



A Presentation by

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The Role of the University in an Era of Change

An Address to the
Plymouth/Northville
Alumni Community
October 3, 1991

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The Controversy

I am sure I don't have to tell you that higher education is experiencing a torrent of criticism these days—from parents and students, from governors and state legislatures, from Congress and government bureaucrats, from the media and the public-at-large. The accusations include:

- We're big, self-centered, and greedy.
- Our students are spoiled and badly behaved and our faculty is even more spoiled.
- We are plagued by a long list of "isms," including racism, sexism, elitism, and extremism.
- We are riddled by scandals in intercollegiate athletics.
- Our intellectual values have further deteriorated, resulting in scientific fraud, political correctness, and a lack of concern for undergraduate education.
- We are gouging parents with high tuition and the federal government with inappropriate charges for research.

Such scathing attacks on the American university are of rather recent origin. Throughout most of its history, academia rarely had to deal with public attention, much less criticism. Historically, probably due to our Medieval religious origins, universities over the centuries kept about them the aura of the sacred, a sense of being set apart from the fray of ordinary life. Universities were accepted and respected by society, at least when it gave our institutions any thought at all, which frankly was not all that often.

The Irony

The seeming paradox today is that the extraordinarily broad public attention and criticism of academia comes at a time when the university is more deeply engaged in society, a

more critical actor affecting our economy, our culture, and our well-being than ever before. To illustrate this growing importance of the university let me give you two quotes. The first comes from Derek Bok, former President of Harvard, "In all advanced societies our future depends to an ever-increasing extent on new discoveries, expert knowledge, and highly trained people. Like it or not, universities are our principal source of all three ingredients."

The second quote is provided by Erich Bloch, former Director of the National Science Foundation, who notes, "The solution of virtually all of the problems with which government is concerned: health, education, environment, energy, urban development, international relationships, space, economic competitiveness, and defense and national security, all depend on creating new knowledge—and hence upon the health of America's research universities."

And yet the attacks continue. Then again, perhaps it is not so paradoxical that just as the university is becoming a key player in our society, it should come under attack. When you get right down to it, perhaps we are victims of our own success. We have entered an era in which educated people and the ideas they produce have truly become the wealth of nations, and universities are clearly identified as the prime producers of that wealth. This central role means that more people today have a stake in higher education. More people want to harness it to their own ends. We have become both more visible and more vulnerable as institutions. We attract more constituents and support, but we also attract more opponents. In the process, the American university has become for many just another arena for the exercise of political power—an arena for the conflict of special interest. Universities have become a prime target for media attention and exploitation. We are increasingly the focus of concern of both the powerful and the powerless.

Hence, we should not be surprised to hear from our critics, since they are a sign that society has an increasingly vital stake in what we do and how we do it. Let me illustrate this increasingly central role with two examples drawn from the University of Michigan:

Genetic Medicine

For those of you who are old enough, let me take you back some forty years to the early 1950s. You will probably recall the great fear of most parents of the dreaded disease, polio. At that time, the University of Michigan was conducting the clinical trials of a new vaccine developed by a Michigan faculty member, Jonas Salk, that was destined to eliminate the threat of this disease from our society. Well, today the University is engaged in an even more important quest, destined to change the entire nature of health care itself.

A team of extraordinary medical scientists is applying the new science of molecular genetics to medicine. You may have heard that two years ago they announced the discovery and cloning of the gene responsible for cystic fibrosis. They have gone on to develop a technique to inject normal genetic material into a cystic fibrosis gene and correct the deficiencies. More recently they have discovered the genetic causes behind other diseases such as neurofibromatosis (sometimes called the Elephant Man's disease), a disease that destroys the body's ability to tolerate cholesterol, and this past year they discovered the gene responsible for diabetes. The team is now closing in on identifying the genes responsible for certain forms of breast cancer. The implications of this work are extraordinary indeed when it is recognized that most of the diseases plaguing our society today are genetic in nature, e.g., cancer, heart disease, high blood pressure. But this is only part of the story.

The University is also one of four sites in the United States engaged in the Human Genome Project, a massive effort aimed at mapping the entire human genetic code. The implications of this effort are extraordinary, since once it is successful, it will allow one to immediately identify an individual's susceptibility to various diseases. In effect, it would shift medicine from therapy to prevention, since such advanced knowledge would allow one to adopt a lifestyle designed to avoid such genetic diseases.

Networking the World

On the University's North Campus is a large glass building, chock-full of computers that in many ways may represent the future of our state. This is the command center of the National Research and Education Network, (NREN), a massive world-wide network operated by the University of Michigan in collaboration with IBM and MCI. It links together the computers on all university campuses and industrial and government laboratories throughout the world. Today the network already links together over four million users world-wide, and it is doubling in size and scope every six months.

In a very real sense, the University of Michigan is playing a lead role in building an interstate highway system of information flow—except in this case the system is world-wide, rather than nation-wide. Why is this so important, aside from the fact that it allows Michigan students, faculty, and staff to collaborate with colleagues around the world? If you think about it, you will realize that the key activity that determined the course of our civilization during the twentieth century was transportation—cars, trains, planes, oil, space. Transportation was the enterprise that determined prosperity, national security, even the nature of our culture, with the growth of the suburbs, international commerce, and so on. A century ago the State of Michigan was well-positioned to play a leadership role in this new range of industries, and through the automobile

industry it became one of the most prosperous and powerful regions on earth.

Many believe that the driving theme of the twenty-first century will be communication, enabled by the profound advances we are now seeing in computer technology, networks, satellites, cellular phones, fiber optics, high definition televisions, and so on. In fact, we are evolving toward a world in which hundreds of millions of computers will easily plug into a global information infrastructure. It's probable that the impact of this technology will be far more radical than the harnessing of steam and electricity that led to the industrial revolution in the nineteenth and twentieth centuries. Perhaps it is more akin in impact to the discovery of fire by primitive tribes since it will prepare the way for a revolutionary leap into a new age that will profoundly transform human culture.

Sound improbable? Recent statistics have indicated that in this country over thirty percent of homes already have personal computers, and over fifty percent of workers use computers in their jobs. Indeed, surveys have indicated that over seventy percent of homes with children ages eight to twelve have Nintendo games, which are nothing more than small personal computers.

To some degree we have already felt the impact of this shift from transportation to communication as Michigan's industry has become less competitive and, in many ways, less important to the world order. Yet, through the leadership role of the University, Michigan is once again positioned to play a leadership role in this new arena, to build a new industrial base in information technology that will provide the infrastructure for the communications industries that will dominate the twenty-first century.

What is the University of Michigan, Anyway?

When we hear the words "the University of Michigan," we generally think of those traditional images of any college. Great faculty challenging and exciting students in the classroom; students studying in our many libraries, scientists toiling away late into the evening in our laboratories, striving to understand the universe, scholars poring over ancient manuscripts in our collections of antiquity.

But there are some other very special images of the University of Michigan that come to mind. Ann Arbor on a Saturday afternoon in the fall, as 105,000 fans are packed into Michigan stadium to cheer on the Wolverines. There is also the caring Michigan seen by the over 750,000 patients each year who are treated by the University of Michigan Medical Center. Some see the University as silicon valley east, working closely with Michigan industry and government to build the high-tech infrastructure, to create new companies and new jobs, and to strengthen and diversify our industrial base.

The University attracts to the state almost one quarter of one billion dollars of federal R&D, not to mention many of the world's leading scientists and engineers. It conducts cutting-edge research in a vast array of areas ranging from medical science, such as the effort to develop genetic medicine mentioned earlier, to technology, including the University's discovery of the maser and holography, to national defense, where University laboratories developed synthetic aperture radar and the radar absorbing materials used to construct the stealth fighter, or in the social sciences, such as the Survey Research Center and the Consumer Confidence Poll.

The University also has a long tradition of helping to awaken the conscience of a nation, the image being the Michigan of "The Big Chill," in

reference to a movie by one of our alumni, Larry Kasdan. Student activism led to the teach-ins of the 1960s against the war in Vietnam to Earth Day in the 1970s to raise concerns about the environment and, most recently, to the University's commitment to become a truly multicultural learning community.

Then too, there is Michigan and the arts: the array of cultural events at Michigan is extraordinary and includes many of the great orchestras and performers of the world. To this is added the scores of spectacular student productions, plays, concerts, dances, and operas that have enlivened the campus over the years.

In many ways, Michigan is a university of the world. It has been long renowned as a truly international center of learning, whether it be through our great area studies programs: the China Center, Japanese Studies, Southeast Asian Studies, Russian and Eastern European Studies, or through our alumni throughout the world. Indeed, in many ways Michigan is the university of the universe because of Apollo 15, the Michigan mission to the moon, which not only established the first UM alumni club in space, but named a crater on the moon after Michigan.

The University serves as a unifying force in our families as well through Camp Michigania and all of the various alumni activities.

But, of course, first and foremost, there is Michigan as the educator, attempting to provide, in the words of one of our first presidents, "an uncommon education for the common man," an education as good as any available in the world, an education for all with the ability and will to succeed, regardless of race, creed, and economic background.

It is important to note these different perspectives of the University because all too often we tend to think of these marvelous and complex institutions in one-dimensional images that reflect

only our particular interests at the moment—when we read about student unrest on our campus or see Florida State intercept four passes or open the tuition bills for our sons and daughters. In fact, perhaps the best way to think of the University is to recognize that our primary role is to invent the future, through the knowledge discovered on our campuses and the graduates that we educate who can carry forth this knowledge and apply it to serve society.

What Do Michigan Taxpayers Get for Their Money?

Let me suggest yet another way to look at higher education in Michigan—in terms of the investment that we each make in it. This past year the taxpayers in the state contributed over \$270 million through state appropriations to the University of Michigan. What did they get in return?

Well, there are certain obvious payoffs. For example, it provided an outstanding education for over 50,000 students including 29,000 undergraduates, 80 percent of them Michigan residents. It also produced 12,000 graduates at all degree levels in all disciplines and professions.

But this investment yielded far more. For example, in comparison to the \$270 million invested by tax payers of the state, the University attracted to Michigan over \$410 million in federal support in the form of sponsored research contracts, student financial aid, and health care. Further, students attracted to our programs contributed another \$300 million in tuition fee payments. In addition, the auxiliary activities of the University, such as its hospitals, residence halls, and athletic teams, contributed another \$800 million to the state's economy. Added all together, the University's activities generated a \$1.8 billion impact on the state's economy, a multiplying factor of roughly six-fold when compared to the taxpayer investment.

But that's not all: it is estimated that the true economic impact of the University multiplies its state appropriation by at least a factor of ten or more. For example, the University's engineering programs are recognized as a key in the recent growth of a \$5 billion industry in industrial automation that has sprung up in the southeastern Michigan area. Each year the University spins off dozens of new companies, creating new jobs and attracting new dollars to our state. Each year the University produces thousands of engineers, scientists, business executives, doctors, nurses, lawyers, teachers, and all of the other professionals so necessary to compete in the knowledge-based economy which characterizes our world.

The Importance of the Research University

It is clear that the public research university, an institution for which the University of Michigan is not only the prototype but perhaps also the flagship, touches the lives of a great many people in a great many different ways. Since World War II our society has assigned to the research university an increasing number of roles, broadening its mission far beyond that of simply producing the educated people needed by our society. Through education, research, and service; through health care, economic development; and yes, even through a sense of pride in athletic accomplishments.

As important as these institutions are today in our everyday lives, it is my belief that in the future they will play an even more critical role as they become the key players in providing the knowledge resources—knowledge itself and the educated citizens capable of applying it wisely—necessary for our prosperity, security, and social well-being.

A World Transformed

Few of us realize the full implications of the ever-accelerating pace of change in our world,

in our nation, and perhaps most of all, in our state. Some of you may have heard me talk frequently about the themes of these changes: a change in population, the globalization of our society and the age of knowledge. These changes are more than just talk—change is transforming our world even as we stand here today. Indeed, one might regard continual change as the only true constant of our age.

Who would have predicted several years ago:

- that Communism would be rejected around the world — swept away by the winds of freedom and democracy
- that the Berlin Wall would crumble and Germany would be reunified, and Eastern Europe would break away from the Soviet Block to embrace democracy and unite with Western Europe
- that the Soviet Union and China, together with most of the world's nations, would act together to defeat the actions of an aggressive dictator in the Middle East
- that the Soviet Union would fly apart from the centrifugal forces of freedom and nationalism
- that the share of the domestic automobile market held by U.S. auto companies would drop below 50 percent
- that test tube fertilization would become routine
- that it would be possible for a person to communicate on a palm-sized cellular phone from any place on the surface of the earth
- or that Bo Schembechler would become president of the Detroit Tigers

Yet, all of these events have actually happened, along with so many other events that have changed our state, our nation, and our world.

And these changes are just the tip of the iceberg. Even more profound changes are underway. We are becoming more diverse, more pluralistic as a people. Indeed, almost 85 percent of the new entrants into our work force during the decade ahead will be people of color, women, or immigrants. Further, our population, economy, and commerce everyday are becoming more interdependent with other nations as the United States becomes a world nation, a member of the global village. And we are rapidly evolving into a new post-industrial society, indeed, a "hyper-industrial" society in which the key strategic commodity necessary for prosperity and social well-being has become knowledge itself—educated people and the ideas they produce. Knowledge now plays the same role that in the past was played by natural resources or geographic location or labor pools.

We live in a time of breathtaking change, at a pace that continues to accelerate even as I speak. The reality is that we have entered the twenty-first century a decade early. The new millennium is here today in 1991, and we must be prepared to face a world of extraordinary change given by the explosion of knowledge itself. Many today believe that a period of change in our civilization is just as profound as that which occurred during the Renaissance, the Age of Discovery, and the Industrial Revolution. Except that while these earlier transformations took centuries to occur, the transformations characterizing our time have been compressed into a decade or less.

Do we know where these changes are leading? What will the world of the twenty-first century be like? All that reasonably can be said is that our world will change more in the next ten years than at any other period of our history. Are we ready for it? Are we prepared to face a world whose economy, culture, and polity is driven by the explosion of knowledge itself?

The Signs of Change in Michigan

Needless to say, this time of change has posed great challenges to Michigan. The America of the twentieth century that we have known was a nation characterized by a rather homogeneous, domestic, industrialized society. But that is already an America of the past. Today we find ourselves to be a highly pluralistic, knowledge-intensive world nation. The impact of these changes is already painfully apparent to Michigan workers and industries.

In fact, it is here in Michigan, in the heart of the rust belt, that the impact of these extraordinary changes are most clearly seen. We all know that the past decade has been a period of great difficulty for our state. Industries of great economic importance to our nation, such as steel and automobiles, have fallen victim to intense competition from abroad. Plants have closed. We still have many people chronically unemployed or underemployed.

There are many indicators of the impact of this transition on our state. For the past decade Michigan has slipped badly in several key indicators of the quality of life. The state ranks:

- 30th in per capita income
- 37th in child well-being
- 39th in housing affordability
- 41st in overall employment
- 48th in business climate
- 48th in high school graduation rates
- 50th in return on federal tax dollars

Oh, we still rank near the top in some things:

- 14th in teenage unemployment rate
- 13th in incarceration rate (and rising rapidly)
- 13th in percentage of children in poverty
- 12th in property tax burden
- 10th in infant mortality
- 4th in public aid recipients
- 1st in mortality from major disease

The situation is particularly alarming for Michigan's children:

- One-third of Michigan's children now live in poverty.
- One-sixth live on public assistance.
- In Wayne County, one-third of all infants now live in foster care, casualties of the drug culture that has taken over our cities.

A bleak picture to be sure. What are we doing about it? Are we responding to these challenges, preparing for the future?

The Dangers of Underinvestment

It is true that we are undergoing one of the most extraordinary periods of change in human history. Yet what remains unchanged in this age of transformation, as in the great revolutions that have preceded it, is the need for us to learn and understand ourselves and our world, to draw on the wisdom and humane values of cultures and tradition, and to apply reason to human affairs. Of course, this is the role of education in general and of the university in particular. During such periods of change, education is assuming a more important role.

Yet, there are dark clouds on the horizon, increasing evidence that we as a people have not yet recognized either the nature nor the magnitudes of the investments that we must make to achieve prosperity in this age of knowledge that is already upon us.

The challenges faced by K-12 education have already become apparent. It is clear that we are indeed "a nation at risk." It is bad enough that 20 percent of Americans are functionally illiterate and that 25 percent now fail to complete high school. Even those who do finish frequently do not have even the most rudimentary skills necessary for economic survival in a competitive world economy.

Yet beyond this we have learned that in international comparisons of achievement in science and mathematics, our grade school and high school students score at the very bottom of industrialized nations. This is serious because the coin of the realm in an age of knowledge will be science, mathematics, and technology. Most American students are simply not developing these skills. Indeed, they aren't even learning the basics—reading, writing, critical thinking, languages, geography, history, literature, and the arts. We have been talking about the twenty-first century, and this may sound remote. But think about this for a moment. These kids that are today testing at the bottom of the heap in world terms will be the backbone of our labor force at the turn of the century, and they will be running our country within the next twenty to thirty years. In fact, you will be entirely dependent on the productivity of this undereducated generation to support your social security programs and your government during your retirement years.

The situation is somewhat different yet no less acute for higher education in our state. While the quality of Michigan higher education today is still high, the long-term prognosis is poor. Over the past two decades the state of Michigan has dropped from the position of a national leader (ranked sixth in 1965), and its public support of higher education is among the lowest in the nation.

Let's look at the comparisons for a moment. Among the states Michigan currently ranks:

- 38th in appropriations per student
- 37th in appropriations as a percentage of personal income
- 26th in appropriations per capita.

Further, we not only fall significantly below the national average in our support, but it is clear that we are slipping even farther behind with each passing year. In fact, over the past decade, the increases we have provided in our support to higher education now rank forty-fifth, nearly dead

last among the states. This past year, despite the fact that the Governor and the Legislature attempted to set the support of education as a priority, we were cut yet another 2.5 percent in base budget, and our state appropriation for July, August, and September—nearly \$100 million—was deferred indefinitely.

Hence, no matter how you slice it, our state now ranks among the lowest in the nation in its support of higher education. As a highly industrialized state undergoing a dramatic change to a knowledge-intensive economy, Michigan is critically dependent upon quality higher education for well-educated citizens and creative ideas. Michigan has now fallen into the bottom ranks of industrialized states in its support of these critical resources. We are being out-spent by 30 to 40 percent in state support per student, not simply by prosperous states like California, but by neighbors such as Indiana and Ohio. They understand what Michigan has yet to grasp. The world is changing rapidly, and we have to prepare ourselves for tough competition.

Feeling the Elephant

Perhaps part of the problem is that most of us really don't understand the nature and the importance of the modern university. The relationship between the modern university and its many constituencies is a bit like the parable of the elephant being felt by the blind men. People perceive us in vastly different ways, depending upon their vantage point, their needs, and their expectations.

For example, students and parents are concerned both with the quality and the cost of education. Business and industry seek high-quality products: graduates, research, and service. Patients in our hospitals seek care that is high-quality and compassionate. Federal, state, and local government have complex and varied agendas which can both sustain us and also

constrain us. And the public itself sometimes seems to have a love/hate relationship with higher education: They take pride in our quality, revel in our athletic accomplishments, but they also harbor deep suspicions about our cost, our integrity, and even our intellectual aspirations and commitments.

As we become ever more dependent upon a broad range of constituencies, we will face increasing pressures to establish our relevance and credibility for this array of interests while at the same time sustaining our fundamental values and purposes. Quite a feat!

Yet this balancing act poses several other serious problems:

1. The diversity—indeed, the incompatibility—of the values, needs, and expectations of these various constituencies, who all view higher education through quite different lenses (the blind men feeling the elephant).
2. The tension between such responsiveness and the University's role as a center of learning where all ideas can be freely questioned in the light of reason.
3. The increasing narrowness of the public support for higher education, which has acquired a "what have you done for me lately?" flavor.

But Something Else is Wrong

But I believe there is a more serious problem. For whatever reason, our generation appears to have rejected many of the most important values of our forebears.

Quality

You would think that the one lesson we should have learned during the 1980s, in Michigan of all places, is the importance of quality in everything we do, in everything we buy. Yet, at least when it comes to education, we seem hell-bent on insisting on bargain basement prices, even if it means bargain basement quality in the nature of our institutions and in the education they are capable of providing to our sons and daughters.

Investments

So too, we appear to have adopted the adage, "Eat dessert first, the future is uncertain." By almost any measure, our nation lags all other industrialized societies in our willingness to invest in the future, whether it is in its manufacturing capacity, or infrastructure, or in our people. In a sense, as a nation we have been spending our children's future to pay for greedy consumption and quick fixes. Instead of investing in our schools, we have squandered our money on junk bonds and leveraged buy-outs, on payments and write-offs to people who already have enough, or more than enough. As Felix Roytan has put it, for the last decade the federal government and the business community have combined in the most gigantic spending and speculative binge in our history. By recklessly cutting taxes while dramatically increasing spending, they have bankrupted the richest country in the world. The junk bond peddlers and the raiders, the speculators, and the S&L hustlers, with their legions of consultants, their lobbyists, and their friendly politicians have turned this country into a vast casino and its value system into show business.

Education

Perhaps nowhere is this tendency to consume rather than invest more apparent than in education. Oh, we can point the finger of blame readily enough—at teachers and principals; at politicians and public figures; at our schools,

colleges, and universities. But perhaps it is time to look as well in the mirror.

We are the ones who steadfastly resist a tax base adequate to support both our needs and desires while providing an adequate level of support for quality education in the state. We are the ones who block any effective efforts to achieve equitable financing of education in Michigan. We are the ones who often are too busy to help our own children in their studies or to participate in their activities. We are the ones who have embraced quick fixes and gimmicks such as the state lottery and the Michigan Education Trust, rather than making the personal and public commitments necessary to ensure a quality education for our children.

Something has changed in Michigan and in America. What has happened to our long tradition that one's first responsibility was to their children? What has happened to us as a nation? Today's generation seems different. We seem determined to eat our dessert first, to meet all our needs and desires, even though it may mean that we are consuming the quality of the future we will leave our descendents.

Perhaps it is just the inevitable product of three generations of affluence, which in turn created a culture of high expectations and politics premised on high assumptions and high consumption, in which expectations became entitlement. Or perhaps it is due to an aging America, willing to place highest priorities on the needs of a retired generation while leaving little for the young. Perhaps it is the "me" generation of the 1960s, now grown into comfortable yuppiehood, a generation that has vigorously defended its rights, but all too frequently failed to step up to its responsibilities. Perhaps we now prefer dreams and illusions to the rigors of reality.

Whatever the reason, it is clear that we may well become the first generation in America that will go down in history as unable—or unwill-

ing—to provide a better future for the next generation, our children and our grandchildren.

A Fork in the Road

It is clear that our state is in the midst of a profound transition from an industrial economy based upon the abundance of natural resources, unskilled labor, and to some degree, constrained and slowly moving domestic markets to a knowledge-based economy, characterized by intensely competitive world markets, rapid change, and—most important of all—educated people and their ideas. This has not been, and will not be, an easy transition to make. .And the truth is that the outcome is still very much in doubt. Will we emerge from this transition as a world economic leader once again? Will we develop a strong, prosperous, albeit new, economy producing jobs and improving our quality of life? Or will we instead fail to heed the warnings, fail to make the investments and sacrifices necessary today for strength and prosperity tomorrow and become an economic backwater in the century ahead?

It is clear that we face a fork in the road ahead. My central theme is that education, broadly defined, will be the pivotal issue in determining which of these two alternative futures will be Michigan's and America's. Indeed, I am absolutely convinced that the dominant issue of the 1990s will be the development of our human resources. Just as previous transformations in our society were associated with major public investments and infrastructure, such as railroads and canals and highways, in the upcoming transition an equivalent infrastructure will be an educated population. The actions we must take today and the investments we must make will clearly determine our capacity to respond to this future.

Conclusion

The choices before Michigan are not easy. But the world moves on faster than ever. Change, driven by technology, has a speed all its own and not to stay abreast is to fall behind.

To be sure we must address pressing social issues of employment, health and social welfare. We must meet the important needs of our citizens today.

But we also must balance these immediate needs with an investment in our future. If we don't invest in cures, our symptoms will, in time, become fatal.

For generations the people of Michigan sacrificed so that their children could have a better life. They had faith in education. Now it is our generation's turn. We must today rekindle that faith and that commitment to the future. We must care for our children's future as much as we attempt to meet our own present needs and desires.

Some Final Challenges

Let me conclude my talk with several challenges, challenges that I believe are necessary for us to face and surmount if we are to prepare ourselves for the future of change that is already upon us.

To Our Universities

In a very real sense our state has entrusted to us its most valuable resources, its youth and its future. To be responsible stewards of the public trust, it is clear that we must strive to achieve greater cost effectiveness in our use of public funds, and I can assure you that we intend to do just that.

But even beyond this, we must become staunch guardians for the quality of our institutions. For in education, as in every other aspect of American life, quality will be the key to our future. We

need to give our children the best education and chance for the future that we can. We should be willing to pass on to them what we ourselves have received, an opportunity for a better life. Hence, to us falls the responsibility of taking the forceful and courageous actions necessary to sustain and enhance this quality. In the long run the people of the state both demand and deserve nothing less!

To You as Citizens and as Parents

Years ago our parents stepped up to their responsibilities by sacrificing to give us an opportunity for a better life through education. Now it is our generation's turn. Today we are called upon to demonstrate a similar commitment to our own children, to the next generation, and to the future.

Education represents one of the most important investments that society can make in its future, since it is an investment in its people. It is indeed the case that our state and our nation have developed one of the finest systems of public higher education in the world. But we also must remember that this resulted from the willingness of past generations to look beyond the needs and desires of the present and to invest in the future by building and sustaining educational institutions of exceptional quality, institutions that have provided those of us in this gathering today with unsurpassed educational opportunities.

We have inherited these marvelous institutions because of the commitments and sacrifices of previous generations. It is our obligation as responsible stewards, not to mention as responsible parents, to sustain them to serve our own children and grandchildren. It seems clear that if we are to honor this responsibility to future generations, we must re-establish the priority of both our personal and our public investments in education, in the future of our children, and hence in the future of our state and our nation.

The Final Challenge

I believe we can meet the challenge of the knowledge-based global society that is our future, but it is clear that to do so will require sacrifices on all our parts. It will take renewed commitment to that most fundamental of all characteristics of the new economic order: quality. And it will take a renewed investment in that most critical resource for our future, our system of public education.

Michigan has everything it needs to succeed, to once again become the economic leader of our nation and our world, if we can summon the will and the discipline to pull together to build a brighter future.