The House of Tomorrow

The goals of American education must go well beyond good citizenship and career success.

For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.

—Kahlil Gibran

Our wish for our children is that they should live well in the house of tomorrow. In the 1980s, we expect that house to be a house of science and technology. To live well in it, our children will require mathematical, scientific, and technological “literacy,” and we have begun to ask ourselves what and how we should teach to help them acquire that literacy.

At the same time, we must be careful not to lose touch with our real desires for our children and our central aims of education. We must not conceive these aims and desires too narrowly. While talk of purposes in education may sometimes seem so general and “theoretical” as to be of little “practical” value, a lack of purpose leaves us wandering and a little lost, and goals that are too narrowly conceived fail to do justice to human potential and the scope of human minds.

When we think of mathematical, scientific, and technological literacy for the 21st century, of citizenship and career success in a high-tech society, and, indeed, of human survival in a changing world, we need a center to which to hold. We need to reconsider our central purposes.

For at least two generations, good citizenship and career success have been high on the list of goals to which North American educators have committed themselves. Our schools are easily recognized in the following sketch of the essentialist orientation to education (derived from Lapp and others, 1975), a tradition in which the preservation of a way of life through citizenship and career education is clear.

The Essentialist Tradition

- Theory of knowledge: Knowledge is “know-how”: factual, practical, quantitative, and oriented to occupational skills and success in adult life.
- Values: To be valued is hard work, the competitive spirit, material success, and commitment to democratic ideals and the Western way of life.
- Curricular content: What should be taught are basic skills, useful and practical information, scientific and technological literacy, and those skills and attitudes needed for career success.
- Theory of education: The purpose of education is to encourage in pupils the values and patterns of the North American way of life, in particular to provide those skills and knowledge that will prepare them to become functioning, productive, and successful members of society.

Such a view of education, its expressed concern for preparing children for success in adult life notwithstanding, fails to see the future as fundamentally different from the present. Within the essentialist view only know-how and basic skills really count for knowledge. New concerns and new programs often do little more than to suggest the substitution of one set of skills—such as thinking skills—for another. Values, the general nature of curriculum content, and the essentialist commitment to career success as a central goal for education remain intact.

Neil Postman (1979) has suggested that it is the essentialist concern for jobs that accounts for the failure of North American education:

Modern secular education fails . . . because it has no moral, social, or intellectual center . . . . It does not even put forward a clear vision of what constitutes an educated person, except if it is . . . a person who possesses “skills” . . . a person with no commitment and no point of view but with plenty of marketable skills. If . . . there is at present any underlying theme to American education it is precisely that: Education is to provide jobs (p. 133).

Now, I do not wish to suggest, and I do not think Postman does either, that career success, “learning to learn,” or the development of “thinking skills” are undesirable, or that they should not figure in some way in our educational intents. If we conceive of them as ends, however, or even as the principal means to a productive life, we conceive of them, and of education in general, too narrowly: they are only part of what becoming educated is about and, particularly for a future we cannot predict, not so central a part as our essentialist tradition would suggest. Education that is more concerned with a person’s “productivity” and “function” than with the meaning of a person’s life is a dehumanizing, alienating education. In J. D. Royce’s words:

The student is being compartmentalized by education and occupational specialization. Finally he gets to the point where he sees himself not as a whole person with diversity of needs and purposes, but only as a plumber, or a teacher, or a salesman. That

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is, he sees himself functionally rather than as a human being. Such a dehuman- or fragmented person, treated essentially as a thing, is existentially dead (Trosko, 1974, p. 12).

Thinking Widely About the World
If education is to ready children for the future, it cannot be for any particular future, but for a multiplicity of futures that we may not be able to describe or even imagine right now; futures in which social structures, values, and work and leisure may be radically different from any image we might envision today.

Don Fabun, for example, believes that people's relationships with jobs will be different and so, therefore, must be the purpose of education:

In a society... in which cybernation and mechanization will minimize the human factor in industrial production, the purpose of education must change. It must begin to educate people to live full and meaningful lives in which "jobs" are at best only incidental, or at least for jobs that are oriented toward human service rather than productivity (Trosko, 1974, p. 16).

The essentialist tradition defines human lives in terms of function and productivity in North America's present social, economic, and political structures, a definition that might well be inadequate, even irrelevant, for the next century. If our wish for our children is that they should live well tomorrow, we must go beyond essentialist conceptions of good citizenship and career success. Our educational goals must reflect larger concerns about our essential humanity: "the highest good to be served by education is the fullest possible realization of the distinctively human capacities and... the life of meaning" (Phenix, 1964, p. 267).

Finding Meaning
It is one thing to say that education should be a humanizing endeavor directed toward the life of meaning; it is quite another to describe what might provide for that fulfillment, especially when we do not really know the world in which our children will expect to find meaning. We do know, however, that meaning is of many kinds, created or discovered in a variety of ways. Only an education that helps a person to partake of each of these kinds of meaning can be a truly fulfilling, humanizing education. Different educators give different names to the ways in which human beings make meaning, and it might be helpful to consider three of these.

Philip Phenix (1964) has described six "realms" of meaning, each of which is characterized by typical methods, leading ideas, and characteristic structures:

- Symbolics: language, mathematics, and other arbitrary symbolic structures
- Empires: the natural sciences
- Esthetics: the various arts
- Synoptics: personal or relational knowledge, direct, existential awareness
- Ethics: moral meanings
- Syntactics: history, religion, philosophy

If any one of six is missing, the person lacks a basic ingredient in experience. They are to be the fulfillment of human meanings something like what basic nutrients are to the health of an organism. Each makes possible a particular mode of functioning without which the person cannot live according to his own true nature (p. 270).

Phenix suggests that without the ability to acquire meaning in each realm, a person "cannot realize his essential human-ness" (p. 270).

Postman (1979) proposes a kind of general education that is "not child-centered, not training-centered, not skill-centered, not even problem-centered [but] idea-centered and coherence-centered" (p. 136). He writes:

... to become educated means to become aware of the origins and growth of knowledge and knowledge systems, to be familiar with the intellectual and creative processes by which the best that has been thought and said has been produced (p. 136).

The knowledge systems that Postman identifies are history, science, semantics, the humanities, and religion. Because every knowledge system draws our attention to some parts of the world and turns us away from other parts, all are necessary for full and rounded human development.

Elliott Eisner (1978) has pleaded for balance in education among the various "symbol systems" human beings have developed for making meaning.

Human beings... construe reality in a variety of ways. The sensory and symbol systems that humans have invented to express what they have come to know create different forms of awareness and make different modes of understanding possible (p. 617).

Each symbol system—mathematics, the sciences, art, music, literature, poetry, and the like—functions as a means for both the conceptualization of ideas about aspects of reality and as a means for conveying what one knows to others (p. 618).

The absence of the opportunity for children to expand their consciousness of the world through any of these various symbol systems, he suggests, must be considered a deprivation and an "impoveryment" of their minds.

Ways of Knowing
If Phenix's realms of meaning, Postman's knowledge systems, and Eisner's symbol systems sound not entirely different from the subjects we presently teach, that is because our familiar subjects are just another way of classifying ways of knowing and of making meaning. Our teaching of these subjects, however, has been directed toward the ends of essentialist education rather than toward humanization and the life of meaning. Consequently our curricula have emphasized certain ways of knowing (reading, mathematics, and, in a limited way, science) at the expense of others, notably the arts and the humanities.

As we think about our children and the future, and our certainty that mathematical, scientific, and technological literacy must have a place in our children's lives, we must not forget that such literacy is not an end in itself, it is not appropriate to treat it as a pre-eminent set of skills our children need in order to get jobs tomorrow. Such literacy is but one way that human beings conceive of and make sense of the world, and as such it has an essential place in our curriculum—but a place that is of greatest value when it is seen to complement rather than supplant other ways of knowing and making meaning.

"You may not divide the seamless coat of learning," wrote Alfred North Whitehead (1967, p. 11): "There is only one subject matter for education, and that is life in all its manifestations" (p. 6). The most practical education for a future we cannot describe must surely be one that opens to children different ways of knowing.

You may strive to be like them, but seek not to make them like you.
For life goes not backward nor tarry's with yesterday.
—Kahlil Gibran

References