

P U R S U I T O F Q U A L I T Y

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I am sure you will appreciate my first reaction when President Ellis asked me to address you today. It was to recall episodes in the critical middle third of my life which was spent on this campus as student and teacher. I recalled vividly the acquisition of a wife, a son, loyal friends, stimulating colleagues, inquisitive students, an open but critical mind, academic degrees, foreign fellowships, and much else.

Commencement, however, is a time to look -- not backward, but forward, even though at our present state of development no one knows what the future holds. Suppose we begin by looking forward some two or three decades. By that time many of you will have attended graduation exercises for your own children. Indeed, it is quite possible that one of you might be asked to give the commencement address in, say, June 1990.

Although my training and experience are those of an economist, I shall say nothing about the challenging possibilities for our gross national product, per capita income, or other economic magnitudes. Instead, I suggest that you look forward by asking yourselves much more basic questions.

What would you like to have your children think of you as they graduate? What can you do to merit such thoughts? Contemplating your children's presumed thoughts in this way is most likely to reveal what is

really important -- your basic motives. This is true because in dealing with your own child you are concerned with an individual you love deeply, who is of your own genes and blood. At the same time you are dealing with a person who is an individual in his own right, different from yourself and from everyone else. You must appeal to his heart and persuade his mind if you are to influence him as you wish. Unfortunately, you cannot be sure that you know what is best. Nevertheless, three decades from now you may well consider that being a parent is one of the most humanizing educational processes known to man.

The tensions arising from the relationships between generations have not eased measurably in the century since Turgenev wrote his Fathers and Sons. The fundamental drift seems to have been in the direction envisioned by Turgenev -- toward Bazarov, the nihilist, and away from Petrovitch, the mystic.

Developments in science, from nuclear physics to molecular biology, suggest that this drift is likely to continue. In any event, the world in which we live differs vastly from that expected by Turgenev's contemporary, Henry L. Ellsworth, Commissioner of Patents, who concluded in 1844: "The advancement of the arts from year to year taxes our credulity and seems to presage the arrival of that period when human improvement must end."

The basic origin of the explosive ideas that have kept the mind and the patent office open is the insatiable desire of man to know the unknown, to comprehend his role in the universe. As candidates for degrees, you are aware that knowledge is like an island in a boundless sea of ignorance. The more you learn, the larger your island, the greater its periphery, the more aware you become of what remains unknown! Hence, you know that the extent of your education is not measured by the number of

questions you can answer. The question, What is it? is only the starting point. Education begins when one asks: Why is it? What of it? What are we going to do about it? Then, like Jacob of old, one begins his night of wrestling. The breaking day will find him victorious only if, like Jacob, he is impelled to say: "I will not let thee go, except thou bless me."

It is when we ask such questions that we find either that science is silent or that scientists respond with conflicting voices. The area of agreement among scientists narrows rapidly as we ask more fundamental questions. There is no agreement at all at the deepest levels, such as the ultimate philosophical -- and theological -- implications of the DNA molecule. This makes one wonder how objective and impersonal science really is. Even logic, that powerful mistress of systematic thought, is not infallible. Indeed, she has been described -- not altogether facetiously -- as an organized way of going wrong with confidence. I say this not to soothe those who may have experienced difficulty with logic and science but rather to caution those who feel themselves masters not to expect more of these disciplines than they can deliver. The wind of change has opened even some of these most tightly closed doors.

Science has taken over large new territories through application of statistical methods. But, somehow, it does not really satisfy our inherent quest for certainty to be told that something has a very high degree of probability. Thus, the motions of the planets about the sun can be described and predicted accurately on the basis of scientific laws. No one, however, at this stage of our development, pretends in any serious sense to "understand" the laws of motion and of gravitation.

As candidates for degrees you appreciate that a university plays a dual role in our society. On the one hand it is a repository of accumulated

knowledge. It has a faculty whose members master the intellectual heritage received from our forebears and pass it on to selected members from each new generation. It undertakes to train men and women who will shape their society on the basis of the accumulated knowledge from the past. On the other hand, the professors are forever in quest of new truth which makes contemporary knowledge and contemporary society obsolete. This does not mean that a university is schizophrenic, working against itself. Instead, it functions in harmony with a society that is not static but developing. Mankind is forever reaching beyond itself, and universities are among the chief agencies through which it does so. Should your University ever come under attack because it is discharging this function, I urge you to rise vigorously to its defense.

In this perspective, a contemporary test of a man's education is the degree to which he maintains an open mind toward attempts to learn more about the universe in which we live. The educated man will not harbor "the old conceit of being wiser than posterity -- wiser than those who will have had more experience," as Jeremy Bentham phrased it. He will reveal himself in such qualities as his zest for life; his sense of humor; his empathy with his fellow man; the largeness and humility of his spirit; the character of his mind, as reflected in the questions he asks as well as the processes by which he reaches conclusions.

The professional man strives for quality. This, of course, is an ancient idea. I happen to have received it from my father. I recall when I told him that I would like to attend the University of Missouri. He thought it was a good idea and said he would help me earn my way by teaching me to be a carpenter.

He was an exacting teacher. My first assignment was to rip parting-beads for window frames from eight-inch boards. He made it look easy. With long, smooth strokes he quickly ripped several half-inch strips. When I tried it, the saw jerked, followed the grain of the wood instead of the pencil mark, and assumed weird angles. Patiently, with a few deft strokes, he restored the saw to its proper position. We alternated this way -- I getting off the mark and he returning to it -- until he sensed my growing impatience.

At precisely the right moment, he said: "Suppose we try planing." At that point, I was willing to try anything that would get me away from sawing. He placed one of his strips into a vise and with one smooth stroke planed a uniform shaving and turned out a perfect parting-bead. Then he took one of my strips. He said: "Well, we will have to correct with the plane the mistakes you made with the saw. That is why you must become master of the saw, and of the plane, and of every tool in the box." Then he generalized: "Life is like that. You will never regret the effort required to do something right. Sooner or later you will have to make up for what you do wrong. With perseverance, you will find it becomes easier and far more rewarding to do things right in the first place."

How much I appreciated training by a man of quality, as I observed hatchet-and-hammer men produce their shoddy results. My father taught me not to be satisfied with something that was "about right." He insisted that it be "just right." He did not look upon work as punishment but as a means of self-expression and he wanted to express the best that was in him. He still derives great satisfaction from pointing out homes whose construction he supervised. He does not own the deeds to them; but in a very real sense they are his homes. His real reward has been at the level

of his motives -- not external but intrinsic. His reward for a service well done was the ability to render even better service. He has been a real professional.

Dr. Robert J. McCracken illustrated this point with a story in his sermon on "The Acquisitive Instinct in Religion":

A visitor to New York was impressed by the courtesy of a bus driver towards the passengers on his bus. After the crowd had thinned out he spoke to him about it. "Well," the driver explained, "about five years ago I read in the newspaper about a man who was included in a will just because he was polite. 'What in the world?' I thought. 'It might happen to me.' So I started treating passengers like people. And it makes me feel so good that now I don't care if I ever get a million dollars."

Reverend McCracken interpreted this experience in these words: "There you have an illustration of motives at two levels, of a man raising his sights, of virtue for its own sake yielding its own reward."

It is reasonable to assume that you will have growing opportunities to shape the character of the institutions that you join. Contemporary society is looking to its leaders to develop a new philosophy of the role and purpose of its institutions, particularly of the business enterprise.

One facet of this new role is the importance of recognizing the ambitions of the members who comprise the staff. Of course, there are individuals whose aspirations are beyond their competence. We should not, however, use this as an excuse to lower our sights with respect to the critical importance of human relations. In the final analysis, institutions exist to serve individuals, not the other way around.

An institution which strives for quality is marked by the attitude of its management toward the problems of human relationships.

Among the goals are:

1. To have each individual be and feel himself a necessary and therefore indispensable part of the institution.
2. To have each individual feel a compulsion to perform at the peak of his ability.
3. To reward each individual in proportion to his contribution to the joint product.
4. To have supervisors at all levels who want their subordinates to make good, who help them make good, and who rejoice with them when they do make good.
5. To prepare for the perpetuity of the institution despite the mortality of every individual in it.

By this time you will appreciate that the main burden of my message is an appeal to permeate our lives and the lives of our institutions with the professional approach. This approach is not something to be taught in a formal training program or to be added for decoration. It should reflect itself in all that we do -- as it will, if it is real.

You may say that I am being impossibly naive or idealistic in appealing for professional standards, in urging the pursuit of quality. I do not think so. After all, exceptional educational privileges impose corresponding responsibilities. It may be that the professional approach is one of those feelings that must be experienced and not merely observed or read about to be understood. If so, my appeal is to strive for the experience. To repeat, it encompasses a sense of duty to serve others as part payment for the thrill of sharing society's great adventure; a sense of humility before the mysteries of the universe, coupled with a burning desire to unravel them; a sense of pride in the achievements of institutions whose destiny one has helped to shape; a sense of contentment in having helped others to self-fulfillment.

I should like also to hope that you may be endowed with serendipity. This world was coined a couple of centuries ago by

Horace Walpole, a great art collector. Every collector knows that he often makes his best finds while looking for something else or even when simply browsing. Until recent editions, Webster defined serendipity as "the gift of finding valuable or agreeable things not sought for." Irving Langmuir, the Nobel laureate in chemistry, suggested "a more appropriate definition. 'Serendipity is the art of profiting from the unexpected.'" Increasing knowledge seems to have been accompanied, not -- as our forebears might have supposed -- by a decrease but rather by an increase in the incidence of "the unexpected." I see no reason to anticipate a change in this correlation. The unexpected will continue to happen -- even more frequently, perhaps. May you have the gift -- or the art -- to profit from it!

Once these attributes are acquired, you will find that you have a mind that never grows old. You will find also that your life, your family, your profession, and indeed the whole society of which you are a part will be enriched and made more significant.

Goethe, the greatest of German poets, exemplified much of what I have to say. He spent sixty years writing his masterpiece; but he completed his Faust. In the very first scene he says:

The inheritance that you have received from
your forebears,
Earn it, to make it truly your own.

In the very last scene he sums up the philosophy he developed over his lifetime in these words:

Yes, to this thought I hold with firm conviction,
The last result of wisdom stamps it true,
Only he earns life as well as freedom
Who daily must conquer them anew.

So, we come back to where we began, to consideration of your children. Remember that it is your children who will gradually take the places of your parents as the loved ones who will be watching over your shoulders. What they will see is up to you.

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