

State of the University 1.4

Introduction

Whether at the level of the University, the state, or the nation, an address entitled "the state of something or other" is likely to be focused on the present...typically on the year past or the year ahead...

It seems more appropriate, however, that in my first State of the University address I depart from the usual tradition of talking about "what is"...and instead focus on "what might be"...

To use this as an opportunity for us to gaze into the crystal ball a bit...to considering just what directions our University might head as it prepares for the future...

I should say at the outset of this process of "futuring" that I believe the University faces a period of unusual challenge and responsibility in the years ahead...but also a time of exceptional opportunity and excitement.

Themes of the Future

Think about it for a moment...

The students we are educating today will spend most of their lives in the 21st century...

Yet most of us are very much products of the 20th Century...

Furthermore, the structure of the American university as we know it today is a product of the 19th Century!

The way we are organized into departments and

colleges...our sequential approach to education...
even the concept of courses and credit hours...
all were introduced over a century ago.

And yet the American society we serve has changed dramatically
during the past century and continues to change at an
ever accelerating pace.

It is therefore both appropriate and important to ask the question:

Is the University as we know it today really prepared to
educate the citizens and serve the society of the 21st Century?

While it is always dangerous to attempt to predict the future,
three themes seem likely to dominate:

- i) It will be a future in which our nation becomes a truly
multicultural society, comprised of a racially and
ethnically diverse population that will be extraordinary
in our history...
- ii) It will be a future in which America will become "internationalized"...
in which every one of our activities must be viewed within
the broader context of an interdependent global community...
as we become a "world nation", with ethnic ties
to every part of the globe...
- iii) It will be a future in which we rapidly evolve from a resource- and
labor-intensive society to a knowledge-intensive society,
in which intellectual capital...educated people and their
ideas...become the keys to our prosperity, security,
and social well-being.

Let's consider for a moment the challenges these themes
pose for our society and its institutions...and for our
University.

Challenges

1. The Challenge of Demographic Change...

America is changing rapidly...

When we hear references to the demographic changes occurring in our nation, our first thought probably focuses on the aging of our population.

It is indeed true that the baby boomers are now entering middle age,

and their generation has been followed by a baby bust... in which the number of young adults will be declining over the remainder of this century by roughly 22%.

And while the rapid increase in the average age of the American population is being driven primarily by the huge increase in the number of middle-age Americans as the baby boom grows up, this has followed on the heels of a significant growth in the 1980s in the number of senior Americans.

Indeed, even today there are more people over 65 than teenagers in this country, and this situation will continue for the remainder of our lives.

Further, the growth rate in both our population and workforce is declining to the lowest level in our nation's history.

America will simply not be a nation of youth again in our lifetimes.

(Note: This is in sharp contrast with much of the rest of the world. For example, in Latin America and Asia, the young comprise 40% of the population, in contrast to 20% in the US and Europe)

And this fact poses a most serious challenge to institutions such as universities which have traditionally served the young.

Yet, there is a far more profound change occurring in the population of our nation.

The racial and ethnic diversity of America is changing rapidly

For the rest of the century, less than 15% of new entrants to labor force will be white males (compared to 47% today)

...almost two-thirds will be women

...27% will be minorities

By 2020, 35% of Americans will be Black or Hispanic.

By 2000, one-third of college age students will be from these groups...

By 2000, 47% of our school children (K-12) will be Hispanic or Black (today 25% are)

In the second half of 21st Century, Hispanics will become the largest population group in America

Those groups we refer to today as minorities will become the majority population of our nation in the century ahead...just as they are today throughout the world.

America of the 21st Century will be the most pluralistic, multicultural nation on earth.

In this future, full participation of currently underrepresented minorities will continue to be of central concern for reasons of equity and social justice.

But, in addition, this objective will be the key to the future

strength and prosperity of America, since our nation cannot afford to waste the human talent represented by its minority populations.

America cannot afford the loss of this human potential, cultural richness, and leadership.

If we do not create a nation that mobilizes the talents of all our citizens, we are destined for a diminished role in the global community, social turbulence caused by growing schisms in our population, and, more tragically, we will have failed to fulfill the promise of democracy upon which this nation was founded.

Implications for UM

Many of us have become firmly convinced that the ability of the University to achieve and sustain a campus community recognized for its racial and ethnic diversity will determine not only our capacity to serve our state and nation and the world, but indeed will become the cornerstone of our efforts to achieve excellence in teaching, research, and service in the years ahead.

We believe the University has a mandate to build a model of a multicultural community for our nation...an environment which is supportive of all individuals, regardless of race, creed, national origin, gender, or sexual preference...

Which values and respects and indeed, draws its intellectual strength from the rich diversity of peoples of

different races, cultures, religions, nationalities,
and beliefs.

It seems apparent that we cannot sustain the
distinction of our University in the pluralistic world
society that is our future without intellectual
diversity and an openness to new perspectives
and experiences.

Our challenge is not to make one group from many,
to blend together all cultures into a homogeneous
mixture...but to build from many varying cultural,
racial, and ethnic groups a truly multicultural
community in which we share those common beliefs
and values which bind us together.

In a very real sense, in our effort to build the multicultural
university of the 21st Century, we are attempting to
address the most urgent and difficult issue confronting
our nation.

All of us--faculty, staff, and students--must
recognize that the challenge of diversity is our challenge
and our responsibility, and until we recognize and accept
this both as individuals and as members of the University
community, we are unlikely to achieve our goals.

In particular, let me clearly state now, at the beginning of my
presidency, that my personal commitment to meeting
the challenge of diversity is both intense and
unwavering.

I am determined that the University of Michigan achieve
leadership in higher education by developing a model of

what a pluralistic, multicultural university must become to serve America of the 21st Century -- and I urge each of you to join with me in the pursuit of this goal.

2. The Internationalization of America

Every aspect of American life is becoming internationalized...

The signs are all about it...

Communications, travel, the arts and culture

Political security and interdependence...

Internationalization of commerce, capital, and labor...

Some facts of life:

The fact is that a truly domestic US economy has ceased to exist.

The market for nearly all significant manufacturing industries has become world-wide

In slightly more than 5 years, US trade deficit has taken us from the world's largest creditor to its largest debtor nation.

Here in Michigan, in the heart of the Rust Belt, we have learned the painful lessons of the new global economic order...
...as key industries have fallen victim to intense competition from abroad...

our plants have closed...our cities have filled with the unemployed...and our social burdens have assumed staggering proportions...

The "shrinking globe" phenomenon suggests that understanding cultures other than our own is necessary not only for personal enrichment and good citizenship in the global community, but indeed, necessary for our very survival as a nation...

But there is another important reason for our renewed attention to the international agenda of the University.

The US has become the destination of about half the world's immigrants
Probably 10 million this decade alone...

One-third of annual population growth today is immigration and with falling fertility rates, immigration promises to become the main determinant of the variability in our population during the 21st Century.

America is evolving into the first true "world nation", shifting rapidly away from Eurocentricity with a emerging focus on the nations of the Pacific Rim, with economic and ethnic ties to all parts of the globe.

Thus we are no longer self-sufficient or self-sustaining. We are not immune to the shocks of the world society. We have never been more dependent on other nations and peoples.

Implications for UM

Among the University's many responsibilities and priorities, one therefore must rank high our responsibility to develop and sustain programs which reflect this international perspective.

It is true that this University has a long tradition of involvement in international activities...indeed, our academic programs, our relationships with institutions abroad, the international representation among our students and faculty...all contribute in important ways to our institution.

If the UM is to fully participate in an increasingly interdependent world, it must begin to think more imaginatively, more aggressively, and more strategically about how

to strengthen our role as a true international center of learning. To assist us in this effort, we have recently asked John Jackson, Professor of Law, to assume the post of Associate Vice President for Academic Affairs with a goal on helping us to develop an agenda for our international activities.

3. The Age of Knowledge

Looking back over history, one can identify certain abrupt changes, discontinuities, in the nature, the very fabric of our civilization...

The Renaissance, the Age of Discovery, the Industrial Revolution...

There are many who contend that our society is undergoing yet another such dramatic shift in fundamental perspective and structure.

As Erich Bloch, Director of the National Science Foundation puts it, we are entering a new age, an "Age of Knowledge"

The signs are all about us.

Our traditional industry economy is shifting to a new knowledge-based economy, just as our industrial economy evolved from an agrarian society at the turn of the century.

Industrial production is steadily switching away from material and labor intensive products and processes to knowledge intensive processes:

Our nation's future has probably never been less constrained by the cost of natural resources.

A transition in which..

Intellectual capital--brainpower-- is replacing financial and physical capital as key to our strength, prosperity, and well-being
This is having a profound impact on our social structure, culture, and economy.
There is also great intellectual change and ferment...
In many fields, the knowledge base is doubling every few years...
New ideas and concepts are exploding forth at ever increasing rates...

Concepts which have shaken apart the classical foundations of knowledge...
the theory of relativity
the uncertainty principle
the molecular foundations of life...
genetic engineering...

Radical critiques of fundamental premises, scholarship, and culture by feminists, minorities, and third world scholars.

Obscure, yet profound, new ways to approach knowledge.

Implications for UM

Our universities will face a period of unusual opportunities during the 1990s...a period in which our society will become ever more knowledge-intensive...dependent upon educated people and their ideas...and hence ever more dependent upon research universities.

It is rapidly becoming apparent that America's great research universities, as the primary sources of new knowledge and those who can apply it, will hold the key to our collective prosperity and quality of life in the age of knowledge that is our future.

Furthermore, the typical college graduate of today will likely change careers several times during a lifetime...

Hence a college education today will only serve as the stepping stone to a process of lifelong education... and the ability to adapt to...indeed, to manage change...will become the most valuable skill of all.

The University should similarly broaden its perspective and consider carefully how it might participate in the lifetime learning of our graduates.

The Need for a New Paradigm

The future will indeed be a time of great challenge... responsibility, and opportunity

It will be a time in which America becomes a highly pluralistic, multicultural society, a member of a global community ever more dependent upon knowledge.

Many of us are convinced that American higher education is facing a period of change similar to that which began more than a hundred years ago when the research university was born in response to the industrial age... when the great land grant universities were born in a profound democratic impulse to extend the

benefits of learning to all of society.

It may well be that the time has come for yet another change... as America and indeed, the world,... changes once again to a postindustrial society... a society intensely dependent upon knowledge

The research university of the future will be called upon to rebalance and adjust its traditional roles of teaching, research, a service to respond to the needs of the pluralistic, knowledge-intensive, world nation that will be America of the 21st Century.

Frank Rhodes has used the analogy of a paradigm shift in suggesting that challenges and changes that will confront higher education in the years ahead.

But I suspect that such a change in the paradigm of the research university will not be gradual and evolutionary... but rather dramatic and revolutionary..

Further, rather than the paradigm serving simply to permit replication, the new paradigm of the research university for the 21st Century will clearly be an object for further articulation, specification and refinement.

And this will require, perhaps more than at any time in the recent history of higher education unusually strong leadership...leadership capable of identifying and articulating an exciting, challenging, and compelling mission for our institutions and then uniting our university communities...and those who support and depend upon us...in a common effort to pursue this mission.

A Heritage of Leadership

Who will determine the paradigm?

Who will provide the leadership?

Why not the University of Michigan?

Our University is in an excellent position to develop this model for the nation--to once again assert its historical role as a leader in higher education in America as the flagship of public higher education

After all, in a very real sense, it was our University that developed the paradigm of the public university capable of responding to the needs of a rapidly changing America of the 19th century... a paradigm that still dominates higher education today.

Several characteristics of the University suggest this role of leadership:

1. Michigan's **Heritage** of Leadership

UM was not the originator of state universities, but it was the first to free itself of sectarian control and become a true public institution.

First large state institution to be governed by the people of the state, 1817

So too, the organic act establishing the UM in 1837 was "the most advanced and effective plan for a state university, a model for all the state institutions of higher learning which were established subsequently."

From its founding, UM was identified with the most progressive forces in American higher education... Angell's attempt to provide "an uncommon education for the common man"...

First to depart from the classical curriculum
in favor of the German approach stressing
faculty involvement in research and dedicated to
the preparation of future study, 1842

First university in the West to pioneer in professional
education, starting the Medical School in 1850,
the Law School in 1859, and engineering courses in 1854

Among the first to introduce instruction in zoology and botany,
modern languages, modern history, American literature,
pharmacy, dentistry, speech, journalism,
teacher education, forestry, bacteriology,
naval architecture, aeronautical engineering,
computer engineering...and even in my
own field, nuclear engineering (with the associated
Michigan Memorial Phoenix Project)

Beyond tradition, however, there are other characteristics
of our University today which position us well for
this role of leadership.

2. **Reputation** as the flagship of public higher education

A large, comprehensive, public, research university

A serious commitment to scholarship

Unusual breadth, rich diversity of academic disciplines,
professional schools, social and cultural activities

Unusual degree of participation of faculty and students in
University decisions

Indeed, throughout its history, UM has been known for
a spirit of democracy and tolerance in its student
body.

Harper's Weekly (1860):

"The most striking feature of the University is the broad and liberal spirit in which it does its work."

3. People

A faculty of great intellectual strength and unusual breadth
Student body of quality unsurpassed by any public institution
Largest alumni body in US (1 out of every 1,000 Americans)
(President's Club Weekend: > 700)

4. Resources

An usually broad base of support from state, federal, and private sources...

5. Ability to control our own destiny

Finally, we must never underestimate the importance of the fact that the University was created by the State Constitution...which establishes our Board of Regents as a coordinate branch of state government, with authority over the University exceeding that of the legislature, governor, and judiciary.

In a sense, we are almost unique among public institutions in having the ability to control our own destiny...

It is this rich set of characteristics that could well position the University to assume once again the leadership role it played in the 19th century by developing the new model for higher education appropriate for the needs of our state and nation in the 21st Century.

A Call for Action

If we are to be successful in defining and achieving a mission of leadership in higher education, we

will need far more than these characteristics,
however.

Let me suggest several of the most critical themes:

1. The Commitment to Quality

Of course, one of the canonical invariants, the constants,
that will allow us to respond to a future of change
is an unrelenting commitment to academic excellence
and scholarly values.

This will require that we also commit ourselves to focusing
resources to achieve excellence...since in a future
of limited resources, quality must inevitably dominate
the breadth and capacity of our programs.

So too, must we recognize that, over time,
the distinction of our institutions will be determined
by their academic excellence and fidelity to
fundamental scholarly principles.

But our adherence to the highest standards of
achievement must be based in a humble appreciation
of the sacrifices made by the generations
that built and sustain us.

Arrogance has no place in our quest for excellence.

2. Diversity, Pluralism, and Multiculturalism

It is imperative that the University both recognize
the importance of diversity and pluralism in its
mission...

And make a firm commitment to its achievement:

- i) Through the recruitment, support, retention,
and success of minority students, faculty,

staff -- and leaders

ii) And through the development of an environment of mutual understanding and sensitivity that not only tolerates diversity, but moreover seeks and embraces it as an essential objective of the institution.

We must recognize that our ability to achieve excellence in teaching, scholarship, and service will be determined will be determined a considerable degree by the diversity and pluralism of our campus community.

We draw great strength from diversity, from the new intellectual perspectives and richness of diverse cultural expressions and experiences.

We simply will be unable to sustain the distinction of our university in the pluralistic world society that is our future without reflecting this diversity in the people who comprise our campus community and throughout our intellectual activities.

3. Intellectual Leadership

The challenge of change

It will be a future in which permanence and stability are discarded in favor of flexibility and creativity... in which the only certainty will be the presence of continual change...

Just as with other institutions in our society, those universities that will thrive will be those that are

capable not only of responding to this future of change...but, indeed, have the capacity to manage and control change.

I believe that it was Burke who said that:

"A state without the means of change is without the means for its preservation"

As a scientist, I believe this is true for all institutions...and universities in particular.

One can argue that such renewal and change are essential both to the achievement and the sustaining of excellence.

Furthermore, leadership requires change, innovation, and venturesomeness

To get better, we must seek a culture in which creativity, initiative, and innovation are valued.

Unfortunately, change can be threatening, particularly when it is imposed by external factors which victimize people

But change and renewal can also empower people; it can give them control over their destiny

However, we also need a stable environment that can sustain change and risk-taking and even failure.. as they say in computers, a "fault-tolerant" environment

1. The safer you can make a situation, the higher you can raise the challenge.

We believe the University should not simply just respond grudgingly to change and challenge; it must relish and stimulate and manage a

process of continual change and renewal if
it is to sustain excellence and leadership.

4. A Return to Fundamental Values

Let me suggest, that as we contemplate the various actions
necessary for leadership in higher education, we would
do well to reconsider the most fundamental values of the
University.

For while change and renewal will be important themes of
our future, they can only occur upon a foundation
of fundamental institutional values.

Of course, academic institutions usually focus first on
intellectual values...characters of the mind....

- The seeking of wisdom
- Discipline of the mind
- Respect for reasoned conclusions
- Intellectual integrity
- Freedom of inquiry
- Democracy and justice

While these are of course essential in any university,
there are also other sets of values which we must
not ignore:

Values of moral character:

- Honesty
- Integrity
- Courage
- Compassion

Values of a civilized society:

- Tolerance and mutual respect

Collegiality, civility, and community

5. The Important "Cs":

The C Words

Community, comity, compassion

Caring, concern

Cooperation, communication, civility

As the pace of change has accelerated and its direction becomes less predictable, the potential for misunderstanding and conflict among various groups in society has increased.

Academic institutions are particularly people-dependent...

Their key to excellence is attracting and retaining the outstanding students, faculty, and staff, and providing them with the environment and encouragement to push to the limits of their abilities, and then getting out of their way!

However, in striving for a culture

Which stresses excellence, achievement, and excitement...which removes constraints from talented people and encourages them to "go for it"!

Do we also run the risk of losing that sense of collegiality, that sense of a scholarly community attempting to focus its collective wisdom on the great problems of our times?

As we attempt to build stronger and stronger programs in the traditional disciplines, do we also create strong centrifugal forces which

tend to pull the various components of the University to the periphery and diminish its core?

A challenge of the modern university is to find in our history and tradition those values that unite us and to renew those values to shape our future.

To strive for a true sense of an academic community in which the human mind is brought boldly to bear on the most enduring questions that confront us.

For that reason, we are convinced that we must look for experiences beyond the academic process to bring people together...to establish new bonds of friendship and understanding.

When we think of the university community, we tend to think first of students, faculty, and staff. But, of course, our community goes far beyond this. It is a community of families, spouses and friends, convinced that there are thousands of members of this extended Michigan family who are every bit as committed to the University as those we call faculty or staff -- who contribute their energy and talents in a host of important, yet usually unrecognized and unappreciated ways. It is essential to draw these people to into our community.

The Role of the Faculty

Of course, we realize in an institution of such size, complexity, and tradition,

The articulation and achievement of any institutional mission must be a communal effort. It will rest with faculty groups in and across schools and colleges; with students inside and outside their formal organizations; with professional and other staff throughout the University.

Hence, the role of the University leadership is simply to generate the debate...and then to provide resources for continuous experimentation.

For we are not a corporation, depending on the traditional hierarchy of command and control...

Rather we are a "voluntary" organization... a creative anarchy...in which people do what they believe in...

The momentum of this University...of any great university...must flow up from the faculty...through the administration... **from** you...not **to** you!

Great universities are run by their faculties... for their faculties, for their students, and for their society.

A Mission for the 21st Century: Leadership

How of much of this particular vision of the future will actually come to pass?

Will the themes of pluralism, internationalization, and knowledge really dominate our future...

To be sure, change is not a predictable process..

There is always a hazard to predicting the future...

But then I always remember that old saying

"The best way to predict the future is to invent it!"..

And isn't that, after all, just the role of the University...

the job of inventing the future?...

There seems little doubt that the decade ahead will indeed be a time of challenge and responsibility, opportunity and excitement.

Alternative Ending (but possibly omit)

In my roles as faculty member, dean, and provost I have become increasingly convinced that the University today faces a pivotal moment in its history... a fork in the road...

Taking the path in one direction will, with dedication and commitment, preserve the University as a distinguished-- indeed, a great--university, but only one among many such institutions.

However there is another path...a path that would require great vision and courage in addition to dedication and commitment...in which the University would seek not only to sustain its quality and distinction, but it would seek to achieve leadership as well.

I believe the University could...and should... embrace its heritage of leadership in public higher education... that the 1990s and beyond could be a time similar to that extraordinary period in the late 19th century when the University of Michigan was a primary source for much of the innovation and leadership for higher education.

And what more exiting mission could we have than to accept

this challenge by striving to develop a new model of
the public university capable of responding to the changing
needs of our state and our nation...

The challenge of making the University of Michigan the model
for the University of the 21st Century.