Building the Future:

Women Leading in Higher Education

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ACE Conference Lansing, Michigan

June 2, 1998

To paraphrase Charles Dickens, these do indeed seem like both the best of times and the worst of times for higher education in America.

- On the one hand, in an age of knowledge in which educated people and their ideas have become the wealth of nations, the university has never been more important, and the value of a college education never higher.
- The educational opportunities offered by the university, the knowledge it creates, and the services it provides are key to almost every priority of contemporary society, from economic competitiveness to national security to protecting the environment to enriching our culture.
- There is a growing recognition that few public investments have higher economic payoff than those made in higher education.
- In 1997 the federal government made the largest commitment to higher education since the GI Bill through \$40 billion of tax incentives to college students and their parents as part of the budget balancing agreement.
- In 1998 Washington took further action by proposing the largest increase in the funding of academic research in decades.
- And both the administration and Congress promise balanced budgets and generous support for years to come.

Yet, there is great unease on our campuses.

• The media continues to view the academy with a frustrating mix of skepticism, ignorance, and occasional hostility that erodes public trust and confidence.

- Although an unusually prosperous economy has provided both state and federal governments with the resources to halt the erosion in public support of higher education, the danger of intervention in the name of accountability remains high.
- Throughout society we see a backlash against earlier social commitments such as affirmative action, long a key mechanism both for diversifying our campuses and providing educational opportunity to those suffering discrimination in broader society.
- And the faculty feels the stresses from all quarters: There is fear that research funding will decline again when the economy cools and entitlement programs grow, a sense of loss of scholarly community with increasing specialization; and a conflict between the demands of grantsmanship, a reward structure emphasizing research, and a love and sense of responsibility for teaching.

To continue paraphrasing Dickens, while we may be entering an age of wisdom—or at least knowledge—it is also an age of foolishness. Last year, the noted futurist Peter Drucker shook up the academy when, during an interview in *Forbes*, he speculated: "Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book." One can imagine the network of interactions that ricocheted across university campuses in the months following Drucker's conjecture. It was fascinating to track the conversations among the University of Michigan deans on electronic mail. Some, of course, responded by blasting Drucker, always a dangerous thing to do. Others believed it to be moot. A few even surmised that perhaps a

former president of the University of Michigan might agree with Drucker. (He doesn't, incidentally.)

So what are we facing? A season of light or a season of darkness? A spring of hope or a winter of despair? More to the point, and again in a Dickensian spirit, is higher education facing yet another period of evolution? Or will the dramatic nature and compressed time scales characterizing the changes of our time trigger a process more akin to revolution?

To be sure, most colleges and universities are responding to the challenges and opportunities presented by a changing world. They are evolving to serve a new age. But most are evolving within the traditional paradigm, according to the time-honored processes of considered reflection and consensus that have long characterized the academy. Is such glacial change responsive enough to allow the university to control its own destiny? Or will a tidal wave of societal forces sweep over the academy, both transforming the university in unforeseen and unacceptable ways while creating new institutional forms to challenge both our experience and our concept of the university?

The Forces Driving Change

There are powerful forces driving an increasing societal demand for higher education services. In today's world, knowledge has become the coin of the realm, determining the wealth of nations. It has also become the key to one's personal standard of living, the quality of one's life. We are in a transition period where intellectual capital—brainpower—is replacing financial and physical capital as the key to our strength, prosperity, and well being. In a very real sense, we are entering a new age, an *Age of Knowledge*, in which the key strategic resource necessary for prosperity has become knowledge itself, that is, educated people and their ideas. Our society is becoming ever more knowledge-intensive.

As knowledge and educated people become key strategic priorities, our society has become more dependent upon those social institutions that create these critical resources, our colleges and universities. Yet there is growing concern about whether our existing institutions have the capacity to serve these changing and growing social needs—indeed, even whether they will be able to survive in the face of the extraordinary changes occurring in our world.

The forces of change of most direct concern to higher education can be grouped into four areas: i) financial imperatives, ii) changing social needs, iii) technology drivers, and iv) market forces.

Financial Imperatives

Since the late 1970s, higher education in America has been caught in a financial vise. On the one hand, the magnitude of the services demanded of our colleges and universities has increased considerably. Enrollments have grown steadily; the growing educational needs of adult learners have compensated for the temporary dip in the number of high school graduates associated

with the post-war baby boom/bust cycle. University research, graduate education, and professional education have all grown in response to societal demand. Professional services provided by colleges and universities also continue to grow in areas such as health care, technology transfer, and extension—all in response to growing needs.

The costs of providing education, research, and service per unit of activity have grown at an even faster rate, since these university activities are dependent upon a highly skilled, professional workforce (faculty and staff); they require expensive new facilities and equipment; and they are driven by an ever-expanding knowledge base. Higher education has yet to take the bold steps to constrain cost increases that have been required in other sectors of our society such as business and industry. This is in part because of the way our colleges and universities are organized, managed, and governed. But, even if our universities should acquire both the capacity and the determination to restructure costs more radically, it is debatable whether those industrial sector actions designed to contain cost and enhance productivity could have the same impact in education. The current paradigm of higher education is simply too people- and knowledge-intensive.

As the demand for educational services has grown and the operating costs to provide these services have risen, public support for higher education has flattened and then declined over the past two decades.ⁱⁱⁱ The growth in state support of public higher education peaked in the 1980s and now has fallen in many states in the face of

limited tax resources and the competition of other priorities such as entitlement programs and corrections. While the federal government has sustained its support of research, growth has been modest in recent years and is likely to decline as discretionary domestic spending comes under increasing pressure from federal budget-balancing efforts. There has been significant downsizing in federal financial aid programs over the past two decades, with a corresponding shift from grants to loans as the predominant form of aid. While the new federal budget agreement is good news to middle-class parents, it is unlikely to bring new resources to higher education.

To meet growing societal demand for higher education at a time when costs are increasing and public support is declining, most institutions have been forced to sharply increase tuition and fees—substantially faster than the Consumer Price Index. While this has provided short-term relief, it has also triggered a strong public concern about the costs and availability of a college education, along with accelerating forces to constrain or reduce tuition levels at both public and private universities. As a result, most colleges and universities are now looking for ways to control costs and increase productivity, but most are also finding that their current organization and governance makes this very difficult.

The higher education enterprise in America must change dramatically if it is to restore a balance between the costs and availability of educational services needed by our society and the resources available to support these services. The current paradigms for conducting, distributing, and financing higher education may not be able to adapt to the demands and realities of our times.

Societal Needs

The needs of our society for the services provided by our colleges and universities will continue to grow. Significant expansion will be necessary just to respond to the needs of a growing population which will create a 30 percent growth in the number of college-age students over the next decade. But these traditional students are only part of the picture; we must recognize the impact of the changing nature of the educational services sought by our society.

Eighteen to twenty-two year-old high school graduates from affluent backgrounds no longer dominate today's undergraduate student body. It is comprised also of increasing numbers of adults from diverse socio-economic backgrounds, already in the workplace, perhaps with families, seeking the education and skills necessary for their careers. When it is recognized that this demand for higher education may be significantly larger than that for traditional undergraduate education, it seems clear that either existing institutions will have to change significantly or new types of institutions will have to be formed. The transition from student to learner, from faculty-centered to learner-centered institutions, from teaching to the design and management of learning experiences, and from student to a lifelong member of a learning community—all suggest great changes are ahead for our institutions.

The students entering college today require a different form of education in which interactive and collaborative learning will increasingly replace the passive lecture and classroom experience. The student has become a more demanding consumer of educational services, although frequently this is directed at obtaining the skills needed for more immediate career goals.

We are beginning to see a shift in demand from the current style of "just-in-case" education in which we expect students to complete degree programs at the undergraduate or professional level long before they actually need the knowledge, to "just-in-time" education in which education is sought when a person needs it through non-degree programs, to "just-for-you" education in which educational programs are carefully tailored to meet the specific lifelong learning requirements of particular students. So too the shift from synchronous, classroom-based instruction to asynchronous computer network-based learning, to the provision of ubiquitous/pervasive learning opportunities throughout our society will demand major change.

The needs for other higher education services also are also changing dramatically. The relationship between the federal government and the research university is shifting from a partnership in which the government is primarily a patron of discovery-oriented research to a process of procurement of research aimed at addressing specific national priorities. The academic medical center has come under great financial pressure as it has been forced to deal with a highly

competitive health-care marketplace and the entry of new paradigms such as managed care. While the public appetite for the entertainment provided by intercollegiate athletics continues to grow, our colleges also feel increasing pressures to align these activities better with academic priorities and national imperatives (such as the Title IX requirements for gender equity).

Even as the nature of traditional activities in education, research, and service change, society is seeking new services from higher education, e.g., revitalizing K-12 education, securing economic competitiveness, providing models for multicultural societies, rebuilding our cities and national infrastructure. All of this is occurring at a time when public criticism of higher education is high, and trust and confidence in the university is relatively low.

The inability of our existing institutions to meet the growing need for higher education is magnified many times throughout the world. Just consider for a moment that over half of the world's population is under twenty years of age, most seeking education as the key to their future quality of life. To meet this staggering demand, a major new university would need to be created every week. Yet in most of the world, higher education is mired in a crisis of access, cost, and flexibility. Unless we can address and solve this crisis, billions of people in coming generations will be denied the education so necessary to compete in—indeed, to survive in—an age of knowledge.

Sir John Daniels, Chancellor of the Open University of the United Kingdom, observes that although the United States has the world's strongest university system this seems ill-suited to guiding us out of this global education crisis. Our colleges and universities continue to be focused on high-cost, residential education and to the outmoded idea that quality in education is linked to exclusivity of access and extravagance of resources. In fact, the American concept of the campus university would deny higher education to nearly all of the billions of young people who will require it in the decades ahead.

Again there are many signs that the current paradigms are no longer adequate for meeting growing and changing societal needs.

Technology Drivers

As knowledge-driven organizations, it is not surprising that colleges and universities should be greatly affected by the rapid advances in information technology—computers, telecommunications, and networks. In the past several decades, computers have evolved into powerful information systems with high-speed connectivity to other systems throughout the world. Public and private networks permit voice, image, and data to be made instantaneously available across the world to wide audiences at low costs. The creation of virtual environments where human senses are exposed to artificially created sights, sounds, and feelings liberate us from restrictions set by the physical forces of the world in which we live. Close, empathic, multiparty relationships mediated by visual and aural digital communications systems lead to the formation of closely bonded,

widely dispersed communities of people interested in sharing new experiences and intellectual pursuits created within the human mind via sensory stimuli. Rapidly evolving technologies are dramatically changing the way we collect, manipulate, and transmit information.

This technology has already had dramatic impact on our colleges and universities. Our administrative processes are heavily dependent upon information technology—as the current concern with the approaching date reset of Year 2000 has made all too apparent. Research and scholarship depend heavily upon information technology, e.g., the use of computers to simulate physical phenomena, networks to link investigators in virtual laboratories or "collaboratories," or digital libraries to provide scholars with access to knowledge resources. Yet, there is an increasing sense that new technology will have an its most profound impact on the educational activities of the university and how we deliver our services.

Most significant here is the way in which emerging information technology has removed the constraints of space and time. We can now use powerful computers and networks to deliver educational services to anyone at anyplace and anytime, confined no longer to the campus or the academic schedule. Technology is creating an open learning environment in which the student has evolved into an active learner and consumer of educational services, stimulating the growth of powerful market forces that could dramatically reshape the higher education enterprise.

Again, we must face the possibility that the current paradigm of the university may not be capable of responding to the opportunities or the challenges of the new knowledge media or the needs of the digital generation.

Market Forces

We generally think of public higher education as public enterprise, shaped by public policy and actions to serve a civic purpose. Yet market forces also act on our public colleges and universities. Society seeks services such as education and research. Academic institutions must compete for students, faculty, and resources. To be sure, the market is a strange one, heavily subsidized and shaped by public investment so that prices are always far less than true costs. Furthermore, if prices such as tuition are largely fictitious, even more so is much of the value of education services, based on myths vague perceptions such as the importance of a college degree as a ticket to success or the prestige associated with certain institutions.

In the past, most colleges and universities served local or regional populations. While there was competition among institutions for students, faculty, and resources—at least in the United States—the extent to which institutions controlled the awarding of degrees, that is, credentialing, led to a tightly controlled competitive market. Universities enjoyed a monopoly over advanced education because of geographical location and their monopoly on credentialing through the awarding of degrees. However today all of these market constraints are being challenged, as information technology

eliminates the barriers of space and time and as new competitive forces enter the marketplace to challenge credentialing.

As a result, higher education is rapidly evolving from a loosely federated system of colleges and universities serving traditional students from local communities to, in effect, a global knowledge and learning industry. With the emergence of new competitive forces and the weakening influence of traditional regulations, the higher education enterprise is evolving like other "deregulated" industries, e.g., health care, or communications or energy. Yet, in contrast to these other industries which have been restructured as government regulation has disappeared, the global knowledge industry is being unleashed by emerging information technology which releases education from the constraints of space and time, even as its credentialing monopoly begins to break apart. And, as our society becomes ever more dependent upon new knowledge and educated people, upon knowledge workers, this global knowledge business must be viewed clearly as one of the most active growth industries of our times.

Many in the academy would undoubtedly view with derision or alarm the depiction of the higher education enterprise as an "industry" or "business", operating in a highly competitive, increasingly deregulated global marketplace. Nevertheless, this is an important perspective that will require a new paradigm for how we think about postsecondary education. Furthermore, it is clear that no one, no government, is in control of the higher-education industry. Instead it responds to forces of the marketplace. Universities will

have to learn to cope with the competitive pressures of this marketplace while preserving the most important of their traditional values and character.

Evolution or Revolution?

In spite of the growing awareness of these social forces, many within the academy still believe that change will occur only at the margins of higher education. They see the waves of change lapping on the beach as just the tide coming in, as it has so often before. They stress the role of the university in stabilizing society during a period of change rather than leading those changes. This too shall pass, they suggest, and demand that the university hold fast to its traditional roles and character. And they will do everything within their power to prevent change from occurring.

Yet, history suggests that the university must change and adapt in part to preserve these traditional roles. It is true that many, both within and outside the academy, believe that significant change must occur not simply in the higher education enterprise but in each and every one of our institutions. Most of these people see change as an evolutionary, incremental, long-term process, compatible with the values, cultures, and structure of the contemporary university.

There are a few voices, however, primarily outside the academy, who believe that both the dramatic nature and compressed time scale characterizing the changes of our times will drive not evolution but revolution. They have serious doubts about whether the challenges

of our times will allow such gradual change and adaptation. They point out that there are really no precedents to follow. Some even suggest that long before reform of the educational system comes to any conclusion, the system itself will collapse.^v

The forces driving change in higher education, both from within and without, may be far more powerful than most people realize. It could well be that both the pace and nature of change characterizing the higher education enterprise both in America and worldwide will be considerably beyond that which can be accommodated by business-as-usual evolution. As one of my colleagues put it, while there is certainly a good deal of exaggeration and hype about the changes in higher education for the short term—meaning five years or less—it is difficult to stress too strongly the profound nature of the changes likely to occur in most of our institutions and in our enterprise over the longer term—a decade and beyond.

While some colleges and universities may be able to maintain their current form and market niche, others will change beyond recognition. Still others will disappear entirely. New types of institutions—perhaps even entirely new social learning structures—will evolve to meet educational needs. In contrast to the last several decades, when colleges and universities have attempted to become more similar, the years ahead will demand greater differentiation. There will be many different paths to the future.

For the past decade we have led an effort at the University of Michigan to transform ourselves, to re-invent the institution, if you will, so that it better serves a rapidly changing world. We created a campus culture in which both excellence and innovation were our highest priorities. We restructured our finances so that we became, in effect, a privately supported public university. We dramatically increased the diversity of our campus community. We launched major efforts to build a modern environment for teaching and research using the powerful tools of information technology. Yet with each transformation step we took, with every project we launched, we became increasingly uneasy.

An Example of Systemic Change: The Michigan Agenda for Women

Throughout the 175-year history of the University of Michigan, it has played a leadership role as both the flagship and the pioneer in public higher education. Furthermore, it has often served as a catalyst in our society for ideas fundamental to the nation's development. As the University prepares to enter its third century, it is clear that sustaining this tradition of leadership will be the inclusion of women as full and equal partners in all aspects of the life and leadership of the University.

Beyond equity and rightful participation, we believe that the University should accept a greater challenge consistent with its heritage of leadership for higher education and our society. In this document we challenge the University of Michigan to accept the following vision statement for its future: By the Year 2000, the University of Michigan will become the leader among American universities in promoting and achieving the success of women of diverse backgrounds as faculty, students, and staff.

To achieve such a vision, the University will have to change dramatically. Such institutional change will require vision, courage, commitment, and leadership. It will require investing University resources in women and in programs that serve them, as well as accountability throughout the institution. It will also require a bold strategy in which we set clear directions, implement decisive actions, and build strong and sustained support throughout the University community and its various external constituencies.

In this document, we outline a plan designed to achieve this leadership vision over the next several years. We refer to this plan as *The Michigan Agenda for Women: Leadership for a New Century*, or more simply, the *Michigan Agenda*. This plan is intended to integrate the goals of gender equity and the participation of women into the University's strategic planning and administrative processes. It calls for dramatically increasing the representation of women among the faculty, the administration, and the leadership of the University. And this plan will aim as well to create a University climate that fosters the success of women as faculty, students, and staff.

This plan is designed to be an organic, evolving tool for achieving institutional change. Over time, its evolution will be shaped by the counsel, experience, and wisdom of those--both within and external to the University--who become committed to institutional leadership

in the success of women. The Michigan Agenda will provide a framework for continuing dialogue, planning, and action through a dynamic process that we hope will eventually reach and involve every member of the University community.

The Challenges

Despite these efforts, and beyond the good news in some areas, it is also clear that the University has simply not made the progress that we should have. Below we summarize the conclusions of a number of recent studies:

Faculty Hiring

In faculty hiring and retention, despite the increasing pools of women in many fields, the number of new hires of women has not changed significantly. We have made little progress in increasing the total number of women faculty over the past decade, still remaining at 20 percent. In some disciplines such as the physical sciences and engineering, the shortages are particularly acute. We continue to suffer from the "glass ceiling" phenomenon, i.e., that women can see through yet not break through to the ranks of senior faculty and administrators. The proportion of women decreases steadily as one moves up the academic ladder (34 percent of assistant professors, 23 percent of associate professors, 9 percent of full professors). Furthermore, in the past five years, only 24 percent of new associate professors and 10 percent of new full professors were women, thus perpetuating the status quo. Over the past decade, the representation

of women at the full professor level has increased only modestly, from 6 percent to 9 percent.

Additionally, there appears to be an increasing tendency to hire women off the tenure track as postdoctoral scholars, lecturers, or research scientists. The rigid division among various faculty tracks provides little opportunity for these women to move onto tenure tracks.

Faculty Success

Retention of women faculty remains a serious concern. Statistical studies in recent years suggest that women are less likely (by 30 percent) than men to be either reviewed for promotion or recommended for promotion at the critical step between assistant professors and associate professors.

Women faculty, like men, come to the University of Michigan to be scholars and teachers. Yet because of their inadequate representation in the University, our women faculty are stretched far too thin. Virtually every woman faculty member is asked to assume a multitude of administrative assignments. While this is true for women faculty at all ranks, it takes the greatest toll on junior faculty.

The period of greatest vulnerability in promotion and retention of women is in the early stage in their academic careers, when they are assistant professors attempting to achieve tenure. Women faculty experience greater demands for committee service and mentoring of women students; inadequate recognition of and support for dependent care responsibilities; and limited support in the form of mentors, collaborators, and role models. The small number of women at senior levels is due in part to early attrition in the junior ranks.

Women faculty at all ranks continue to describe their difficulties in juggling teaching, research, formal and informal advising, departmental and University-wide committee service, and family responsibilities. The majority of female faculty do not feel that these difficulties arise from overt or systematic discrimination, but rather from the interaction between a system that is becoming increasingly demanding and competitive, and their personal lives, which are often more complex than those of their male colleagues because of dependent care responsibilities.

It is also clear that despite the efforts of many people, we still suffer gender-based inequities with respect to resources made available to individual faculty members in areas such as startup salaries, access to funding for the summer months, laboratory space and office space.

The Culture

While the low participation of women in senior faculty ranks and among the University leadership may be due in part to the pipeline effect of inadequate numbers of women at lower ranks, this absence of senior women could also be due to the degree to which senior men faculty and administrators set the rules and perform the evaluations

in a way--whether overt or unintended--that is biased against women.

Surveys to identify the barriers to success and comments on equity in hiring, promotion, and workload reveal a general discontent about the department and university climate in which faculty women must work. Many view the University as being intolerant. They feel frustrated in a system that they see as unworkable. They believe that old boy networks abound. Women feel that in order to succeed they must play by the rules that have been previously set up by the men in their fields. They also suggest there may be differences in styles between the two genders which further increase the difficulty of female faculty in achieving their career goals.

While some women feel at ease within the existing male-designed system, many others see themselves as isolated, lacking mentors, and not being included in various local and national networks. One notes, "My profession is male-oriented and very egalitarian. The men are willing to treat everyone the same as long as you act like a man."

In raising these concerns about the campus culture, women do not seek special privileges. But they recognize that the rules have been made largely by men to benefit men. These must now be modified to accommodate women as well. Women seek equal support for equal effort.

University Leadership Roles

Many concerns derive from the extreme concentration of women in positions of lower status and power--as students, lower level staff, and junior faculty. The most effective lever for change may well be a rapid increase in the number of women holding positions of high status, visibility, and power. This would not only change the balance of power in decision-making, but it would also change the perception of who and what matters in the University. Yet here we face a particular challenge.

The University of Michigan has acquired an external image as a tough and unforgiving place for women in senior academic or staff leadership roles. Furthermore, there is a sense that many women have accepted or been assigned roles of considerable responsibility without adequate authority to succeed in the position. The number of women faculty and staff in key administrative posts is unacceptably low. For example, over the past several years, the University has lost several women in senior leadership positions (including three deans, one chancellor, two associate vice presidents, and two directors). Although in most of these cases, women leaders went on to more senior positions elsewhere, the fact that the University was unable to retain them or recruit other women into these senior positions is a reason for concern. Many academic and administrative units have no women in key leadership positions.

Women of Color

Women of color can face the double jeopardy of racial and gender discrimination. While the Michigan Mandate has made some progress in increasing the representation of women of color among both faculty and students, they still face many special needs and concerns in achieving full participation in the University. Today, only 3.1 percent of tenure/tenure-track faculty are women of color. Furthermore, the proportion of women faculty of color who achieve promotion is lower than that of either men of color or white women.

So too, women staff of color face particular challenges. Job segregation and promotion among staff are particularly important issues.

Staff Issues

The great economic growth of this nation during the 1970s and 1980s was due in part to women entering the labor force. Today this increased participation has reached a plateau, in large measure because of artificial barriers our society has imposed on women moving up the career ladder. There is a concern that at the University, we simply do not do an adequate job of placing women in the key staff positions that get them ready for senior assignments. Women are not provided with adequate stepping stones to senior management, and many believe they are all too frequently used as stepping stones for others.

Women leaders have long urged adoption of a philosophy of staff development and programs to implement it. Although the M- Qualify effort seeks to address these staff developments, it is also obvious that we need a far more aggressive approach.

Salary equity and compensation are now the pre-eminent issues facing staff women. Data from the Michigan College and University Personnel Association show that University of Michigan staff salaries are now less competitive than they were a few years ago; in many cases, salaries in the lowest paid classifications have eroded most. We should aim at providing equal salaries and benefits for equal work that are independent of gender.

It is clear that we need to rethink our philosophy of staff benefits. There is a need to move to more flexible benefits plans which can be tailored to the employee's particular situation (e.g., child care rather than dependent health care). Furthermore, we should aim at providing equal benefits for equal work that are independent of gender.

Pipeline Concerns

Despite the efforts to document the "pipeline" challenges faced by each academic unit of the University (i.e., by examining pools of prospective women students, undergraduate concentrators, graduate students, and faculty at various ranks), little progress has been made in developing and implementing specific strategies to deal with underrepresentation where it is acute. Such efforts are particularly necessary in areas where women are seriously underrepresented either on faculties or in the professions.

Student Issues

While Michigan attracts outstanding women students to its various academic programs at the undergraduate, graduate, and professional levels, many others are deterred from applying to or attending the University because of perceptions concerning the environment for women at Michigan. Indeed, parents sometimes convey concerns about sending their daughters to the University and sometimes even encourage them to consider institutions with reputations for being more supportive of and providing more opportunities to women. We should move immediately to bring University policies and practices into better alignment with the needs and concerns of women students in a number of areas including campus safety, student housing, student life, financial aid, and child care.

Of course, over the longer term it is essential that we attract more women into senior faculty and leadership roles if we are to be able to attract top women students. Furthermore, as one of the nation's leading sources of scientists and engineers, the University simply must do more to encourage and support women in these fields of study--fields from which women have for decades been discouraged from entering.

The Campus Environment

Most women faculty, students, and staff succeed admirably in working and learning at the University. Nonetheless, they struggle

against subtle pressures, discrimination, and a still-common feeling of invisibility. Removing barriers and encouraging women's full participation will transform the University, creating a community in which women and men share equal freedom, partnership, and responsibility.

The Plan

Such a plan has been developed in a companion document: *The Michigan Agenda for Women: Leadership for a New Century.* In this planning effort we have sought to develop:

- clear, concise, and simple goals
- specific actions and mechanisms to evaluate their impact
- a process to involve the broader University community in helping to refine and implement the plan.

With these characteristics in mind, we propose a very simple yet challenging vision statement for the University:

The Michigan Agenda Vision Statement:

By the Year 2000, the University of Michigan will become the leader among American universities in promoting and achieving the success of women of diverse backgrounds as faculty, students, and staff.

The goals necessary to achieve this vision can be stated simply as:

- 1. To create a University climate that fosters the success of women faculty, students, and staff by drawing upon the strengths of our diversity.
- 2. To achieve full representation, participation, and success of women faculty in the academic life and leadership of the University.
- 3. To make the University the institution of choice for women students who aspire to leadership roles in our society.
- 4. To make the University the employer of choice for women staff who seek satisfying and rewarding careers and to provide opportunities for women staff who seek leadership roles.
- 5. To make the University the leading institution for the study of women and women's issues.

Conclusion

This initial plan represents only a beginning. The Michigan Agenda is intended to be an organic, evolving tool for achieving the institutional change necessary for true gender equity. It is the sketch of a vision and a plan that will evolve over time as it is shaped through the interaction with broader elements of the University community. However, our commitment to move ahead will not change, nor will our conviction that the greatness of our University will be determined by the degree to which women assume their rightful role as full participants and leaders in our community.

The University of Michigan has the opportunity to emerge as a leader in the role of women in higher education. But to earn this leadership and to achieve the vision proposed by the Michigan Agenda, it will be necessary to change the University in very profound, pervasive, and permanent ways.

Women deserve full membership and equal partnership in the life of the University. Removing barriers and encouraging women's participation in the full array of University activities will transform the University by creating a community in which women and men share equal freedom and responsibility.

The Questions Before Us

Many questions remain unanswered. Who will be the learners served by these institutions? Who will teach them? Who will

administer and govern these institutions? Who will pay for them? What will be the character of our universities? How will they function? When will they appear?

Perhaps the most profound question of all concerns the survival of the university in the face of the changes brought on by the emergence of new competitors. That is the question raised by Drucker and other futurists. Could an institution such as the university, which has existed for a millennium, disappear in the face of such changes?

Most of us, of course, believe quite strongly that the university as a social institution is simply too valuable to disappear. On the other hand, there may well be forms of the university that we would have great difficulty in recognizing from our present perspective.

Let me suggest a somewhat different set of questions in an effort to frame the key policy issues facing higher education:

1. How do we respond to the diverse educational needs of a knowledge-driven society? Here we must realize that, while the educational needs of the young will continue to be a priority, we also will be challenged to address the sophisticated learning needs of adults in the workplace while providing broader lifetime learning opportunities for all of our society.

- 2. Is higher education a public or a private good? To be sure, the benefits of the university clearly flow to society as a whole. But it is also the case that two generations of public policy in America have stressed instead the benefits of education to the individual student.
- 3. How do we balance the roles of market forces and public purpose in determining the future of higher education? Can we control market forces through public policy and public investment so that the most valuable traditions and values of the university are preserved? Or will the competitive and commercial pressures of the marketplace sweep over our institutions, leaving behind a higher education enterprise characterized by mediocrity.

Concluding Remarks

We have entered a period of significant change in higher education as our universities attempt to respond to the challenges, opportunities, and responsibilities before them. This time of great change, of shifting paradigms, provides the context in which we must consider the changing nature of the university.

Much of this change will be driven by market forces—by a limited resource base, changing societal needs, new technologies, and new competitors. But we also must remember that higher education has a public purpose and a public obligation. Those of us in higher education must always keep before us two questions: "Who do we

serve?" and "How can we serve better?" And society must work to shape and form the markets that will in turn reshape our institutions with appropriate civic purpose.

From this perspective, it is important to understand that the most critical challenge facing most institutions will be to develop the capacity for change. We must remove the constraints that prevent us from responding to the needs of rapidly changing societies, to remove unnecessary processes and administrative structures, to question existing premises and arrangements. Universities should strive to challenge, excite, and embolden all members of their academic communities to embark on what should be a great adventure for higher education.

While many academics are reluctant to accept the necessity or the validity of formal planning activities, woe be it to the institutions that turn aside from strategic efforts to determine their futures. The successful adaptation of universities to the revolutionary challenges they face will depend a great deal on an institution's collective ability to learn and to continuously improve its core activities. It is critical that higher education give thoughtful attention to the design of institutional processes for planning, management, and governance. Only a concerted effort to understand the important traditions of the past, the challenges of the present, and the possibilities for the future can enable institutions to thrive during a time of such change.

Those institutions that can step up to this process of change will thrive. Those that bury their heads in the sand, that rigidly defend

the status quo or, even worse, some idyllic vision of a past which never existed, are at very great risk. Those institutions that are micromanaged, either from within by faculty politics or governing boards or from without by government or public opinion, stand little chance of flourishing during a time of great change.

Certainly the need for higher education will be of increasing importance in our knowledge-driven future. Certainly, too, it has become increasingly clear that our current paradigms for the university, its teaching and research, its service to society, its financing, all must change rapidly and perhaps radically. Hence the real question is not whether higher education will be transformed, but rather *how* . . . and by *whom*. If the university is capable of transforming itself to respond to the needs of a culture of learning, then what is currently perceived as the challenge of change may, in fact, become the opportunity for a renaissance in higher education in the years ahead.

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ⁱ Peter Drucker, Interview, Forbes Magazine, 1997.

ⁱⁱ Joseph L. Dionne and Thomas Kean, *Breaking the Social Contract: The Fiscal Crisis in Higher Education*, Report of the Commission on National Investment in Higher Education (Council for Aid to Education, New York 1997).

^{III} David W. Breneman, Joni E. Finney, and Brian M. Roherty, *Shaping the Future: Higher Education Finance in the 1990s* (California Higher Education Policy Center, April 1997).

^{iv} Patricia J. Gumport and Brian Pusser, Academic Restructuring: Contemporary Adaptation in Higher Education, Chapter 23 in M. Petersen, D. Dill, and L. Mets, Eds., *Planning and Management for a Changing Environment: A Handbook on Redesigning Post-Secondary Institutions* (Jossey-Bass, San Francisco, 1997).

v Lewis Perelman, *Educom Report* interview.

vi Proceedings: Special Roundtable on the public and private financing of higher education, "Shaping the Future," Joint Effort of the Pew Higher Education Roundtable and the California Higher Education Policy Center with support from the Ford Foundation and the James Irvine Foundation, 8 pp., 1996.