

Remarks of

Ernest L. Boyer

U.S. Commissioner of Education

at the 1979 Commencement

of Union College

Schenectady, New York

June 17, 1979

To be read in final form.
President Suber
He was Commissioner at this time
1. President Suber
2. Distinguished Honorees

Final Speech

I'm honored to be on this day
having I discovered that

I know that Commencement is one of the most cherished traditions on this campus. And its a very special honor for me to be with you today.

But I also clearly understand that you are here to see the graduates, not to listen to a speech. In fact -- commencement speeches are -- I suspect -- among the least remembered messages on Earth. And I'm embarrassed to confess

that I can't even remember who spoke at my commencement. Let alone recalling what he said. I'm just assuming it was a "HE".

Well -- having put the significance of my own participation in perspective -- let me confess to the graduates this morning that I have but one message to convey.

My concern is this:

I urgently hope that your education has prepared you for productive work.

- o I also hope that -- in the process -- you have gained a world perspective and discovered your own relationship to the planet Earth. *I hope that you*

My concern about the "breadth" of college education was deepened several years ago while I was shuffling through my 3rd Class Mail. The Stanford student newspaper reported that the institution was preparing a required course in Western Civilization. In response, the student editorial said that:

This new report proposes to remove from students the "right" to choose for themselves. This is not to deny that courses in Western Civilization are valuable but to "require" students to take a course, carries a strong illiberal connotation.

It imposes a uniform standard on non uniform people.

Frankly: I was startled by that statement.

It struck me as a staggering comment on our time that this student, after 15 years of formal education,

- 1) rejected the idea of "relationships" and
- 2) failed to understand that a search for our common heritage is in no way to be confused with something he called "uniformity."

This incident vividly revealed to me one of the academic tragedies of our time.

Somehow--

- o our notion of intellectual and cultural "connectedness" has snapped.

Somehow--

- o our schools have failed adequately to teach our common heritage and -- in the process -- this intellectual narrowness and personal self indulgence has left us frightfully ignorant about each other and about our planet Earth.

- o Today less than 1 percent of the college students are enrolled in any course on international affairs.

- o College enrollments in foreign language have dropped 40 percent in 7 years.

- o A recent national survey revealed that, even after President Carter gave his speech on energy, only one-half of the public surveyed -- 52 percent to be precise -- even knew that America had to import oil from abroad.

- o In recent years fifty percent of all twelfth-graders studied could not choose correctly an Arab country but of four choices they were given,
- o and 40 percent of these twelfth-graders thought that Golda Meir rather than Anwar Sadat was president of Egypt.

Last year during TV coverage of the Sadat-Begin discussions, which, incidentally, were interspersed with coverage of the Chicago Bears football game

- o three out of every four spectators interviewed at half time had never heard of Sadat or Begin,
- o but all were aware of the prowess of local hero Walter Payton.

Recently, while flying from New Orleans to Orlando, I read in the morning paper, the New Orleans Times-Picayune

- o that University of California scientists had now concluded
- o that the earth's ozone band is being harmed by contaminants at twice the rate predicted earlier.

o I thought it symbolic of our time that this important story -- perhaps a life-or-death story -- was reported in a single paragraph buried deep in section II.

o o o

Environmentalists are fond of talking about the "vulnerability" of our "ecosystem"

o but I suspect that because of ignorance it is "our own" life system which may be most fragile and most threatened.

Lewis Thomas, that marvelous science writer, in his remarkable book The Lives of a Cell, said,

o "It is illusion to think that there's anything fragile about the life of earth; surely this is the "toughest membrane imaginable in the universe.

o We, the human species, are the delicate part, transient and vulnerable as cilia."

And yet with all our vulnerability

we have assumed that, in the name of something we call "progress," we could move ahead without understanding our connectedness to each other and to nature.

And we have assumed that we could do so without understanding there is a "negative" price to pay.

In the social world as in the physical world there is no "free ride;"

for every action there is an equal and equivalent reaction which inevitably must be faced.

The "time bomb" may be "delayed", but the equation somehow, sometime, will be balanced.

Recently (in my own office,) I've developed a little tactic which has temporarily stopped us cold.

Whenever I get a proposition which someone says will "improve the system," I send it back and say, "Give me the negative side of your assumed progress."

What's the price we pay -- It may be worth it of course -- but there will be a trade off to be sure.

For generations we have assumed that we can gain and never lose. The assumption is false.

II

But enough of these gloomy observations.

I believe that once again a new "sense of urgency" is beginning to emerge.

- o We are beginning to recognize that the human race is expanding at the rate of 200,000 people every day -- 73 million people every year.

Painfully we are now reminded

- o that our gas pumps are somehow connected to the Middle East; strange for places like Kuwait,
- o that American industry is almost wholly dependent on foreign sources for chromium, for cobalt, for bauxite, for magnesium, and for tin;

Ry-ab-t
phew

- o that 40 to 95 percent of our precious metals/are imported from Third World countries;
- o that about one-third of the profits of American corporations/come from exports or from foreign investments;
- o that one out of every six factory workers in this country/is making something to send abroad;
- o and that two million Americans are employed in foreign trade.

o o o

We are beginning to ^{understand} ~~comprehend the fact~~ that a child born today into a world of four billion people will, if he attains age 60, share the earth with three times as many human beings.

Yogi Berra, that great American philosopher, said on one occasion, you can do a lot of observing by just watching. And I suggest you can gain a lot of wisdom by discovering the unity of our world

- o not just in a physical sense
 - o but in a social sense as well.
-

To be specific: I believe colleges should teach about our interdependent world, and underscore the moral choices to be made so the surprises in later life may at least be modestly reduced.

In a monograph published by the World Affairs Council of Philadelphia, Robert Muller said

"A child born today . . . will be both an actor and a beneficiary or a victim in the total world fabric and he may rightly ask,

"Why was I not warned?"

Why was I not better educated? Why did my teachers not tell me about these problems and indicate my behavior as a member of an interdependent human race?"

o o o

I where

To be still more specific, its time for our schools and colleges to give a new priority to science

we should teach not just basic scientific principles but emphasize as well the way science and technology now shape our world.

If Three Mile Island taught us anything at all it taught us how ignorant we are.

During that crisis we heard on the evening news about rems, containments, and cold shutdowns ~~words~~^{terms} which were for most of us a foreign language.

Three Mile Island also taught us we cannot trust "PR" promoters who in times of crisis seem more concerned with image than with truth.

In short, students must develop a better understanding of the technological world we have created

- o so that our society will be driven more by understanding than by fear.
 - o And so that we will be better able to decide the awesome moral choices which must be made.
-

o o o

Several months ago -- Jean Ganz Cooney, of Sesame Street, the National Science Foundation, and I announced a new television program, which will focus on "science, technology and the environment."

- o It's going to be targeted to junior high school children, 10 to 12.
- o It's going to be offered/in the middle of the school day so it can be shown in classrooms.
- o And it will be offered/in the late afternoon and evenings so parents and children can watch it.

Incidentally, Joan sent me some disturbing findings the other day.

In doing some of their preproduction research-- they tried to find out what understanding junior high school students have about their world.

She found that some children when asked,

- o "Where does electricity come from?" said "the switch."
- o When asked, "Where does the water come from?" they said "the faucet."
- o "Where does the garbage go?" You guessed it . . . "down the chute."

AND AS A NEW PRIORITY WE MUST PAY MORE ATTENTION TO STUDENTS WHO ARE TALENTED AND GIFTED THESE YOUNG PEOPLE HAVE BEEN THE MOST NEGLECTED STUDENTS

A bit humorous, perhaps, but startling as well. We have developed a culture in which our sense of "connectedness" goes about as far as that which we can see, and feel, and touch. IN OUR SCHOOLS

IMAGINATION QUANTUM LEAP EINSTEIN

III

In the end, of course, the goal of education must be not just to acquire knowledge but to shape attitudes as well.

The power and the possibility of changing attitude was dramatically illustrated just a little over a year ago

- o when President Sadat said he wanted to address the Israeli Parliament.
- o The world was stunned, and days later millions of people sat transfixed as an Egyptian plane touched down on Israeli soil.

It is not to diminish the political impact of that visit to say that

- o none of the words that were exchanged,
- o none of the speeches,
- o none of the documents,
- o none of the private meetings,
- o and none of the toasts --

o none of these was as significant as the riveting of the whole world's attention on one single breathtaking symbolic image when two former enemies shook hands.

Instantly, 500 million people -- and they tell me that's how many saw that encounter -- 500 million people felt their "connectedness."

Instantly their "perspective" was expanded and, momentarily at least, the world was brought together in one grand gesture on behalf of peace.

IV

And this brings me back to my central message to the class of '79.

I hope that during your collegiate years you have developed special skills -- skills to help you get a job.

o I also hope that during your collegiate years you have developed a greater respect for the planet Earth and a greater understanding of our dependence on each other.

When our first astronauts came back from outer space
with those marvelous photographs of ~~the~~ Earth, Archibald
MacLeish wrote in the New York Times--

"to see the Earth as it truly is

small and blue

beautiful in that eternal silence where

it floats is to see ourselves

as riders on the Earth together"

As a member of the Class of 1979 I congratulate you and
I wish you much success -- as you continue your journey --
as riders on the Earth.

###