Universities today are expected to convert barbarians into educated persons who are ideally prepared for the world of work in the same amount of time that universities previously devoted to the teaching of the classics, rudimentary mathematics, and some rhetoric. Since metropolitan universities must also engage in some remediation because they accept in large numbers young men and women who are not ideally prepared for university work, they must consider curricula that take longer to complete than the current ones, if they are to attain all of the objectives. Otherwise, all that will be accomplished in curricular reform is to substitute one important course for an equally valuable one.

Converting the Barbarian

The Role of a Metropolitan University

As our society encounters what appear to be intractable problems, many of them concentrated in metropolitan areas, certain politicians, civic leaders, and members of the media have begun to look to the metropolitan university for solutions. They look to the university out of frustration instead of demanding that institutions that currently have the responsibility

for solving these problems do a better job.

Unfortunately, those well-intended individuals lose sight of the weaknesses and the distinctive competencies of a university, including the metropolitan university. American universities all along have been uniquely designed to convert the barbarian, and more recently have been given the mandate of preparing students for the world of work beyond the priesthood, law, and medicine. Research produced in universities can certainly lend insights into solutions of contemporary problems, and some academics can assist implementation of solutions through consultancy. However, in the main, universities are simply ill-equipped to execute the solutions.

The Greeks called those who did not speak Greek barbarians because the languages of the foreigners sounded to them like "bar-bar." Or so the story goes. As the Romans ascended into dominance, they too referred to anyone who was neither Greek nor Roman as a barbarian. Subsequently, the word was associated with anyone not imbued with what we know as the classics—the study of Greece and Rome. Peoples were called barbarians even when it was indisputable that they had mastered many crafts; acquired the

rudiments of science; and possessed effective forms of governance, a tradition of music and art, and, in many cases, a written language.

Of course there aren't that many classicists today, and most of us nonclassicists would object to being called barbarians. Classicists were displaced in large numbers by persons with a "liberal arts" education, which continued the emphasis on matters Roman and Greek to be sure, but added the study of history and literature of other cultures, and the fine arts. As stated in the famous Yale Report of 1823, the traditional defense of a classical education—that it provided "the discipline and the furniture of the mind"—was quickly adopted by "liberally" educated persons.

As early as the 1820s, a movement was being born that would attempt to connect the study inside a university with what was taking place in the world outside by supplementing the liberal arts course of study with modern languages, mathematics, and the sciences. This movement was provided the needed energy by the likes of Thomas Henry Huxley. Some would refer to this approach to higher education as the "utilitarian paradigm," but I prefer to consider the expanded curriculum as an updated definition of a liberal education for reasons that follow.

Words constantly evolve and barbarian is no exception. Thus, the word barbarian must be used in a manner that will not insult the majority of educated people who are nonclassicists, and who possess an education at variance with the severe formula of the dyed-in-the-wool liberal arts purists. In order to accomplish our objective, let us briefly look at a few erstwhile but stellar scholars, for their lives may provide us with examples of the essence of a liberal education.

Nicolaus Copernicus entered the Jagiellonian University (also known as the University of Cracow), then famous for its mathematics, philosophy, and astronomy curriculum, where he concentrated on astronomy. He studied the liberal arts at Bologna, medicine at Padua, and law at the University of Ferrara, from which he emerged with the doctorate in canon law. He was elected a canon of the church and diligently executed the duties associated with that office. He also practiced medicine and authored a treatise on monetary reform.

Thomas Jefferson was a statesman, author, architect, inventor, naturalist, and linguist. Moreover, he studied law and wrote on the topic of monetary reform. Vilfredo Pareto was an economist, sociologist, mathematician, engineer, and philosopher. Blaise Pascal was a philosopher, mathematician, physicist, and theologian. These individuals declared as their specialty the study of what was important at the time.

But once a critical mass of curious investigators embarked on the endless road to new intellectual discoveries, the body of knowledge started exploding at an exponential rate. It has been estimated that approximately 70% of all scientists who have ever lived are alive today and publishing furiously. This geometric expansion of the knowledge storehouse has rapidly advanced the extinction of the *Renaissance man* to be replaced just as quickly by the age of *specialized man*.

Having so much more to learn is not the only obstacle to becoming a latter-day Renaissance person. Since the passage of the Morrill Act in 1862, the practice of offering in universities technical and vocational subjects

that previously had been taught in other institutions has become so firmly ingrained that the social class dichotomy of "educating the minds" of the elite while "training the hands" of the masses has lost its meaning. Today, for better or for worse, colleges and universities are viewed, especially by first-generation college students and their parents, as instruments for preparing students for the world of work. But producing competent specialists, technicians, and professionals is insufficient.

Clearly, Copernicus, Jefferson, Pareto, and Pascal were not only liberally educated men, they were among the most gifted of their age, and no course of study alone creates genius of that order. However, we can

The specific contents of a liberal education...should concern themselves with what is important at the time.

strive to attain what they aspired to, to master what was important in their time. Thus, the definition of a nonbarbarian or a liberally educated person hinges on acquiring at least a basic understanding of what is important in our time. To define liberal education differently would imply that the significant eternal verities were discovered hundreds of years ago, and what has been developed more recently is

immaterial. That is hardly a defensible position. The specific contents of a liberal education evolve over time, but always should concern themselves with what is important at the time.

In regard to this objective, the results of a recent nationwide Gallup Poll are most disconcerting. Twenty-five percent of the 696 surveyed college seniors did not know that Columbus landed in the New World before 1500. Only 58 percent of the college seniors knew that the Civil War was fought between 1850 and 1900, and 23 percent believed that Karl Marx's phrase "from each according to his ability, to each according to his need" appears in the U.S. Constitution. Sixty percent could not recognize the definition of Reconstruction as the period that followed the Civil War. Fifty-eight percent could not identify Plato as the author of *The Republic*. Fifty-four percent did not know that the Federalist Papers were written to promote ratification of the U.S. Constitution. Forty-four percent did not know that Herman Melville wrote *Moby Dick*, and 42 percent could not identify the Koran as the sacred text of Islam.

But should anyone be surprised? Students can graduate from 77 percent of the nation's colleges and universities without taking a foreign language, and, to listen to many of them speak, one would think English was a foreign language as well. From 41 percent of academic institutions they can receive degrees without taking mathematics and from 38 percent without taking history. In the interest of civilization, culture, and freedom—to say nothing about the interest of economic and technological well-being—our colleges and universities, especially our metropolitan universities, should convert barbarians as well. After all, our society, like all others, depends for its cohesiveness on common knowledge.

Before I propose a solution, I would like to address a fundamental contradiction. Society expects much more than before from colleges and universities, and there is so much more to learn. Yet we are asking academic institutions to convert barbarians into educated persons who are ideally prepared for the world of work in the same amount of time that colleges and universities previously devoted to the teaching of the classics, simple mathematics, and some rhetoric. The challenge is particularly unattainable as far as the metropolitan universities are concerned, since they accept in large numbers young men and women who are inadequately prepared for college or university work.

I submit that this objective cannot be attained even with well-prepared students, and that the current attempts to restructure curricula are analogous to being in more than one place at the same time. In other words, the result of these futile exercises is an unacceptable trade off. It

substitutes one important subject for an equally important one.

For example, in a computerized nuclear age with dazzling medical advancements, substituting physics for chemistry or chemistry for biology solves very little. An educated person should have at the very least one course of each at the college level. Frequently, one physics course might be a person's only opportunity to understand the nuclear age in which he or she lives; a biology course, the only chance to comprehend the disease from which he or she is suffering; one chemistry course the only occasion to fathom the cure.

The strategy of substituting Western Civilization for American history, or Non-Western Civilization for Western Civilization is just as flawed. History on a social level is the functional equivalent of memory at the individual level. How effective can a society with collective amnesia be in a global economy, or with its foreign policy, especially if history repeats itself? And if college and university students are permitted to graduate without art and music appreciation courses, what eventually is to become of our museums and symphonies?

In the absence of a grounding in economics, how is a person to understand how wealth is created and how resources are efficiently allocated? Without a sound grounding in mathematics, a person will have difficulty understanding much of what is important in our time, as well

as finding and keeping a challenging job.

I submit another important argument on behalf of a liberal education, as I have defined it. The scientific method as developed by the traditional sciences has been aped by the social sciences, education, and business administration. The reductionist tendencies of this method of knowing produce a molecular view of the world that frequently lacks cohesion. The more molar analytical approaches employed in the arts and humanities might provide a useful counterpoint to the scientific method.

Unlike most of my academic colleagues who have the courage of their convictions but lack the courage of their doubts, I would prefer not to determine single-handedly what is important in our time. Had I attempted, I might have included the study of organizations in the important category, since our lives are dominated by organizations, and run the risk of being condemned by my liberally educated colleagues to perdition. Collectively, however, I believe we can reach a consensus on what is important in our time, if we are not forced to make unacceptable trade offs. The avoidance

of such trade offs would require a course of study that would consume all or the better part of four years and produce a generalist.

Yet, we cannot afford to short shrift professional education; for in a global economy where most countries have lower wage levels than in the United States, the sections of our nation that will prosper are those with the best educated work force and the finest infrastructure for research and development. The United States will have to compete in capital-intensive

To attain our goals we must provide more time for the requisite course of study.

goods and services requiring high-level cognitive skills. Perhaps shifting professional education to the graduate level, the model of law and medical schools, should be given serious consideration. Some American universities have already adopted this model for business administration, although the course of study is not nearly as long. In any case, if a

choice at the baccalaureate level must be made between professional courses and courses that produce a liberally educated person, then the benefit of the doubt should go to the latter.

How then do we create a specialist or a professional who is not a barbarian at the same time? First of all, we must recognize that to attain our goals we must provide more time for the requisite course of study. Either we must adopt the law school model or we must configure five-year and even six-year degree programs. Five-year baccalaureate degrees already exist, and were originally intended to ensure curriculum breadth. However, as the result of increasing complexity of technical fields, these five-year degrees too frequently have evolved into opportunities for increasing the number of required technical courses. That is not what I am proposing. The suggested alternatives may require rethinking and restructuring graduate study as we know it today.

Furthermore, public and private financial assistance needs to be increased so that students without financial means would not be excluded from such an important opportunity as a college or university education. Cooperative programs should be inaugurated by more metropolitan universities not only in the interest of ameliorating financial insufficiencies, but also for the other benefits that cooperative programs engender.

One could even make a cogent argument that the U.S. economy would be more competitive if employers assumed a greater responsibility for vocational skill training, thus freeing up the time for universities to do a better job with English, mathematics, and the sciences. After all, a young person entering the work force today will have to retrain at least several times before she or he retires. Hence, what we will need most of all in the work force of the future are quickly retrainable workers, and those are folks who have a sound grounding in the fundamentals.

Demands for our limited national resources are great, and increasing support for higher education will require hard choices. Yet, we must decide what sort of society we are to become, and how this is to be accomplished. Clearly, the task of providing a liberal education would be made easier if elementary and high schools taught more, and every effort should be made to bring about this result. If more of the conversion were

to take place at the secondary educational level, fewer demands would be placed on metropolitan universities.

I single out the metropolitan university because its first-generation college clientele frequently lacks the opportunity to begin the conversion process on the home front, the way scions of the economically advantaged do. Moreover, U.S. high schools do not contribute to the conversion process nearly as well as do secondary schools in Europe and other parts of the world. Thus, the post World War II metropolitan universities in the United States have to compensate for these deficiencies as well.

Cities, unlike towns and rural areas in which many American colleges and universities are located, contain museums; symphonies; theaters; corporate headquarters; city, county, and state administrations; and media centers. Therefore, metropolitan universities should enrich the educational experience of their students by exploiting the urban environment to a greater extent than currently is the case through field trips, guest lectures, adjunct professors, and co-op arrangements. Exposure to these precious urban assets may prove even more appealing to many students than offering them a football team and could be used as a recruiting strategy.

What I am proposing will not come about by itself. Those of us who subscribe to these ideas must persuade the body politic in the marketplace of ideas that our proposals will create a better society and a stronger safeguard for freedom than the competing ideas and models, including the ones on which we are currently embarked. And there is no better time to begin than now.

Suggested Readings

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