

## **1987 Distinguished Teacher of the Year**

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### *A Look Ahead*

There is an ancient Chinese saying, "May you live in interesting times!" This message seems particularly appropriate for all of us involved with education today, students, parents, faculty and administrators. Even a casual observer of the educational scene cannot help but notice that the winds of controversy and change are blowing in many directions. The level of debate has now reached the point where education likely will be a major issue in the forthcoming presidential campaign.

Let's begin with a review of some of the major forces fueling this debate. These forces are economic, social, demographic, scientific and technological in nature. And they are occurring at local, national and international levels. Against this background, several emerging patterns in education stand out. These patterns all seem to support a single powerful message. And the message is this: We are going to have to deliver higher quality education in a more cost-effective way to a more diverse student body. I'll then discuss briefly how new developments in "instructional technology" may assist us in this task, and finish with some comments on how this technology meshes with our traditional thoughts about good teaching. To set some time frame for my remarks, let's think in terms of the Distinguished Teacher of, say, the year 2000.

The prospective students that this individual will be teaching started kindergarten this fall. Twenty-four percent of them live below the poverty line and 38 percent of them are non-white. With the average age of the U.S. population being 31 for whites, 25 for blacks and 22 for Hispanics, who's going to have the most children? In disciplines like engineering, where minorities traditionally have been underrepresented, the implications are especially clear. At the same time, a new wave of older students is entering colleges and universities. These students bring with them their own special set of needs.

What kind of curriculum will our year 2000 Distinguished Teacher be presenting? It is difficult to make accurate predictions, but several trends are obvious. First, we already are in the midst of a wave of curricular reform, stressing interdisciplinary connections and skills for a changing world. On one hand, engineers are busy trying to widen their

humanities training, and, on the other, pressure is on to incorporate more science and technology into liberal arts curricula. Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, labels this movement as possibly the most intense and constructive debate of undergraduate education in three decades. There is mounting evidence that too many students learn to parrot information teachers give them, without understanding the underlying "whys" and "hows" As reported recently in the *Miami Herald*, "think critically" likely will be the educational buzz words of the decade, and the 3 C's – communication, critical thinking and coping – definitely are in.

In another recent article in the *Herald*, David Gordon, professor of economics at the New School for Social Research, expressed the view that the pace of upward mobility appears to have declined sharply in the U.S. during the past decade. And, along with this, the relative importance of higher education has increased. This trend seems to be reflected in the anxiety many of our current students feel about the prospects of being able to obtain a good job after graduation.

The situation is very nicely summarized, I believe, in a recent report in *The Chronicle of Higher Education* on the annual meeting of the National Governors Association. In this report, Carolyn Mooney wrote, and I quote, "Colleges and universities are being pushed to improve quality while keeping tuition low, to measure what students learn while encouraging them to take more risks, to focus more attention on undergraduate teaching while doing research that will help revitalize a particular state's economy, to raise the participation of minority students, and to improve teacher education." Any of this sound familiar? Clearly, more and more responsibility for this country's economic, social, political and military well-being and world stature is being placed upon our educational systems. This is bound to have a pronounced impact upon our curricula.

And what about costs to students and parents? How much more will they be willing, or able, to pay for all we are being asked to provide them? The fact that increases in tuition have exceeded cost-of-living increases in each of the last seven years has received considerable press. Several recent public opinion polls indicate that increasing numbers of Americans – some 50 to 60 percent in some of the surveys – feel that the current quality of higher education does not merit its cost – a point of view, I might add, receiving vigorous promotion by Secretary of Education William Bennett. Personally, I believe that tuition is one of our true remaining bargains. However, as one who just wrote a check for tuition and fees that exceeded the down payment on the first home I bought, I also am willing to concede that there is room for discussion.

What is the message in all this? As I stated at the outset, I believe the message is that we are going to have to deliver higher quality education in a more cost-effective way. And

we will have to do this for a more diverse student body, many of whom may not be as well prepared as our current students. In short, we are going to have to improve quality and efficiency. This should come as no surprise. Manufacturing firms have had to do it, farmers are in the process of doing it, and it appears that we are next. The attitudes of "business as usual" and "don't fix it if it isn't broke" no longer will suffice.

There are some bright spots in this picture, however. For one thing, many universities are beginning to put more emphasis upon teaching in their hiring, promotion and tenure considerations. This will help us "put our money where our mouth is." For another, recent developments in instructional technology portend major improvements in quality of instruction, efficient use of student and faculty time, and accommodation of a variety of learning styles.

Because of its potential impact upon the teaching process, and because of the perceived threat it poses to many faculty, let us consider instructional technology in a bit more detail. At the low-tech end, it involves things such as books, films, video tapes and physical models – items familiar to us all. At the high-tech end are computer programs, interactive video discs and artificial intelligence-based tutoring systems.

As one example among literally thousands, I mention a system called ClioTutor developed at Rhode Island College. This system consists of 32 computer-based educational programs intended as supplements to lectures and readings in introductory history courses. Work is now underway on a companion system called ClioText. ClioText is intended to eliminate introductory lectures. The program familiarizes students with historical documents that they then can discuss in a seminar.

Will our potential Distinguished Teacher of the year 2000 lose his or her position to a computer before the coveted award can be secured? Hardly – to even consider this as a possibility is to ignore the true role of the teacher. He or she is much more than an "information storage device" and a "transmitter of information." The relationship between teacher and student is emotional as well as intellectual. Students need encouragement as well as expertise. Too frequently, students declare themselves stupid, when they are only ignorant – good teachers make clear the difference.

Some 150 years ago, in the annual Phi Beta Kappa address at Harvard, Ralph Waldo Emerson stated, "Colleges can only highly serve us when they aim not to drill, but to create; when they gather from far every ray of various genius to their hospitable halls, and, by the concentrated fires, set the hearts of their youth on flame." Our Distinguished Teacher of the new century, along with all of us, faces many new challenges. So let's replace Emerson's word "youth" with the word "student" and get on with the job!