

Flint Rotary Luncheon
Friday, June 3, 1994
12:00 noon (Remarks at 1:00 pm)
Sarvis Food Center

(Larry Kugler will do the introduction.)

Good afternoon and thank you, Larry. I would like to thank the Flint Rotary for inviting me to join you today. Before I begin with my remarks, I would like to express, on behalf of the entire University of Michigan community, our gratitude and appreciation to Larry Kugler. Larry has served as Interim Chancellor of the University of Michigan-Flint since the first of the year, and he has done a commendable job. I have valued his wise counsel and I thank him for his able leadership.

Today I would like to focus my remarks on some of the challenges we face in higher education during a time of great change, as well as the role of the University of Michigan-Flint in the local community.

Changing Nature of the Michigan Economy

Over the past couple of years, I have spoken frequently about the serious structural problems faced by our state, as evidenced by some very painful symptoms such as the bad news from Michigan industry and the closing of many industrial plants. I have also noted the degree to which we have slipped in the key indicators of the quality of life, such as per capita income, return on federal tax dollars, housing affordability, and the well-being of our children. And in other areas our numbers have been on the rise, but who wants a rise in infant mortality, or in the percentage of children living in poverty?

While these trends are alarming, my remarks today are not going to be replete with sobering statistics. The truth is that much of the recent economic news is good across the nation, and for the first time in over 20 years, the voters of Michigan were even able to agree to the first reform of an inequitable property tax structure.

And yet while a few of the symptoms are clearing up, the patient is far from cured. Many of the most fundamental challenges remain, and they must be faced.

So, why have we gone through such rough times recently? And, what are we going to do about it?

We are living in the most extraordinary of times. Who would have predicted a few years ago: the collapse of Communism, the end of the Cold War, the redefinition of the world economic order, the direct manipulation of the human gene to cure disease, the Internet phenomenon, linking 20 million people worldwide, digital convergence, in which phone and computer companies merge with the entertainment industry?

Yet all of these events have happened, and the pace of change continues to accelerate. Many believe that we are going through a change in our civilization just as profound as that which occurred in earlier times, such as the Renaissance and the Industrial Revolution, except that while these earlier transformations took centuries to occur, those characterizing our times will occur in a decade or less.

Today we are evolving rapidly to a new, post-industrial, knowledge-based society, just as a century ago our agrarian society evolved to the Industrial Revolution. A key element in the transformation is the emergence of knowledge as the new critical commodity, now as important as natural resources or low-skilled labor were in earlier times.

This new critical commodity knows no boundaries. It is generated and shared wherever educated, innovative, and creative people come together; and as we have learned, it spreads very quickly.

We have entered a new age, the Age of Knowledge, in which the key strategic resource necessary for our prosperity, security, and social well-being has become knowledge: educated people and their ideas. Indeed, the Age of Knowledge is accompanied by a fundamental transformation in our economy that is reshaping virtually every product, every service, and every job throughout our state, our nation, and indeed the world.

One of the strongest beliefs I hold is that the key to economic growth is education. Education is the only enterprise that will save us from becoming a backwater economy.

Over the next few years, we must make some hard choices and reform our K-12 system. We are closer to designing a system that lets students, teachers, and parents know what is expected of them--one that uses international benchmarks to compare our schools. But we are still far from getting parents to understand that there indeed is a problem. Michigan children may be able to compete with children from Ohio, but they are far behind children in Tokyo and Beijing. K-12 reform is imperative, and that message must be delivered more forcefully not just in Lansing, but around the state.

But there is something else. Even if we are successful in our reform of K-12 education, it is clear that we must make additional investments to create the new jobs that can employ these graduates. These jobs presently do not exist in our state.

It is important to realize that increasing the competitiveness of existing industry, while perhaps retaining market share and sustaining profits, will not retain jobs. Efforts such as total quality management, shorter cycle times, just-in-time inventory will most likely not lead to creation of new jobs. In an

Age of Knowledge, it is new knowledge itself which is necessary for creating new jobs.

To me it seems increasingly clear that new jobs in Michigan are going to be created by entirely new activities, such as genetic medicine, biotechnology, information technology and computer networking, optics, lasers, ultra high-speed technology, and automated manufacturing.

And the University of Michigan is a key ingredient in these activities. On-campus research helps to generate the creativity and ideas necessary for innovation. Faculty efforts help to attract the necessary risk capital through federal R&D support. Through our education programs, we help to produce the scientists, engineers, and entrepreneurs to create and implement new knowledge. And they are also the key to knowledge transfer.

We are fortunate that the University of Michigan and Michigan State University are among the best in the world. We can take advantage of the talent and resources that reside there right now. But to do so, we must consider the changes we face in the coming century and think far more strategically than we have in the past.

In Michigan we have a unique vantage point from which to view a particularly important feature of these changes.

If there was one sector that most strongly determined the progress of the 20th century, it was transportation and its related industries--cars, planes, trains, oil, space. Transportation determined prosperity, national security, even our culture--with the growth of suburbs, international commerce, etc.

During this period Michigan's automobile industry had no equal, and the state rapidly became one of the most prosperous and powerful industrial regions in the world.

Today things are very different. While the automobile industry is on the upswing in this country again, we have entered a new era in which the engine of progress is not transportation but rather communication and information, enabled by the profound advances we are now seeing in computers, networks, satellites, fiber optics, and related technologies.

Information technology will provide a wealth of opportunities for the future, yet both the pace and nature of the changes occurring in our world today have become so rapid and so profound that our present social structures--in government, education, and the private sector--are having increasing difficulty in sensing the changes much less understanding them sufficiently enough to allow them to respond and adapt. There are increasing concerns that our present institutions, such as universities and government agencies, which have been the traditional structures for intellectual pursuits, may turn out to be as obsolete and irrelevant to our future as the American corporation of the 1950s.

Universities such as Michigan provide an excellent example of these challenges.

Since the business of the university is knowledge, the impact of extraordinary advances in information technology could have profound implications.

Technology such as computers, networks, HDTV, ubiquitous computing, knowbots, and other technologies may well invalidate most of the current assumptions and thinking about the future nature of the university.

Instead, at Michigan we are asking ourselves questions lately such as:

Will a university of the 21st century be localized in space and time, or will it be a metastructure involving people throughout their lives wherever they may be on this planet--or beyond?

Is the concept of a specialist really necessary or even relevant in which the most interesting and significant problems will require "big think" rather than "small think?"

Will lifestyles become increasingly nomadic, with people living and traveling where they wish, taking their work with them?

In the spirit of these questions, perhaps we should pay far more attention to creating new structures more appropriate for the evolving information technology. One example would be the collaboratory, envisioned as an advanced, distributed infrastructure which would use multimedia information technology to relax the constraints on distance, time, and even reality.

And as we think about other alternative structures, we must keep in mind that the structures themselves must adapt to an environment of continual change. With that caveat, I'd like to share with you some of the more provocative themes suggested by colleagues across the University to illustrate the broad range of possibilities for the university of the twenty-first century.

21st Century Themes

These include:

-The *"state-related, but world-supported" university*: a university with a strong public character, but supported primarily through resources it must generate itself, not through general purpose appropriations.

-The *"world" university*: as a new world culture forms, a number of universities will evolve into learning institutions serving the world, albeit within the context of a particular geographical area.

-The *"diverse" university (or "uni-di-versity")*: a university drawing its intellectual strength and character from the rich diversity of humankind,

providing a model for our society of a pluralistic learning community in which people respect and tolerate diversity even as they live, work, and learn together as a community of scholars.

-The *“cyberspace” university*: a university that spans the world (and possibly even beyond) as a robust information network linking together students, faculty, graduates, and knowledge resources.

-The *“creative” university*: as the tools for creation become more robust (e.g., creating materials atom-by-atom, genetically engineering new life forms, or computer-generating artificial intelligence or virtual reality), the primary activities of the university will shift from a focus on analytical disciplines and professions to those stressing creative activities (i.e., “turning dreams into reality”).

-The *“divisionless” university*: The current disciplinary (and professional) organization of the university is viewed by many as increasingly irrelevant to their teaching, scholarship, and service activities. Perhaps the university of the future will be far more integrated and less specialized through the use of a web of virtual structures which provide both horizontal and vertical integration among the disciplines and professions.

-The *“university as capstone of a lifelong sequence of education”*: since education will increasingly require a lifetime commitment, perhaps the university should reinvent itself to span the entire continuum of education, from cradle to grave. It could form strategic alliances with other components of the educational system, and commit itself to a lifetime of interaction with its students/graduates, providing them throughout their lives with the education necessary to meet their changing goals and needs.

-The *“laboratory” university*: (the university within a university) could we create within our institution a “laboratory” or “new” university that would serve as a prototype or test bed for possible features of the university of the 21st century? The “New U” would be an academic unit, consisting of students, faculty, and programs, with a mission of providing the intellectual and programmatic framework for continual experimentation.

-The *university as a “knowledge server”*: Perhaps the triad mission of the University of Michigan--teaching, research, and service--is simply the twentieth century manifestation of the more fundamental roles of creating, preserving, transmitting, and applying knowledge. While this fundamental “knowledge server” definition of the university does not change over time, it seems clear that the particular realization of these roles is changing rapidly (e.g., digital convergence, collective learning, strategic research).

The University of Michigan is a large and complex organization--bureaucratic, conservative, and for the most part, resistant to change. Over time we have become encrusted with policies, procedures, committees, and organizational layers that tend to discourage risk-taking and creativity. We must take decisive action to streamline processes, procedures, and organizational structures to enable ourselves to better adapt to a rapidly-changing world.

As you can imagine, the transformation process poses a tremendous challenge. It will encompass every aspect of our institution, including: the mission of the university, financial restructuring, organization and governance, intellectual transformation, relations with external constituencies, and cultural change.

It won't be easy, but it won't be impossible either. Those of you who have been through a major reorganization of your companies will be able to relate well to what I am saying.

Call it “re-engineering,” “restructuring” or “re-inventing,” but gradually leaders and members of the University community must begin to develop a shared vision of what this institution should become. And this is where you, as citizens of the Flint region with an interest and a connection to the University of Michigan-Flint, can help to develop the transformation process.

UM-Flint’s Mission - Focused on Meeting the Needs of the Region

How does Flint fit into these scenarios of the university of the 21st century? It is not too soon to join together and consider seriously what role UM-Flint should play in the future.

Several months ago, Elizabeth Cummins of the *Flint Journal* authored a series of articles on the University’s role in Flint, and in one of the articles she wrote:

“As a higher education institution.....UM-Flint has been a quantifiable success, a prominent element of Flint that has flourished through what seemed its most bleak times.”

From its early days of less than 200 students, enrollment has grown to almost 6,500 students. This qualified Flint as the fastest-growing public higher education institution in the state in the past decade.

Since its establishment in 1956, the University of Michigan's Flint campus has passed through three stages of development:

- from a two-year senior college
- then a four-year baccalaureate institution
- to an institution offering a select range of programs at the master's level as well.

Flint's mission statement reads in part, " The mission of the University of Michigan-Flint is predicated on a partnership between the liberal arts and sciences and the professional areas." In addition, development of this institution "is intended to sustain and enhance the teaching and research activities, as well as physical facilities, essential to an urban-based regional institution."

Through the years, the University of Michigan-Flint has focused on meeting the needs of the region. Programs have developed as a result of community needs, including lifelong learning for students of all ages, and access for those who might not have had the opportunity to complete a college education.

The University also seeks active cooperation with other educational institutions in the area, including C.S. Mott Community College and GMI Engineering & Management Institute, to encourage complementary programs and facilities.

We continue to establish important links to the downtown community through our facilities, including the University Pavilion and the Thompson library currently under construction.

Three months ago, we launched the Community Stabilization and Revitalization Project, an effort designed to enhance the economic and social quality of life in the Flint/Genesee community. Directed by Dr. Kristen Skivington of the UM-Flint School of Management, the Community

Stabilization and Revitalization Project can provide expert faculty from the University in areas such as strategic planning, advanced production technology, quality control, continuing education, or market development, to name a few.

The University's relationship to the Flint community is enhanced and complemented by a rich array of activities and programs. Indeed, that's all good news, yet the University's role is influenced by your changing needs, and we need to know from you what those needs are and what you think they will be in the future.

And now we are entering a new era. As you probably know we have appointed a new Chancellor who will take over the helm in August.

After a national search in which a number of very strong candidates were identified and considered, the search committee's efforts helped to produce an outstanding candidate. Charlie Nelms will be the fourth chancellor at Flint. For the past seven years, Dr. Nelms has been chancellor at Indiana University East in Richmond, and he has a 20-year career in higher education, including leadership positions in a variety of settings--residential

and commuter campuses, multi-campus systems, community colleges and the private sector.

In each instance, he combined teaching and administration with community involvement.

He will bring to his new position an excellent background as an educational leader, and he is a person of great integrity and personal warmth.

And he is an individual who values the views of faculty, staff, students, and members of the local community. I strongly support Charlie Nelms in his new role, and I hope you will soon have the opportunity to welcome he and his wife Jeanetta and their son Rashid to Flint, and to work together to meet the needs of the Flint community.

I understand that some of your membership will continue discussions with UM-Flint Vice Chancellor Joanne Sullenger in an effort to broadly acquaint our incoming Chancellor with the leaders in this community, such as yourselves, and the dynamics of this region.

I hope you will each find an opportunity to give your support to Chancellor Nelms.

Conclusion

In conclusion, I believe that universities, businesses, and government must all restructure themselves to serve the future rather than perpetuate the past. We must be able to succeed in a rapidly-changing, frighteningly competitive, and knowledge-intensive world marketplace.

This is an exciting time for the University of Michigan, for the Flint community, and for American higher education. We face in the 1990s a period of significant change on the part of our universities if we are to respond to the challenges, opportunities, and responsibilities before us.

Our challenge at the University of Michigan is to work together to provide an environment in which such change is not regarded as threatening but rather

as an exhilarating opportunity to engage in the primary activity of a university--learning--in all of its many forms, to better serve our local community, the state of Michigan, the nation, and the world.

We hope you will join us as we look to the beginning of the next century and beyond, as we continue to adapt to tremendous change. We invite your input on the future of this great institution, and we look forward to working together with you.

(Q&A session to follow.)

June 1, 1994