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Education has an urgent need for redirection

by D.A. Henderson '50

What are we doing to prepare students to live in a more interdependent and heterogeneous world?

n public health and medicine, the last decade has witnessed unprecedented progress, especially as tools have become available to probe the nature of individual cells, how and of what they are constructed and what causes them to function and malfunction. With an expanding knowledge of the basic building units of life itself, fundamental questions are now being addressed as to how and why cells age, precisely how they change when exposed to a chemical substance or physical insult and what may protect against the change. A foundation is being laid for revolutionary changes in health and medicine over the coming 50 years and, most important, the tools for a redirection of focus toward prevention of illness and the maintenance of a higher quality of life. As a privileged observer of the landscape of biomedical research, I would venture to say that for the first time in my experience, reasonable expectations of scientific breakthroughs exceed the most optimistic prognostications of America's leading medical journal, the Reader's Digest. Profound changes in the practice of public health and medicine are a certainty but what these may be are not what I propose to discuss.

Of more fundamental concern to me are the individuals who will shape the destiny of this and other countries and permit or hinder the promise of science to be realized. Governing their performance is the education they receive. Today, it seems to me, two vital issues indicate an urgent need for redirection in education. The first relates to the definition of the world about which we must know and the second, the educational process itself.

For every student to be well and fully grounded in the patrimony of his civilization is the raison d'etre and fundamental core of the curriculum of a liberal education. This, we should, we must, value most highly. Definition of the nature of that patrimony or of what we perceive our civilization to be, how-

ever, has changed and is changing. Once it was defined primarily in terms of "Western Civilization," of Greece and Rome, and of European history, culture and values. In the days of sailing vessels and comparative national self-sufficiency, so-called Western Civilization arguably could be defined as the patrimony of our civilization. However, as communications have improved, rather than to broaden our concept either of patrimony or civilization, we seem to have narrowed it. During the past 50 years the focus has steadily and perceptibly shifted toward the history, culture and values of the English-speaking peoples and, during recent decades, toward those of America, arrogantly defined by ourselves as simply the United States.

To me, returning to assume residence in the U. S. from 11 years in Europe and nearly 20 years of traveling the world, it was a sobering experience to find many of my academic colleagues, let alone the average citizen, apparently more provincial and more self-centered than when I left.

The recently issued report of the National Commission on Excellence in Education pointedly observes:

History is not kind to idlers. The time is long past when America's destiny was assured simply by an abundance of natural resources and inexhaustible human enthusiasm, and by our relative isolation from the malignant problems of older civilizations. The world is indeed one global village. We live among determined, well-educated and strongly motivated competitors. We compete with them for international standing and markets, not only with products but also with the ideas of our laboratories and neighborhood workshops. America's position in the world may once have been reasonably secure with only a few exceptionally well-trained men and women. It is no longer.

Knowledge, learning, information and skilled intelligence are the new raw materials of international commerce and are today spreading throughout the world as vigorously as miracle drugs, synthetic fertilizers, and blue jeans did earlier.

The terms "global village" and "international interdependence" regretably have been so often used that they represent shopworn phrases. To most they still mean little. However, a few specifics help to illustrate what profound changes have already occurred and are now occurring in our own global interdependence. The so-called Third World countries whose history, culture and values we have all but ignored now account for 44% of all our imports and 37% of our exports. The very integrity of our banking system is contingent on policies being decided and events occurring in Mexico City, Kinshasa and Brasilia not in Washington. Available energy reserves constitute but a finite pool from which the entire world draws and the production of which, as we know, can be perturbed with devastating results. Or, to bring this closer to home, 45% of all children enrolled today in the Los Angeles County school system are Spanish American and the proportion is continuing to grow. Each year, some 750,000 immigrants enter this country, most from this hemisphere. Indeed we are now, all but in name, the country of first asylum for this hemisphere. I would venture to say that not 10 years hence, the present level of immigration will seem but a trickle, compared to the flood tide of immigrants then. Little noted is the fact that a unilateral decision to act, to control our own borders is being pre-empted by an increasingly frequent assertion by Third World countries who contend that the developed world's right to invest and export to them should be contingent on the reciprocal right to export their own human problems, such as unemployment, to the developed world.

Our civilization and its patrimony now extends far beyond the narrowly defined confines of the 19th century, let alone the provincial 20th century. What are we in education doing to prepare students to live in the increasingly interdependent, more heterogenous world so different from what we have known? Only 15% of U. S. high school students now study any foreign language and, at the college level, a scant 5% of students preparing to become teachers take any course at all in international or foreign area studies. In a recent study of high school seniors, over 40% could not locate Egypt on a map. In the business world, Japan has 10,000 English-speaking representatives in the U.S.; we have fewer than 900 in Japan and only a handful speak Japanese. At the same time, as pointed out by Ralf Dahrenthat is increasingly hostile to internationalism. This has affected education; further than that, it has affected trade, and, in the end, the very texture of cooperation on which international communication is built." Illustrative of this was a just completed 20-year strategic planning document of a prominent college of arts and sciences which contains no reference whatsoever to international studies and barely a passing mention of language programs. Those whose responsibility it is to acquaint coming generations with the patrimony of our civilization needs to redefine our relevant civilization and its patrimony. We are part of a global village whether we like it or not.

A second force of equal importance relates to the "rapidity of obsolescence." Instrumentation that once usefully could be employed for 10 to 25 years is frequently obsolete in as little as three to five. This is a problem that endowments do not take into account nor rarely do donors. I expect that in no more than five years every student entering graduate school will have his own computer, as will most entering college. And what of a faculty that seeks to stay

abreast of an ever more rapidly proliferating literature and body of knowledge in its own field, be it science or the humanities. How much more rapidly they too become obsolete. And, let us not forget our product, the student. How much more quickly obsolete in his or her technical knowledge base.

Bearing the inevitable scars of a dean in one institution trying to effect change, I would observe that traditional methods, beliefs and curricula are not easily modified, let alone significantly redirected. Illustrative is the remark less than five years ago by a senior academic official in Baltimore who commented that giving credit for courses in computer science is equivalent to granting credit for courses in basket weaving. And, only in the past year, at our own school, has it finally been accepted by the faculty that air conditioning is a reality and that teaching can continue through the summer.

We are confronted with obsolescence and institutional conservatism and, at the same time, increasingly serious problems in obtaining adequate financial support to encourage or promote change. But there is an imperative for change which is increasingly urgent.

time, as pointed out by Ralf Dahrendorf, director of the London School of Economics, "We are living in a climate that is increasingly hostile to internationalism. This has affected education; further than that, it has affected trade, and, in the end, the very texture of cooperation on which international communication is built." Illustrative of this was a just completed 20-year strategic planning document of a prominent college of arts and sciences which contains

"Our concern, however, goes well beyond matters such as industry and commerce. It also includes the intellectual, moral and spiritual strengths of our people, which knit together the very fabric of our society. . . ."

With change occurring so rapidly and institutions so ponderously difficult to redirect, one must anticipate the all but unimaginable of two or even three decades hence and begin now to plan for the future.

With computers and satellite communication, we are on the threshold of the most radical change in education since the invention of printing. For 500 years, learning has been through the written and spoken word. Commitment of facts to memory has been an intrinsic, if not always explicit, component of that process. With an increasing ability to access vast amounts of information readily

and rapidly and with an unprecedented ability to manipulate these data, there is a need to refocus the educational process on problem solving, on fundamental values, on method and process. The concept that four, eight or even 12 years of university education will turn out a "state of the art" graduate is no longer relevant. The "state of the art" in many fields changes in as little as three to five years. The President's Commission calls for the creation of a learning society in which all will increasingly be engaged in a lifelong learning process. Although lifelong learning is a common theme of commencement speakers and although honored more or less by all of us, few as yet deliberately and conscientiously devote much time and energy to formal learning. However, the need is growing and likewise the number of older students enrolled. Last year, for example, more than one-third of all students enrolled in New York State's public and private colleges and universities were more than 25 years of age.

Now emerging in this revolution of communications technology are the tools for interactive communication through two-way audiovisual communication. For those seeking formal instruction, geography will not be the barrier it is today. University campuses will not vanish (or, at least, I hope they won't) but the potential is before us for those seeking further education to participate more readily in the lifelong learning process. The thrust for education of the future clearly must take into account three themes: "communications," "adults" and "part time." Traditional academicians will not find this adjustment an easy one.

Andre Malraux in an interview in 1974 took a highly pessimistic view when he stated:

"We are living at the end of a quite unprecedented era, the end of the 1450–1950 cycle, which was a model of complete civilization. . . . We are more or less aware that we live in a world that is dying and we find it very difficult to imagine another one. There was also, I suppose, the end of Rome, but by the time people became aware of the fact, it was already well and truly dead. We, on the other hand, are actually living out the process."

Perhaps we are too comfortable with the world today, perhaps our social and academic institutions are too traditional and too slow to permit essential change or perhaps those changes are too great and must occur too rapidly for our own cultural and value system to accept.

This country, however, has an extraordinary capacity to adapt and to change. Witness the fact that we have major cities whose chief executives are black—or even women; a river, not far from here, that no longer is a fire hazard; and satellite communication that can bring to you in living color in your own living room, pictures of battles fought that day half way around the world.

If I have a concern, it is whether the finest of our academic institutions, whose stature and traditions have stood them in good stead, have themselves the gourage to look at a different percent and an even more different future than that for which curricula and teaching methods were so carefully designed. Oberlin has a tradition of excellence, a tradition of pioneering in education, a tradition of international interest.

If ever there ever was a time and a need for change and for academic leadership, it is now and I hope—at Oberlin.

Reserences

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