



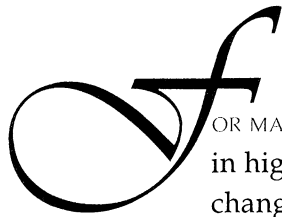
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*A Vision for the 21st Century:  
Beyond "The Leaders and Best" ...*

PRESIDENT'S WEEKEND ADDRESS

SEPTEMBER 29, 1995  
OFFICE OF THE PRESIDENT  
THE UNIVERSITY OF MICHIGAN

JAMES J. DUDERSTADT, PRESIDENT  
THE UNIVERSITY OF MICHIGAN



FOR MANY YEARS I have given speech after speech on the changes occurring in the world, in higher education, and in our University. In this paper I continue that theme of change, but in a more personal vein.

After serving for almost a decade as Provost, Acting President, and President, Anne and I have decided that this will be our last year as leaders of the University. It is my intention to retire from the presidency and return to the faculty of the University next summer.

We want to thank all of you for your support and for the privilege of serving the University in these leadership roles. It has been a wonderful and exhilarating experience, primarily because of the extraordinary people who learn in, work at, sacrifice for, and love Michigan. It has also been a satisfying period in our lives because of the exceptional progress made by the University during these years.

While there is no perfect time to step aside from a leadership role, Anne and I have decided that this year may be the best both for us and for the University. Through the efforts of countless members of the University, most of the goals we set in the late 1980s have now been achieved. Due to your efforts, by any measure, the University today is better, stronger, more diverse, and more exciting than at any time in its history.

#### THE UNIVERSITY OF MICHIGAN TODAY

Let me review some of the vital signs with you:

- National rankings of the quality of the University's academic programs are the highest since these evaluations began several decades ago. A close examination reveals that the academic reputations of our programs have increased more than any other university in America over the past decade. Further, when rankings across all academic programs and professional schools are considered, four institutions stand apart: Harvard, Stanford, the University of California, and the University of Michigan.
- Through the remarkable efforts of our faculty, the University passed MIT several years ago to rank now as the nation's leading research university, attracting more

federal, state, and corporate support for our research efforts than any other university in America.

- Despite the precipitous drop in state support over the past two decades, the University has emerged financially as one of the strongest universities in America. It is the first public university in history to receive an Aa1 credit rating by Wall Street. Our endowment has increased four-fold to over \$1.3 billion. And, thanks to your generosity, with almost two years left in the Campaign for Michigan, we are already at 90 percent of our \$1 billion goal.
- We are making substantial progress in our efforts to restructure the financial and administrative operations of the University, including award-winning efforts in total quality management, cost containment, and decentralized financial operations.
- A walk around the University reveals the remarkable transformation in our environment as we approach the completion of our massive program to rebuild, renovate, and update all of the buildings on our campuses—a \$1 billion effort funded primarily from non-state sources.
- The University Medical Center has undergone a profound transition placing it in a clear leadership position in health care, research, and teaching.
- We have launched some exceptional initiatives certain to have great impact on the future of the University and higher education more generally, such as the Institute of Humanities, the Media Union, the Institute of Molecular Medicine, the Davidson Institute for Emerging Economies, and the Tauber Manufacturing Institute.
- And perhaps most important of all, through efforts such as the Michigan Mandate and the Michigan Agenda for Women, we now have the highest representation of people of color and women among our students, faculty, staff, and leadership in our history. Michigan has become known as a national leader in building the kind of diverse learning community necessary to serve an increasingly diverse society.

As we approach the twenty-first century, it becomes clear that the University of Michigan has become not only the leading public university in America, but that it is challenged by only a handful of distinguished private universities in the quality,

breadth, capacity, and impact of its many programs and activities. Throughout higher education, people now look to us as truly “the leaders and best.”

### THE CHALLENGE OF CHANGE

It is natural to take great pride in what members of the Michigan family—faculty, students, staff, alumni, and friends—have accomplished. Working together, we have indeed built a truly extraordinary university. But we have built a university for the twentieth century, and that century is rapidly coming to an end. It is now time to lead the University in new directions, to transform ourselves to better serve a rapidly changing world.

The America of the twentieth century was a nation characterized by a homogeneous, domestic, industrialized society—an America of the past. Our students will inherit a far different nation—a highly pluralistic, knowledge-intensive, world-nation that will be the America of the twenty-first century.

Many believe that we are going through a period of change in our civilization as profound as that which occurred during the Renaissance and the Industrial Revolution—except that while these earlier transformations took centuries to occur, the transformations characterizing our times will occur in a decade or less! The 1990s are viewed as the countdown toward a new millennium; we find ourselves swept toward a new century by these incredible forces of change. However, the events of the past several years suggest that the twenty-first century is already upon us, a decade early. We live in a time of breathtaking change, at a pace that continues to accelerate.

The challenges and changes facing higher education in the 1990s are comparable in significance to two other periods of great change for American higher education: the period in the late nineteenth century when the comprehensive public university first appeared and the years following World War II when the research university evolved to serve the needs of postwar America. Many are concerned about the rapidly increasing costs of quality education and research during a period of limited resources, the erosion of public trust and confidence in higher education, and the

deterioration in the partnership between the research university and the federal government. However, our institutions will be affected even more profoundly by the powerful changes driving transformations in our society, including the increasing ethnic and cultural diversity of our people; the growing interdependence of nations; and the degree to which knowledge itself has become the key driving force in determining economic prosperity, national security, and social well-being.

One frequently hears the primary missions of the university referred to as teaching, research, and service. But these roles can also be regarded as simply the twentieth century manifestations of the more fundamental roles of creating, preserving, integrating, transmitting, and applying knowledge. From this more abstract viewpoint, it is clear that while these fundamental roles of the university do not change over time, the particular realization of these roles do change—and change quite dramatically, in fact.

Consider, for example, the role of “teaching,” that is, transmitting knowledge. We generally think of this situation in terms of a professor teaching a class of students who respond by reading assigned texts, writing papers, solving problems or performing experiments, and taking examinations; but we should be aware that this form of instruction is a relatively recent form of pedagogy. Throughout the last millennium, the more common form of learning was through apprenticeship. Both the neophyte scholar and craftsman learned by working as apprentices to a master. While this type of one-on-one learning still occurs today, in skilled professions such as medicine and in advanced education programs such as the Ph.D. dissertation, it is simply too labor-intensive for the mass educational needs of modern society.

The classroom itself may soon be replaced by more appropriate and efficient learning experiences. Indeed, such a paradigm shift may be forced upon the faculty by the students themselves. Today’s students are members of the “digital” generation. They have spent their early lives surrounded by robust, visual, electronic media—Sesame Street, MTV, home computers, video games, cyberspace networks, and virtual reality. They approach learning as a “plug-and-play” experience, unaccustomed and unwilling to learn sequentially—to read the manual—and rather inclined to plunge in and learn through participation and experimentation. While this type of learning is far different from the sequential, pyramid approach of the traditional university curriculum, it may be far more effective for this generation, particularly when provided through a media-rich environment.

It could well be that faculty members of the twentieth-first century university will be asked to set aside their roles as teachers and instead become designers of learning experiences, processes, and environments. Tomorrow's faculty may have to discard the present style of solitary learning experiences, in which students tend to learn primarily on their own through reading, writing, and problem solving. Instead they may be asked to develop collective learning experiences in which students work together and learn together with the faculty member becoming more of a consultant or a coach than a teacher.

One can easily identify other similarly profound changes occurring in the other roles of the university. The process of creating new knowledge—research and scholarship—is also evolving rapidly away from the solitary scholar to teams of scholars, perhaps spread over a number of disciplines. Indeed, is the concept of the disciplinary specialist really necessary—or even relevant—in a future in which the most interesting and significant problems will require “big think” rather than “small think”? Who needs such specialists when intelligent software agents will soon be available to roam far and wide through robust networks containing the knowledge of the world, instantly and effortlessly extracting whatever a person wishes to know?

So, too, there is increasing pressure to draw research topics more directly from worldly experience rather than predominantly from the curiosity of scholars. Even the nature of knowledge creation is shifting somewhat away from the analysis of what has been to the creation of what has never been—drawing more on the experience of the artist than upon analytical skills of the scientist.

The preservation of knowledge is one of the most rapidly changing functions of the university. The computer—or more precisely, the “digital convergence” of various media from print to graphics to sound to sensory experiences through virtual reality—has already moved beyond the printing press in its impact on knowledge. Throughout the centuries the intellectual focal point of the university has been its library, its collection of written works preserving the knowledge of civilization. Yet today, such knowledge exists in many forms—as text, graphics, sound, algorithms, virtual reality simulations—and it exists almost literally in the ether, distributed in digital representations over worldwide networks, accessible by anyone, and certainly not the prerogative of the privileged few in academe.

Finally, it is also clear that societal needs will continue to dictate great changes in the applications of knowledge it accepts from universities. Over the past several decades, universities have been asked to play the lead in applying knowledge across a wide array of activities, from providing health care, to protecting the environment, from rebuilding our cities to entertaining the public at large (although it is sometimes hard to understand how intercollegiate athletics represents knowledge application).

This abstract definition of the roles of the university has existed throughout the long history of the university and will certainly continue to exist as long as these remarkable social institutions survive. But the particular realization of the fundamental roles of knowledge creation, preservation, integration, transmission, and application will continue to change in profound ways, as they have so often in the past. And the challenge of change—of transformation—is in part a necessity simply to sustain our traditional roles in society.

#### A HERITAGE OF LEADERSHIP

There is an increasing sense among leaders of American higher education and on the part of our various constituencies that significant change on the part of our universities must occur during the 1990s if we are to respond to the challenges, opportunities, and responsibilities before us. A key element will be the capacity of universities to transform themselves into entirely new paradigms that are better able to serve a rapidly changing society and a profoundly changed world.

We must unshackle the constraints that prevent our institutions from responding to the needs of a rapidly changing society; remove unnecessary processes and administrative structures; question existing premises and arrangements; and challenge, excite, and embolden members of our university communities to embark on this great adventure. Our challenge is to provide an environment in which such change is regarded not as threatening but rather as an exhilarating opportunity to engage in learning, in all its many forms, to better serve our world.

Let me add a personal note here. Almost exactly ten years ago, as I was beginning my tenure as provost of the University, I had the opportunity to visit several leading universities in an effort to better understand Michigan's role in higher education. I still remember a fascinating conversation with Derek Bok, then president at Harvard, in which he contrasted our two institutions. He noted that Harvard could amass resources truly unchallenged in higher education and focus this wealth to create programs of extraordinary quality.

However, he also noted that despite its wealth, Harvard had great envy for one particular characteristic unique to Michigan. Bok believed that Michigan's very unusual combination of outstanding quality, vast size, and great academic breadth gave us the ability to take risks on a scale unthinkable to other universities. He viewed Michigan's unique role in higher education to be that of a pathfinder—to blaze new trails, to take chances, and to create the future.

And it is this spirit that has always animated my years of leadership. I believe that Michigan's heritage as "the leaders and best" demands a sense of adventure, a go-for-it spirit, a willingness to take chances, and, on occasion to fail, in an effort to define the future.

In 1995, the University of Michigan finds itself as well positioned as any university in America to define the very nature of the university for a twenty-first century world.

That is our challenge.

That is our destiny.

And that is also our heritage.



## SOME CONCLUDING REMARKS

In recent months, Anne and I have come to believe that such new directions may benefit best from new leadership, fresh visions, and untapped energy.

To this end, I have informed the Regents of my intention to return to the faculty at the end of this academic year. This will provide the Regents with ample time to complete the search for my successor. This transition period will also allow me to provide the stable leadership necessary to keep the University on course until a new president has been selected.

Although we have had many opportunities for leadership elsewhere, Anne and I remain deeply committed to Michigan. Indeed, after twenty-seven years on the faculty, and as dean, provost, and president, we are maize and blue down to the level of our DNA. We look forward to serving the University in new ways in the years ahead. And we look forward to many more years of working with the marvelous people who make up the Michigan family.

Thanks for the opportunity to serve!

And Go Blue!!!

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