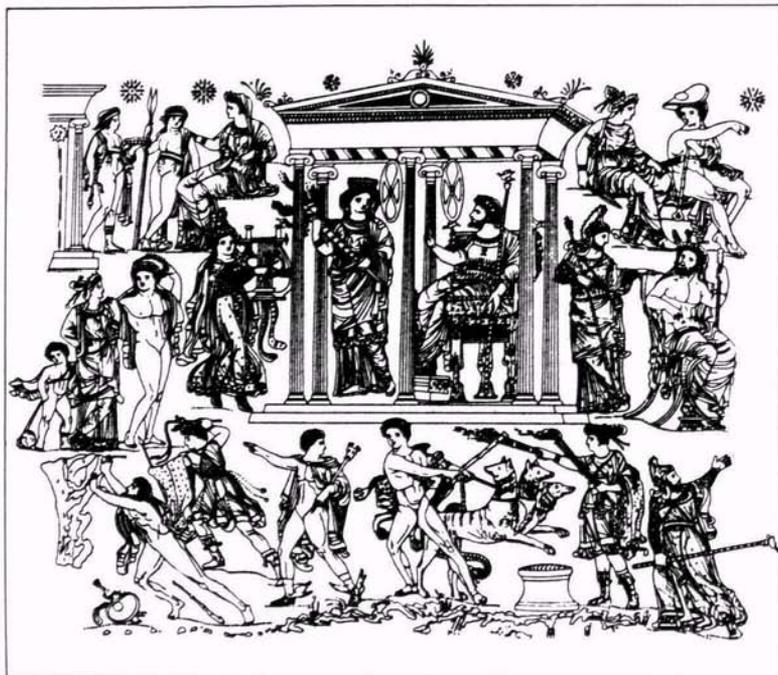


General education is useful not because we remember everything we learn or because we can apply it, but because it helps us think, feel, and imagine.

WHAT KNOWLEDGE IS OF MOST WORTH?



HARRY S. BROUDY

What knowledge is of most worth? Herbert Spencer made this question famous in his 1859 essay, but it has preoccupied educators from the beginning of formal schooling. This is so for a number of reasons: first, human life is multi-valued and the values are not always in harmony; second, formal schooling entails an investment of limited time and money, so that choices have to be made. Furthermore, educators are always aware that mistakes in schooling are not easily corrected. The pupil cannot be de-programmed at will, any more than rubber worn off a tire can be restored by running the car in reverse.

The customary and sensible way to approach this question is to do what Spencer did: make a list of priorities and allocate schooling accordingly. Spencer's hierarchy of needs that were to guide the educator's choice of the knowledge of most worth were:

1. Those that minister directly to self-preservation
2. Those that secure for one the necessities of life
3. Those that help in the rearing and disciplining of offspring
4. Those involved in maintaining one's political and social relations
5. Those that fill up the leisure part of life, and gratify taste and feelings.¹

I do not know how many thousands of such lists have been drawn up; this

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exercise has become a standard part of any educational project. Ascertaining needs and goals and establishing priorities is a minor industry in education. In light of this, one may be pardoned for asking why the question has persisted for centuries.



Socrates (469–399 B.C.) and Isocrates (436–338 B.C.)

Socrates and Isocrates were for part of their careers contemporaries in Athens. Isocrates established a famous school for young men where he taught the arts of rhetoric and oratory, as well as other subjects related to success in political life. This was the knowledge of most worth for ambitious young Athenians; the success routes of the day called for these skills.

Socrates also taught young men. He could have taught them the skills of rhetoric, but he spent most of his time questioning them about whether the success routes of the day were worth traveling. He wanted to inquire with them as to whether there was a special art and technique of teaching virtue that could make life *truly* worthwhile.²

The two schools differed not only in style and emphasis but in results as well. Isocrates' alumni achieved distinction in political and military pursuits. While Socrates had brilliant students, some ended up in disgrace politically, and Socrates himself could not convince a jury of Athenians that in criticizing the success routes of the day he was not corrupting the youth of Athens. It is ironic, therefore, that few today read or remember Isocrates while Socrates is a perennial culture hero and

his dialogues, as recorded or imagined by Plato, are still best-sellers of a sort.

The Perennial Dichotomy

The Socrates-Isocrates split is repeated in every era. The schooling the dominant group in society judges to be needed for success automatically becomes the criterion of "quality" education; that is, the knowledge most worthwhile. In our society there are many success routes and many gradations of social class, but we have little difficulty identifying the dominant classes and the schooling they prefer. Their values for all practical purposes represent the good, the true, and the beautiful.

With multiple success routes and lifestyles, adolescents may have trouble deciding among them. Fortunately, they have a yardstick by which to measure the value not only of a career but of virtually every aspect of life. It is the price something can command on the market. The media tell us about a \$250,000 bid for a painting, a \$250,000 salary for a baseball player, a \$250,000 lottery prize, a \$250,000 jewel robbery, a \$250,000 palimony suit. If everything equal to the same price is equal to each other, then speculating on what knowledge is of most worth is unnecessary—just watch television.

It is very difficult for citizens, young or old, not to measure importance by price tag or—what comes to the same thing—by publicity. For publicity determines the size of the market for a product or an idea, and this determines the price tag. It is not that the media are against virtue or the "finer things," as some mistakenly aver; on the contrary, they would feature Socrates, Jesus, and any other critic of materialistic values—if the program could command a decent Nielsen rating. Money or the love of it may or may not be the root of all evil, but it does reduce the peculiar

intrinsic qualities of the several value domains to one flavor—as dreary a result for life as for ice cream.

The market tells us, including the adolescent, which knowledge is of most worth. It is "how to" knowledge. It is knowledge and skill designed for a programmed result or a competence that has some market value, preferably a high one. "How to" books on every subject from making love to getting rid of one's spouse or excess weight sell briskly. Teachers are told to practice specific behavior competences and to concentrate on learnings that can be measured by minimum competency tests. If there is a firm educational generalization, it is: Don't bother with general principles.

Yet today, as in every era, the tendency of schools to become oriented to the success routes of the day—or the vocational market—is questioned by Socratic surrogates. They argue that there is a knowledge about the nature of humankind and qualities of mind and character that make for happiness and that this is the knowledge of greatest worth. It is a view of life with a long stubborn tradition in philosophy and religion, and has its advocates among humanists and intellectuals.

Many parents, too, oppose early specialization in high school or college on more pragmatic grounds. They recognize that some studies serve a wide variety of vocations, for example, the skills of communication, critical thinking, mathematical reasoning, problem-solving strategies. These are all-purpose tools, so to speak, and premature restriction of schooling to the skills of this or that trade or profession is inadvisable on both scholastic and economic grounds. Furthermore, these parents believe that if the pupil does not acquire proficiency in the more generalized fields while in school, it will be difficult

to acquire it elsewhere.

Another boost for general studies comes from captains of business and industry who, from time to time, announce publicly that employees with broad intellectual backgrounds are more valuable than those whose training is narrowly specialized. Unfortunately, their hiring practices do not always jibe with their pronouncements, and word gets around that specialization is what counts.

However, in spite of these constituencies, it is very difficult to "sell" a secondary general studies curriculum, and even harder to do so on the college campus. According to Peter Drucker, "Paying no heed to the incantations of the 'youth culture' and the media, they [undergraduates] have been shifting from psychology into medicine, from sociology into accounting, and from black studies into computer programming."³

The reasons for this shift are not hard to find. There is no value so lofty that it does not depend on financial support. It is understandable, therefore, that adolescents are anxious to take care of their vocational career first and to leave the more general and more liberal studies for the time when economic status is secure. If, according to Aristotle, the liberal studies are those undertaken solely for self-cultivation and not out of economic and social necessity, it is clear that modern youth has no time for the liberal studies. The well-to-do retiree is the most plausible candidate for such studies.

Furthermore, the most consistent proponents of liberal studies on the university campus are likely to be found in the humanities departments, and they, alas, lack credibility. Often they are no broader or more humanistic in their interests than specialists in the sciences or professional schools. As scholars within

a humanistic field, they are professionals and members of a professional guild for which they would like to recruit new members among their graduate students. But to support graduate students requires fairly large numbers of undergraduate students who can be taught by graduate teaching assistants. The modern research university that prides itself on "quality" does not provide many models of the generally or humanistically educated human being for the student to emulate.

But the most damaging fact for general education is the difficulty of demonstrating that it really functions as its proponents claim it does. If ten years after graduation the alumni cannot recall very much of the content of the courses they studied, and if they are not "applying" them to their life problems, inevitably the question will be asked: Why bother studying them in the first place? This question has bedeviled schools in this country for decades. It resulted not only in the expulsion of Latin from the required curriculum, but many other studies as well. It bedevils the whole secondary school organization.

Public school administrators must keep one eye on college admission requirements and another on the post-secondary pursuits of non-college-bound students. Aggravating this tension is the commitment of the public schools to individual differences, to the entitlement of each pupil to instruction that somehow fits his or her needs. Alternatives, options, and choices have been the dominant buzz words of curriculum construction in recent decades. As a result, the public high school is programmed to frustrate the many and satisfy the few. For individual differences are infinitely varied, even from day to day, and the promise of special programs for every constituency that discerns a need is destined to be broken.

Given this situation, we must decide between a cafeteria curriculum that will meet a variety of needs (or wants) and a uniform "basic foods" model that will give the most help in post-secondary vocational tracks and in the widest range of post-school life situations.

The arguments against the cafeteria model are both theoretical and practical, and I shall not go over familiar ground. One that ought to be mentioned, though, is the prospect of service occupations displacing many factory jobs. This requires a greater reservoir of symbolic skills for a greater number of high school graduates for the middle-range occupations. Another is that even the pretense of educating for enlightened citizenship requires an imagic-conceptual store that only a long and steady commitment to general studies can hope to provide. Finally, with impatient undergraduates anxious to get into professional curricula, if general education is not done thoroughly in the high school, it may not be done at all, at least not until after retirement.⁴

Arguments Against

But the arguments against the uniform general education curriculum are also numerous and familiar. That such a curriculum is unteachable to a large proportion of the school population that is forced to attend public high schools is perhaps the most familiar and persuasive. That it is elitist and unsuitable for the non-college-bound who need earlier preparation for the world of work is also familiar and needs no elaboration. Those who wish to argue realistically for a general studies curriculum face a three-fold task: first, to convince the school administrator and the public that general studies have a use in life that can be demonstrated; second, that such a curriculum is teachable to the entire educable school population. Finally,

"It is only when subject matter is repeatedly encountered in a wide variety of materials that it becomes part of the very structure of the mind."



one must give reasonable evidence that the financial resources of the school system are most fruitfully used to require a K-12 curriculum in general education for the total school population. I shall indicate sketchily a few lines of reasoning in behalf of this view.

This is not the proper occasion to discuss the details of a general education curriculum either for the high school years or for what I think is more important, the K-12 years. I shall, however, mention the ingredients of one such curriculum.

1. Symbolics of information—linguistic, mathematical, imagic
2. Basic concepts of mathematics, physics, chemistry, and biology
3. Developmental strands: evolution of the cosmos, institutions, culture
4. Problem-solving
5. Exemplars in the arts and sciences.⁵

What can one reasonably expect of 12 years of study in such a curriculum? *Explicitly*, one can expect sufficient retention of the symbolics of information and the basic concepts of the sciences to pursue post-secondary studies. The problem-solving component can be expected to form the habit of critical or hypothetico-deductive methods of reasoning in social and individual problem situations.⁶ The developmental studies will probably yield little that can be learned by rote for long-term retention. They and the exemplars, the influential works in arts and sciences, are used tacitly for the most part. All of these five strands need to be studied over the whole K-12 range in varying degrees of depth and detail. It is only when subject matter is repeatedly encountered in a wide variety of materials that it becomes part of the very structure of the mind.

Even so, the fact remains and is ruefully verified by most of us, that within

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half a decade after passing examinations we can recall relatively little of the history, science, and literature we studied so successfully. Nor can many of us claim that we are “applying” the principles, facts, and relations that we studied in those courses either in high school or in college, if by applying we mean that given a life problem or predicament, we deduce from our formal studies a means for its solution. In our fields of specialization, we apply our technical and professional studies, but usually only in these fields. General studies are difficult to apply because there is no direct route from principles to predicaments. We cannot apply the principles of thermodynamics to repairing our automobiles unless we know a great deal about the innards of motor cars and have the technology to change whatever is wrong.

Yet the laity and many educators think the criteria of schooling are the ability to recall the content that has been studied or the ability to apply it. On these criteria, however, general studies fare poorly. It is at this critical juncture that either we come up with a justification other than that we use our former studies by replicating or applying them or give up the case to the proponents of early vocational and pre-vocational studies, the use of which can easily be demonstrated.

The justification I propose depends heavily on what Michael Polanyi calls tacit knowing or knowing more than we can tell.⁷ This means that most of what is studied formally functions tacitly rather than explicitly in post-school life. Can we detect such tacit uses?

For a quick but illuminating answer, read the next issue of the Sunday *New York Times*—especially the section dealing with trends and ideas. Note where the blocks to understanding occur and ask whether or not you ever had for-

mal work in that area. How many of the articles are too technical for you? How many demand perspectives and contexts that you can or cannot supply?

This is the way general studies function; for even though the details are no longer recallable, they furnish a repertoire of images and concepts *with* which we think, imagine, and feel. They give richness to our response by a wealth of associative resources; they give intelligible order to our experience because it is shaped tacitly by the stencils of the disciplines.

This rough and ready test indicates how we use general studies in fields outside our professional specializations. And it is a fair test, because reading and discussing and thinking about the problems of the day are the ways we as citizens use our schooling. I have called these uses of schooling associative and interpretive to distinguish them from the replicative and applicative. In these uses we think and feel *with* the images and concepts that we have encountered in our school studies. Not having been exposed to these studies shows up in poverty of association and context. There is nothing very mysterious or esoteric about these uses: the curriculum in general education builds up stencils or lenses through which we construe reality. Each subject matter stencil exposes a situation to the context of a discipline; each stimulus elicits images that clothe it with the depth of meaning that makes language usage intelligible.

It is this associative and interpretive use of knowledge that may turn out to be of most worth, not only in the long run but in the short run as well—for adolescents fighting their way into maturity as well as for retirees who now have time to reflect upon what they have lived through. It is of worth, not because it has the approval of the social elites and not because it will have a di-

rect occupational payoff in the success routes of the culture. Rather it is because this kind of context-building knowledge gives form to everything we do and think and feel, on the job, in the voting booth, in the home. It is the form of the educated mind. ■

¹E. P. Cubberly, *Public Education in the United States* (Cambridge: The Riverside Press, 1919, 1934), p. 470 ff.

²A detailed discussion of these two approaches can be found in H. S. Broudy and John R. Palmer, *Exemplars of Teaching Method* (Chicago: Rand McNally, 1965), pp. 18–22 and chapter III.

³*The Chronicle of Higher Education*, Point of View, May 4, 1981.

⁴I realize that this flies in the face of the strenuous efforts to use the high school as a vestibule to the world of work, but aside from the fact that some form of universal service may very well come into being before the end of the century that will sop up large cadres of adolescents and keep them out of the labor market, the value of work for students is not so self-evident as its proponents have led us to believe. Albert Shanker in his column in *The New York Times*, June 28, 1981, cites the studies by Sheila Cole (*Working Kids on Working*, Lothrop, Lee and Shepard, 1980) that give a good deal of evidence to the contrary.

⁵For a detailed discussion of this curriculum, see H. S. Broudy, B. O. Smith, and Joe R. Burnett, *Democracy and Excellence in American Secondary Education* (Chicago: Rand McNally, 1964; Melbourne, Fla.: R. J. Krieger, 1977).

⁶This is the familiar Complete Act of Thought made familiar and famous by John Dewey, *How We Think* (Boston: D.C. Heath, 1910).

⁷Michael Polanyi, *The Tacit Dimension* (Garden City, N.Y.: Doubleday/Anchor, 1967).

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