

SECOND ANNUAL SUNY FARMINGDALE FACULTY CONFERENCE

Remarks by
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SUNY College of Technology at Farmingdale
Farmingdale, New York

September 2, 1987

INTRODUCTION

I am delighted to return to this impressive campus. Farmingdale has always been a very special place for me. I remember the warmth and commitment of the administration and faculty--a tradition that lives on today. And I am doubly pleased to be participating in this Second Annual Faculty Conference in which you pause at the beginning of the academic year to inquire into the meaning of a college education.

Let me begin with a personal reflection: It was in 1972, and I was sitting in my office in Albany, New York. It was a dreary Monday morning, and, to avoid the pressures of the day, I turned instinctively to the stack of third-class mail that I kept perched precariously on the corner of my desk to create the illusion of being busy. On top of the heap was the student newspaper from Stanford University. My eyes immediately were glued on a headline announcing that the faculty at Stanford, in a burst of creativity, was reintroducing a required course in Western Civilization, after having abolished all requirements just three years before.

The students at Stanford, I discovered quickly, were mightily offended by the faculty's brash act. And, in a front-page editorial--which, incidentally, was bordered in black to indicate that the students were in deep mourning--the editorial board declared, "A required course is an illiberal act." They concluded with this blockbuster question: "How dare they impose uniform standards on non-uniform people?"

That observation troubled me at the time, and it has troubled me to this day. I was troubled that some of America's most gifted students, after fourteen or more years of formal education, still had not learned the simple truth that, while we are not uniform, we still have many things in common. These students had not discovered the fundamental fact that, while we are autonomous human beings with our own aptitudes and interests, we are, at the same time, deeply dependent on each other.

This brings me to the theme of my remarks. I believe that all worthy goals in education are best expressed in one simple word--"connections." Education, on the one hand, should prepare students to live independent, self-sufficient lives so they can be economically and socially empowered. But education should also help students go beyond their private interests and put their own lives in historical, social, and ethical perspective. In other words, students during their undergraduate experience should discover themselves as well as their connections. Let me focus on several issues to illustrate my point.

I.

In the Carnegie Foundation report College, we say that the first goal of education should be to help all students become empowered in the written and spoken word. Through linguistic understanding, we discover our connections. After all, only the human species excels in the exquisite use of symbols. Like other forms of life, we build nests, we seek mates, and we flee from or confront our foes. But, unlike others, we take infinite pains to express and record our feelings and ideas--to make connections. And we capture these experiences through the miracle we call language.

Language is the centerpiece of learning. Therefore, it was particularly dismaying to discover that 60 percent of the 5,000 faculty we surveyed for College said the students were not prepared to do collegiate-level work. When we pressed them further, the faculty said the basic problem with today's students is their lack of proficiency in English. We give special priority in the Carnegie report to writing, since it is through clear writing that clear thinking can be taught. We are even audacious enough to suggest that every student, before graduating from college, be asked to write a thesis on a consequential topic. If after twelve or fourteen or sixteen years of formal learning our graduates cannot express themselves clearly and coherently, then we should lock the school and college doors and start again.

But I do not mean literacy in the minimal sense. We need something larger. Last year, the National Assessment for Educational Progress released a report on adult literacy in the United States. The survey researchers found that, based on UNESCO standards, almost all U.S. students are literate; they can read and write and recognize simple words in isolation. But the researchers also found that nearly 40 percent of the adults surveyed could not give meaning to the message. They were able to recognize words, but they did not have insight or understanding.

Literacy, however, means still more. In teaching language in our dangerous and interdependent world, it is urgently important that students learn that good communication means integrity as well. We hear a lot of talk these days about teaching values in the public schools. I am not sure that values can be taught through a course in morality or ethics. I am convinced, however, that the basic problem is not in either Wall Street or Washington. It is not illiteracy, but the lack of integrity in the use of language. Call it honesty.

In other words, in the end, we teach values in the classroom and on the campus through the authenticity of the messages we send. I am suggesting that the quality of the undergraduate experience be measured by the quality of our communication and that truth is the obligation we assume when we are empowered with the use of symbols. If we do not have integrity in our messages, then our connections, socially, will be snapped.

II.

In our search for connectiveness, I have a second priority to propose. In the days ahead, it is urgently important that students gain an international perspective and become familiar with cultures other than their own. In conducting our studies at the Carnegie Foundation during the past five years, we have, frankly, found the signs of isolation among high school and college students enormously disturbing.

For instance, about three years ago, 40 percent of the community college students surveyed in California could not locate Iran or El Salvador on a map. During our research for High School, we found that only two states require students to complete a course in non-Western studies. And two years ago, more than 30 percent of 5,000 undergraduates surveyed said they had "nothing in common" with people in underdeveloped countries. Nothing in common with those whose fortunes are more diminished than their own!

Asked whether they would support more general education requirements, undergraduates overwhelmingly endorsed only one course; 71 percent said they would accept an additional requirement in computer science. At the other extreme, only 21 percent said they would support another course in history. What has gone wrong? Why has the study of the human story become so unpalatable?

We live in a world that is economically, politically, and ecologically connected. I worry that education in the United States is becoming increasingly parochial at the very moment the human agenda is more global than ever. Lewis Thomas once wrote that, if this century does not slip forever through our fingers, it will be because learning has directed us away from our splintered dumbness and helped us focus on our common goals. This vision of connectiveness is at the heart of education for the 21st Century.

As we approach the year 2000, it is also urgently important that students discover their connections to the natural world and, through science, begin to understand the ecology of our planet. Benjamin Shen of the University of Pennsylvania has estimated that fully half the issues before Congress relate to science. Without scientific literacy, it is difficult to see how a citizen of tomorrow can even remotely relate to such issues as nuclear power, genetic engineering, or environmental pollution. We do not all have to become experts in those fields. But I do hope that we will have enough background to ask confidently the right questions and enough intelligence to know if technicians are giving us straight answers.

When I was Commissioner of Education, Joan Ganz Cooney, the brilliant creator of "Sesame Street," came to me one day and proposed a new program in science for junior high school students. It subsequently was developed and called "3-2-1 Contact." In doing research for the program, the Children's Television Workshop had asked junior high school students such

questions as, "Where does water come from?" More than 30 percent answered, "The faucet." The researchers asked, "Where does light come from?" The students answered, "The switch." They asked, "Where does garbage go?" They answered, "Down the chute."

We consume, but give little thought to what we do with our leftovers. We love the luxury of intake, but are troubled and angry about disposal. I was rather startled and somewhat shaken by Senator Paul Laxalt's recent statement that he is confident no state will have to become the dumping ground for nuclear waste; instead, he said, we will pay a foreign country a high fortune to take our junk.

There is an inevitable cycle to our lives. Do our students understand the connections? Or does their understanding of the natural world only go as far as the refrigerator door and the light switch? Our world is made up of working parts--connections through the miracle of language; connections through the study of cultures other than our own; connections through the ecology of the planet. These interdisciplinary lessons must be understood if we are to succeed in adequately educating our students.

We have today a rare opportunity to make the case that the whole of the curriculum needs to be reframed. Artificial barriers between the disciplines need to be broken down so that history and art and geography, not to mention the sciences and mathematics, can perhaps nurture one another.

Frank Press, president of the National Academy of Sciences, recently talked about connections. Frank argued that the great discoveries of science might be seen as a search to find

aesthetic alternatives to messy concepts. Thus, he said, the elegant periodic table replaced the potpourri of tortured arrangements of elements that were practically useless for predicting properties of missing elements. The Copernical universe is not only more correct, he said, but also more pleasing in its simplicity than the earlier formulations. The forced explanations of how genetic information is stored were swept away in the early 1960's by the magnificent Double Helix, which was not only rational, but poetic as well.

And I was interested that the work of the recent Nobel Prize winner, geneticist Barbara McClintock, was, as she defined it, always carried out with an artist's eye. Indeed, a recent biography of McClintock is entitled, appropriately, A Feeling for the Organism. The statement that accompanied McClintock's National Academy of Sciences Kimber Award in 1967 talked about what they called her "surpassingly beautiful investigations." McClintock has noted, "Basically, everything is one. There is no way you can draw a line between things."

Even technicians become poetic. I have observed at Cape Canaveral, when there is a successful liftoff, they do not respond with, "Wasn't that a technological achievement." Instead, they say, almost in a whisper, "Beautiful."

I am suggesting that the goal of education must be to help our students see connections across the disciplines and bring a more coherent meaning to our world. Without that, they live with information, not with understanding.

III.

This leads me to say a word about the academic major and its connection to the world of liberal learning. I was delighted to learn this morning that Farmingdale has awarded baccalaureate degrees in technology. What a marvelous opportunity such programs provide--a chance to blend the goals of the liberal and the useful arts. Today, most students, based on our study, want to get their general education out of the way in order to become competent and proficient in a special field. We are in the credentialing, not the educating, business.

But most students are not asked to consider competence and credentialing to what end. The crisis in most professions today has less to do with the technical aspects of the field and more to do with the social risks and the moral dilemmas that the technocrats confront.

In College, we suggest that the values professionals bring to their work are every bit as crucial as the work itself. We conclude that general and specialized education should be blended during college, just as they inevitably must be blended during life. If we want our graduates to have a larger meaning in their work, those interrelationships need to be explored before they leave the campus.

Eric Ashby, the great British academic, wrote that the path to culture should be through a person's specialization, not by bypassing it. "A student who can weave his technology into the

fabric of society," he said, "can claim to have a liberal education; a student who cannot weave his technology into the fabric of society cannot claim even to be a good technologist."

Work is honorable; vocation is a high calling. But we need to make sure that we define work appropriately and that our Bachelor's of Technology degrees prepare technologists who can put their work in historical, social, and ethical perspective. Without that, the human planet is in danger.

IV.

Now, I would like to say a word about the teacher. We have a curriculum and a course syllabus to give direction. But, in the end, it is the magic of the teacher in the classroom who can integrate ideas and help students see connections. We give high priority to research in this country, and well we should. But we should also give more priority to teaching--from the school to the college level. In fact, I believe that teaching in the early years matters most. I am convinced that, if we would give as much status to first-grade teachers as we do to full professors, perhaps our jobs on campus would improve.

Speaking of early learning, I recently read in the Kansas City Times an opinion-page article by Robert Faughum that rather whimsically reminded me of the importance of early learning. The article was entitled "All I Ever Really Needed to Know I Learned in Kindergarten," and the author wrote as follows:

Most of what I really need to know about how to live, and what to do, and how to be, I learned in kindergarten. Wisdom was not at the top of the graduate school mountain, but there in the sandbox at the nursery school.

These are the things I learned: Share everything. Play fair. Don't hit people. Put things back where you found them. Clean up your own mess. Don't take things that aren't yours. Say you're sorry when you hurt somebody. Wash your hands before you eat. Flush. Warm cookies and cold milk are good for you. Live a balanced life. Learn some and think some and draw and paint and sing and dance and play and work everyday some.

Take a nap every afternoon (especially true for academic deans). When you go out into the world, watch for traffic, hold hands, and stick together. Be aware of wonder. Remember the little seed in the plastic cup. The roots go down and the plant goes up and nobody really knows how or why, but we are all like that.

Goldfish and hamsters and white mice and even the little seed in the plastic cup--they all die. So do we.

And then remember the book about Dick and Jane and the first word you learned, the biggest word of all: LOOK. Everything you need to know is in there somewhere (speaking of connections). The Golden Rule and love and basic sanitation. Ecology and politics and sane living.

Think of what a better world it would be if all of us--the whole world--had cookies and milk about 3 o'clock every afternoon and then lay down with our blankets for a nap. Or if we had a basic policy in our nation and all other nations to always put things back where we found them and to clean up our own messes (speaking of ecology).

And it is still true, no matter how old you are, when you go out into the world, it is best to hold hands and stick together.

(Reprinted from the Kansas City Times, September 17, 1986.)

I am intrigued that, very often, the profoundly simple lessons--the ones we encountered very early--become lost in dim memory. Without getting sentimental, I wish that we could ask students before they graduate to go back to the elements of sane living. And I wish we could realize that, to prepare students for the 21st Century, we do not necessarily need a new curriculum so much as we need new candor in the classroom.

The harsh truth is today, in too many classrooms, creativity is denied. We are systematically training pedants who have lost the power to view themselves as creators of ideas. We can teach

our students to remember facts, but we must stimulate them to respond to the inner creativity that is not mediated by our culture.

Today's society is desperately in need of individuals who are able to look at the old and the familiar in startling new ways. People who can--as William Faulkner phrased it in his Nobel Prize address of 1950--"make out of the material of the human spirit something which was not there before."

We need creativity, not peasantry, in the classroom. Carl Sandburg expressed it when he wrote:

Once having marched
Over the margins of animal necessity,
Over the grim line of sheer subsistence
Then man came
To the deeper rituals of his bones,
To the lights lighter than any bones,
To the time for thinking things over,
To the dance, the song, the story,
Or to the hours given over to dreaming,
Once having so marched.

Now, more than ever, we need creative teachers who can instruct and inspire and who can encourage students to make their own connections in a world where problems must urgently be confronted.

V.

Let me conclude by reflecting on the college community and the quality of campus life because, in the end, our campuses do not teach just in the classrooms, but in the libraries, in the dormitories, and in the cafeterias, too. Yet, we found during our study of undergraduates that 50 percent of the students surveyed said they are treated like a number in a book; more than 40 percent said they do not feel a sense of community at their institution, and two-thirds said they do not feel comfortable talking with professors outside the classroom.

Campus culture is changing. We now confront younger and older students. I was thrilled to hear that your campus has a day-care center and that students' children are now being enrolled. It is important to blend the young and old.

At this point, I am prompted to ask a question: Are we in the academy still creating on campus a climate in which the whole is greater than the sum of its parts, so that students can be engaged socially and intellectually outside the classroom? I do not want to romanticize the notion that the modern campus is a community comprised of many cultures. At the same time, isn't it fair to ask whether we can create a college that is held together by something more than a winning football team or, to use Clark Kerr's colorful description, a common grievance over parking.

In a brilliant study of creative community, Carl E. Schorske, a colleague of mine at Princeton, described 19th

Century Basel, Switzerland, as a place where community had been built. He said the profession of learning was prized among the merchant families of Basel, just as the priesthood was valued in Ireland. Schorske said the entire community worked together to enhance the quality of urban life. If a city can be concerned about the quality of life, I am convinced that it is also possible for administrators, faculty, and students--a much more intentional community--to build connections and to be engaged in a common cause.

The Carnegie Foundation has suggested that the spirit of community might be strengthened by asking students to engage in community service in which they make connections between what they learn and how they live. I came to this suggestion because, during our research for High School, I became convinced that we do not have just a school problem, but a youth problem. We have a generation of young people who see little connection between the school and the community beyond, who feel unneeded and unconnected to the larger world. I worry about colleges being suffocatingly too introspective--places where students spend time in class but are not asked to test their theories beyond the campus or to engage their own lives in meaningful encounter.

There is, for instance, something seriously wrong about a culture where the generational connections have been snapped. My parents are living in a retirement village near Harrisburg, Pennsylvania. The average age there is about eighty. My father, a bit of a grump, once said, "There's no big deal being eighty around this place. You have to be ninety even to get a cake."

There is one redeeming virtue there, however. They have a day-care center at the village, and all the children have adopted grandparents. Every morning, fifty four- and five-year-old children come trudging onto the campus, and my wife's mother, who is 86, is up at 6:30 to give them breakfast. My mother, who is in the bed-care section, has a little four-year-old who greets her in the morning and brings a flower and a wash cloth. There is something authentic about the day beginning with an eighty-year-old being greeted by a child filled with the vitality of a new life; there is something equally important about a four-year-old understanding the agony and the courage of growing older.

So we suggest in our report that, maybe, our young people in school and college level should find ways to extend their learning far beyond the campus to make connections. We propose that they engage in internships in the city or tutor other kids in school. Perhaps some of our best teachers are in the classrooms today, and they should have a chance to serve as mentors to younger students.

Vachel Lindsay once wrote:

It is the world's one crime its babes grow dull, ...
Not that they sow, but that they seldom reap,
Not that they serve, but have no gods to serve,
Not that they die but that they die like sheep.

Students must understand that the tragedy of life is not death; the tragedy is to die with commitments undefined, with convictions undeclared, and with service unfulfilled.

More than forty years ago, Mark Van Doren wrote that "the

connectiveness of things is what the educator contemplates to the limit of his capacity." And, he said, "The student who can begin early in his life to think of things as connected, even if he revises his view with every succeeding year, has begun a life of learning." This, to me, is the special challenge of the undergraduate experience.

Thank you very much for inviting me to be with you this morning.