

Welcome

A time of excitement as the holiday season approaches

A great year thus far...

National rankings moved Bus up a notch...

UG Education is ranked 8th in reputation...and 39th in expenditure...
certainly the most cost-effective in the nation

Two more MacCarther Prizes...John Holland and Ann Ellis Hanson

We're still ranked #1...not in basketball...but in research
...the leading research university in Amerca

Continuing to stay on track with pace of Michigan Mandate
...Minority enrollments up to 22% (7,000 students)
...Black up to 7.8% (2,700...highest in history)
...Graduation rates at 68%...highest among publics
...Faculty hiring...up to 13%...on track to double in 5 years

EPA National Center in Environmental Education (K-12)

And, of course, we've designed a new Michigan emblem...
...it's called the Michigan Tie...

Seriously

...Fifth straight Big Ten championship in a row...
...4th Rose Bowl in five years
...BB is ranked 1st (at least until we play Duke)
...CC finished 5th in nation
...hockey is ranked among national leaders

Campaign for Michigan

And in September we kicked off the largest fund-raising campaign
in the history of higher education!

Status to date:

Outline of Today

Note: Stimulated by strong interest of members of PAC...

The University and K-12 Education

Let me illustrate these discussions with several examples from very recent personal experiences. Last year I attended an international conference involving the top scientists, government officials, university leaders, and business leaders from a number of nations throughout the world. At this meeting, a senior executive of Nissan pointed out that, following an extended visit by a number of senior Japanese business leaders to this country, the group was asked what they viewed as the greatest strength and the greatest weakness of the United States. The Japanese were unanimous in their conclusions: America's greatest strength was its research universities, clearly the finest in the world. America's greatest weakness, however, was public education at the primary and secondary level.

This past January, I attended the annual meeting of the Business-Higher Education Forum in Tucson. This is an organization comprised of forty of the nation's leading chief executive officers and forty university presidents. During this meeting, these business leaders stated their belief time and time again that the quality of public education in American today was the most serious crisis our nation has faced since World War II. And yet, they also expressed their frustration that this was a crisis about which there was very little public awareness and even less public consensus.

Today I will focus my remarks on K-12 education because, like the Japanese, I believe that this part of the pipeline is clearly our weakest link, our Achilles' heel. By any measure, K-12 education is in serious trouble. We are indeed a "nation at risk," or to quote a U.S. Senator's observation in a meeting I attended last

Wednesday in Washington, "Public education in America is an absolute disaster!"

Ross Perot was quoted as saying, "The hardest thing I ever did was the year I spent trying to improve the Texas public schools. It was the hardest, meanest, bloodiest thing I ever tried to do." It is not surprising then that we continue to be paralyzed in our efforts to come to grips with school finance reform or the major structural changes necessary to achieve quality in public education.

Let me be frank with you. I am very worried--worried about the future of our nation, worried about the future of our state, worried about the future that my children will inherit, and worried about both your future and mine--since it is clear that everyone of us is at great risk because of our serious under-investment in the quality of our human resources.

Graduation Rates and Literacy

The United States today spends more on education than any nation on earth, \$328 billion, more than for any public service, including national defense. Yet, functional illiteracy in this nation currently runs between 20 percent to 30 percent, compared to a high of 5 percent in most other industrialized nations. Fully 25 percent of Americans now fail to complete high school. Each year 700,000 students drop out of high school and 700,000 more graduate without functional literacy.

Achievement Measures

Our first tendency is to think that K-12 education is merely failing with minorities and at-risk students. However, other comparisons demonstrate that this is not the case and that the weakness of our educational system extends throughout all of our society. Even if we exclude those who drop out, we are presently only educating 15 percent to 20 percent of our students to an intellectual level capable of functioning well in the everyday world. In recent assessment tests it was found that only 20 percent of high school seniors could write an adequate letter. Only 12 percent of high school seniors could take a group of six fractions and put them in order of size. And only 5 percent of high

school graduates today enter college ready to begin college level mathematics and science courses or to approach the reading of technical material.

International Comparisons

At every level of education, American children rank near the bottom in their knowledge of science and mathematics when compared to peers in other advanced nations. For example, compared to students in fifteen other nations, U.S. high school seniors scored among the bottom quarter on calculus and algebra achievement tests. Our seniors ranked fourteenth among fourteen nations in science achievement. This dismal performance is present at every level of American primary and secondary education, in essentially every discipline.

We are a sports-oriented society, and we like to frame issues in the language of sports such as "being number one." But public education is not a game. Rather, it is a deadly serious matter of raising a generation of Americans who will be able to hold their own in an increasingly competitive, increasingly complex, and increasingly science- and technology-oriented world.

The coin of the realm in the age of knowledge that is our future will be knowledge of science, mathematics, and technology. Yet it is clear that most American students today are simply not developing the knowledge base or the skills necessary to compete in this world.

The students in our classrooms today--students testing at the bottom of the heap in world terms--will be the backbone of our labor force in the century ahead. Indeed, they will be running this country with several decades!

I think you can see why I am worried--and why you should be worried. We are indeed a nation at risk, and we will become even more so as we grapple with the extraordinary changes underway in our society, our nation, and the world.

So What Is the Problem?

The Last of the Smokestack Industries

As Albert Shanker, president of the American Federation of Teachers, has observed, a fundamental flaw in our system of public education is our assumption that our teachers are the workers who have the task of delivering knowledge to our children. Such a system would make a lot of sense if we view the student as a passive object, passing down an assembly line, being worked on by others, the teachers.

What we need to do is stop thinking about how to fit teachers, students, and parents into an old fashioned factory. Even modern business is abandoning the factory model.

The Blue-Collarization of the Teaching Profession

It seems clear that teachers are--or at least should be, regarded as--among the most valuable members of our society, since in a very real sense they are creating our future. And yet how do we treat them? We give them low salaries, low status, and few rewards. We give them little opportunity for control of the curriculum and drown them in a mire of bureaucracy. We assign them the challenge of dealing with children from disintegrating families, impoverished backgrounds, dulled by the impact of television. And then we criticize them for not doing their job!

The Conflicting Missions of Our Public Schools

However, over the past several decades, we have assigned to our public schools a broader array of social roles for which they were unprepared, thereby undermining their primary purpose of education. We have shifted our schools attention from the intellectual achievement of their students and more to concerns about social adjustment, individual realization, and group consciousness. Indeed, we have lost any coherent vision of the precise role that our schools should play in our society.

Family Attitudes

Perhaps it is the lack of commitment of the American family to the education of children that most distinguishes us from other countries. We seem too busy to help our own children in their studies or to participate in their activities.

The Disintegration of Our Social Fabric

Of course, there are many situations in which we cannot blame the family. Because for many children, the family simply doesn't exist!

Roughly one-half of the students enrolled in K-12 education come from what we used to call "broken homes." Except that in today's society this situation has become the norm rather than the exception. To this we must add the full range of other social ills, ranging from the mind-numbing impact of television, to poverty and the disintegration of the family, to drugs and crime. Of the class of 2002 that started kindergarten this past year, 25 percent are living below the poverty level, 15 percent have physical or mental handicaps, 15 percent have been born to teenage mothers, and 10 percent have illiterate parents.

Public Attitudes

In fact, when it comes right down to it, how many of us are really willing to insist on quality in our schools in the face of the political pressures and costs which such a quality commitment will trigger? How many of us realize that what is at stake here is not just the future of our children, but the future of our nation and our way of life, not to mention our own personal well-being?

The Failure of Our Universities

While I am taking pot shots at various groups, let me also aim a few as well at higher education. Many of the problems faced by public education these days are our doing. For years in most of our institutions the education of K-12 teachers was ranked among the lowest of our priorities. Indeed, in some institutions--including the University of Michigan--during the period of serious financial pressure in the early 1980s, we have proposed that our schools of education should be eliminated!

Further, we have perpetuated the smokestack assembly-line approach to education, both in our instructional programs and in our accreditation activities. We have not insisted on the highest standards and best preparation of those we admit to our teacher education programs. And we certainly have not adhered to the highest standards for our own graduates.

Indeed, we have allowed many of our schools of education to become, in effect, diploma mills, placing far more emphasis on quantity than quality of graduates. For example, the three largest teacher factories in the United States are in Michigan--and five of the ten largest teacher colleges are in this state. Last year, Michigan's schools of education produced over three times as many teachers as there were openings in our schools. It seems clear that our universities simply must step up to the challenge of reducing enrollments and increasing quality in our schools of education if we are to serve public education in Michigan.

Political Minefields

One of the great curses of the American experience has been our preference for "quick fixes," simple solutions to complex problems. Too often we go for the slickly marketed patent medicine that not only doesn't provide a cure, but actually aggravates the problem. The classic example of this tendency toward gimmickry is the state lottery, which, in effect, robs from those most in need of state assistance to subsidize those already well supported.

Possible Solutions

The reform movement launched by the "A Nation at Risk" report with only modest improvement in the quality of our public schools. Teacher salaries have increased; academic standards have been raised; leaders in both the public and the private sector have become strong advocates for education. Yet we still have not made much progress.

Part of the problem is that we essentially have taken the system we have in place for granted, assuming that it is correct and that all we need do is fix it up a

bit. We are only now beginning to recognize that we need more than gradual reform. We need a complete overhaul of our public schools.

But doing this will be a great challenge. Major reform will be strongly resisted from many quarters: by teachers and unions, by administrations and school boards, by politicians, and even by parents. All will feel threatened by the significant changes necessary to restore the quality of American public education. And well they should, since we do not even have agreement on the most general nature of the changes which must occur.

What Higher Education Can Do?

Higher education must awaken to its responsibilities for the quality of public education in America. It is clear that we need to reach out more to school districts--working with them and responding to their needs. We need to work with our public schools to experiment with new techniques, new texts, new methods of instruction, new ways of organizing knowledge, and engaging students in the excitement of experimental problem solving.

An important effort in this respect is the new Partnership for a New American Education. This consortium, consisting of the state's three research universities--the University of Michigan, Michigan State University, and Wayne State University--is working closely with state government and the private sector to develop in the State of Michigan a model for higher education in America.

Universities must re-examine our priorities and ask ourselves whether we are not partly to blame and whether each of us should not put a much higher priority on preparing talented graduates for primary and secondary education. In this regard, we must pay particular attention to our own schools of education. Traditionally, these units have had the lowest status of any of our academic units on our campuses. During the 1970s and early 1980s our education schools were regarded as a haven for mediocre students and mediocre faculty. It is ironic that if one looks at the reform movement over the last five years, there is very little mention made of our schools of education. It is clear that our universities need

to mount much more effective programs to train teachers, principals, and superintendents.

Finally, our universities really can set the pace for public education in America by simply insisting on far higher entrance requirements and communicating these clearly to parents and prospective students. In this way, we may be able to generate the necessary pressures for reforms of our public schools.

A Plan for Michigan

Michigan's system of public education is massive and complex:

- 562 districts
- \$6.7 billion/y (local, state, federal)
- 1.5 million students
- 82,000 teachers
- 7,500 administrators
- 65,000 other staff

It should be apparent from these statistics that top-down efforts will be very ineffective in achieving reform of such a massive system. Rather, the key is to activate bottom-up forces at the school level--both from within and from without--which address educational quality.

Over the past several months, I have been a part of a small group of leaders from the business and higher education communities who have been working to develop an action plan for major school reform in Michigan. We begin with a very fundamental premise: *That all children can learn more than our schools--and most parents--currently expect of them.* Then we must develop and implement a set of challenging, coherent, and concrete set of academic standards, empower local schools to meet these standards, and hold the schools accountable for the achievements of their students. We should focus on the key themes:

- management by objectives
- site-based management

- accountability

More specifically, let me suggest the following set of actions:

1. Development of clear objectives

We must develop clear objectives for our schools. In particular, we should develop an ambitious and challenging core curriculum that focuses on higher order thinking and learning. Fortunately, the Michigan State Legislature has taken action within recent years through Public Act 25 to require this action. Unfortunately, primary responsibility has been assigned to the State Board of Education, and thus far, this body has proposed a core curriculum that is quite weak and conditioned by the status quo. It clearly does not meet the needs of schools for serious and coherent guidance in raising their educational sights. Other states such as California and Connecticut are far ahead of Michigan in this respect.

Here it is important to realize that we cannot be satisfied with local standards, or Michigan standards, or even national standards. We must set true world standards, since our children must be prepared to compete in a knowledge-intensive world society. Further, while educators and parents must be involved in defining these educational objectives, so too must be "consumers" of the products of public education such as business, industry, and higher education.

2. Accurate assessment methods

Second, we must develop accurate methods for assessing student achievement which are closely aligned with the objectives set by the core curriculum. Here we already have a good tool: The Michigan Educational Assessment Program. However, this program is currently underfunded and strongly resisted by many teachers and school districts. In the face of this resistance, it may be necessary to create truly independent assessment agencies outside of government, such as nonprofit corporations governed by boards representative of wide constituencies. However we approach assessment, it is clear that key to the reform effort will be our capacity to tell schools, parents and

students, colleges and employers, and the public at large just how our schools are doing in meeting the high standards we must set for them.

3. Moving to site-based management

We simply must break the chains of laws and bureaucracy that bind our schools and allow them to determine their own strategy for achieving objectives. We should shift genuine authority and resources to the school level to provide principals and teachers new flexibility to try new approaches, reallocate resources, adjust staffing, and make their schools work better. Of course, such a shift in authority to the local schools will take control away from state legislators, state officials, local school boards, and central district offices. All of these groups must agree to eliminate existing policies that currently constrain school activities.

Our schools will need strong support if they are to move toward ambitious curricular objectives. To this end, we must clearly improve the preparation of professional staff. Our present system for preparing teachers and administrators, largely based on the "teachers colleges" tradition of the years past, must be overhauled. So too, must more attention be given to curriculum and materials preparation. Administrators must be trained in modern management methods. And we need to establish models of outstanding schools through efforts such as the Michigan Partnership for a New Education and the Kalamazoo Area Math and Science Center.

Further, we must recognize that different areas will need to adopt different strategies to achieve the quality of education our state and nation requires. For example, for some areas, parental choice will be an important feature to create the free market necessary to drive change. In others, the use of alternative teacher certification will be useful in attracting the very best talent into the classroom. Eventually it seems clear that we must move to longer school years, perhaps along the lines of Europe and Asia. And, as I have noted earlier, we must take strong action to make teaching a true profession once again, including clear rewards for high merit.

Of particularly importance will be addressing the needs of schools serving concentrations of disadvantaged children. We should set as a goal the challenge

of bringing all children into the primary school years with solid skills in reading and mathematics. For example, it seems clear that important programs such as Head Start should be fully funded. Further, extended-day kindergarten will prove useful in impoverished neighborhoods. Schools facing the heavy burdens of poverty will require additional public support.

4. Accountability

Finally, after setting clear objectives, implementing accurate assessment measures, and providing schools with the flexibility and support to achieve these objectives, we must insist on accountability. To this end, statewide outcome-based accreditation will prove useful. But perhaps the most important accountability will be provided by employers and higher education.

Business and industry must make student achievement a key component of hiring and advancement decisions. If employers begin to weigh student achievement in K-12 heavily in their hiring, then the message will rapidly permeate public education that there are strong rewards for school performance.

So too, higher education must set clear and high standards for admission to their institutions. Here I should note that within the past month, the Michigan Presidents' Council, comprised of the presidents and chancellors of Michigan's fifteen public campuses, has reached agreement on a set of minimum standards which will go into effect in 1995. To be eligible for normal admission to any of Michigan's public universities, Michigan high school graduates must have met these requirements. To accommodate those students who have not had the opportunity to achieve these academic objectives, universities will have the flexibility for provisional admission--with the requirements being met through remedial, non-credit instruction on campus.

Finally, it will be necessary to have authority to address those situations--which we hope will be rare--in which schools simply are unable to make progress. For example, there should probably be state authority to take over failing schools. Other actions such as district consolidation, alternative management, and appropriation levels may be necessary to motivate the reform movement in some schools.

Concluding Remarks

Our educational system is complex and decentralized, with the primary responsibility located at the state and local level. There is no simple solution. It is clear we must push on all fronts to improve the quality of public education. We must weave a strategy of many strands, a strategy that places existing programs in a larger context that establishes a clear sense of direction, develops leadership for the task, and assures continuity of effort. Above all, we must be consistent and persevere.

It is clear that the challenge of public education should not be just the worry of local communities, or state government, or universities. It is everybody's concern! Each of us must step forward and unite to face the challenge of the future. We must work together to build new coalitions, including both the public and private sectors, state government, education, business, and labor, to develop an agenda appropriate to secure the future of our children, our state, and our nation.

Michigan, indeed America, continues to be blessed with abundant natural resources and a people of great strength. But the writing is on the wall. If we are to prosper in an age of knowledge that is almost certainly our future, we must join together now to restore both our public and our personal investments in education, in our people and their ideas, in our children, and in our future.