuitive, or subconscious human drives and needs is looked upon as not really central in rationally organized education; sublimation is the prescription within the socially acceptable range of the irrational, special counseling beyond that.

Leroy F. Troutner, writing in the anthology Existentialism and Phenomenology in Education in the mid-1970's, proposes a working partnership between the cognitive-problem-solving and the affective-existential modes of teaching-learning. He recognizes that an actual synthesis of these two modes is probably not possible, but that the very different ways these two aspects look at reality may just enable them to complement one another's strengths and weaknesses.

He sees the archetypes of the cognitive-problem-solving and the affective-existential in philosophy as, respectively, Dewey and Heidegger, and he thinks of them as helpful in the total process of education from childhood to adulthood in different ways.

...In trying to teach students the significance of the relationship between education and the man-culture relationship, the largely theoretical approach of John Dewey needs to be supplemented by the more personal approach of the existentialists... In order to realize how man is the creature of culture, the student must become aware of the power of culture in his own life and then, after recognizing what culture is, he must be able to distance himself from it in order to criticize it and thereby help create it by changing it. (1974, p.44)

The connection for Troutner between the two dimensions of heuristic and affective is the process of cultural change. Progressivism places the emphasis on the human being, being a creature of culture first and then becoming able to act upon and

contribute to culture. Existentialism acknowledges the prior claim of culture as the creative context of the human, but goes on to envision the person as a creator of culture once he or she becomes aware of the significance and the possibility of making meaningful personal choices.

## Some dangers

This approach to the reconciliation of different modes of teaching-learning has its own problems precisely where the learning-product approach of Black has its greatest strengths. It assumes that the didactic or cognitive-intellectual mode of educating has been totally accounted for within Dewey's cognitive problem-solving emphasis. A serious difficulty involves giving less than deserved recognition to the power and influence of the social heritage; it is complementary to the potential problem in Black's approach, of making the social heritage the primary touchstone for measuring individual achievement.

The arguments for somehow taking into account all three modes of human development are borne out in both of these Black, quite rightly from a rational, cognitive examples. conception of teaching-learning, would utilize the products of the social heritage, reflected in logically organized subject matters, to bring about the proper formation of human character, responsibility, and creativity. Troutner, taking a process approach to education, relates the social problem-solving curriculum and methodology of group process to the eventual recognition on the part of the individual that he or she may make unique contributions of their own. The product philosophy of Black (and of Aristotle, among others) takes into account the proper and reasonable conditions for human happiness, pursued indirectly. The process philosophy of Troutner (and of Dewey and Heidegger, among others) takes into account human history as resource and as partial context.

In other hands, didactics may be reduced to formalism and traditionalism for their own sake, as in the case of a legalistic approach to religion or in the reduction of science to routine technique, as Nietzsche pointed out. Heuristics may be reduced to quantitative expediency, as in the accountability movement, shrinking human learning into behaviorally measurably modules and components. Philetics may be reduced to narcissistic self-absorption. Self-congratulatory "touchy-feelies" deserve our scorn more perhaps even than overt attempts at behavioral conditioning, since often these so-called educative enterprises take advantage of, and manipulate, very real human vulnerabilities.

Given the technical demands of a given educative situation,

it may be necessary temporarily to focus predominantly on one or another of the dimensions. But this temporary focus is a means. not an end in itself. Grammatical rules, for example, are not a discrete entity separable from their context in literature or in everyday conversation. Learning-by-doing in a social setting is not applicable to all subject matters. Philosophy itself as a subject is not reducible exclusively to language analysis, however useful this may be as a means of clarification. So-called humanistic experiences in pseudo-therapy are not fully representative of the heights and depths of human inspiration and human anguish; these experiences trivialize existence.

If the three dimensions of education, whether understood as the Kantian categories of intellect, feeling, and will, or from Broudy's discussion of the didactic, heuristic, and philetic, are taken fully into account, then we will have countered to a considerable extent the many forms of reductionism so prevalent in contemporary society. We will be able to see more clearly the absurdity of trying to encompass the work of educative institutions within mere technologies of behaviour. The teacher may then re-emerge as more than a legalistic rule follower and learning technician. He or she may be allowed, as students should be allowed, to become caring, intelligent, and purposeful human beings.

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