

# Universities of the World and in the World



# Glion

- The Glion Colloquium
  - \* 20 university presidents
  - \* Comparing differing perspectives of the future of the university
- What do presidents usually talk about
  - \* Money
  - \* Politics
  - \* Students
  - \* College sports (at least for an unfortunate few...)





























# Moving to the 100,000 foot level...

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- The Current Budget Crunch (both in U.S. and Europe)
- Changing Education Needs of a Knowledge Society
- Diversity
- Technology
- Intellectual Change
- Global Sustainability
- Markets



# A Social Transformation

## The 20th Century

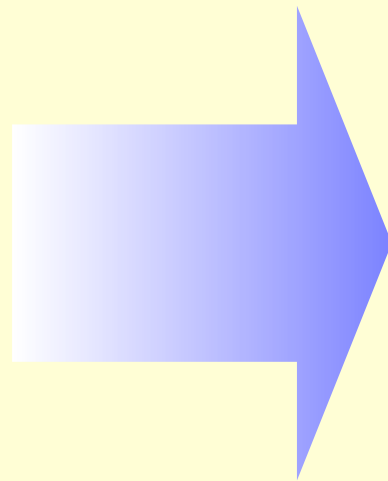
Transportation

Cars, planes, trains

Energy, materials

Nation-states

Public Policy



## The 21st Century

Communications

Computers, networks

Knowledge, bits

Nationalism

Markets



# The Age of Knowledge

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**Educated people and ideas**

**Prosperity**

**Security**

**Social well-being**

**Educated people are the most valuable resource  
for 21st societies and their institutions!!!**



# The Forces of Change

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## The Age of Knowledge

The Knowledge Explosion  
Globalization  
The High Performance Workplace  
Diversity  
Accelerating Technological Change  
Nonlinear Knowledge Transfer

Changing Societal Needs  
Financial Imperatives  
Technology Drivers  
Market Forces

# The Themes of Our Times

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- The exponential growth of new knowledge.
- The globalization of commerce and culture.
- The lifelong educational needs of citizens in a knowledge-driven, global economy.
- The increasing diversity of our populations and the growing needs of underserved communities.
- The impact of new technologies that evolve at exponential rates (e.g., info, bio, and nanotechnology).
- The compressed timescales and nonlinear nature of the transfer of knowledge from campus laboratories into the commercial marketplace.



# Forces of Change

## A Changing World

The Knowledge  
Explosion

Globalization

High Performance  
Workplace

Diversity

Technological Change

Knowledge Transfer

## Forces on the University

Economics

Societal Needs

Technology

Markets

**Evolution?**

**Revolution?**

**Extinction?**



# The Future of the University?

“Thirty years from now the big university campuses will be relics. Universities won’t survive. It is as large a change as when we first got the printed book.”

– *Peter Drucker*

“If you believe that an institution that has survived for a millennium cannot disappear in just a few decades, just ask yourself what has happened to the family farm.”

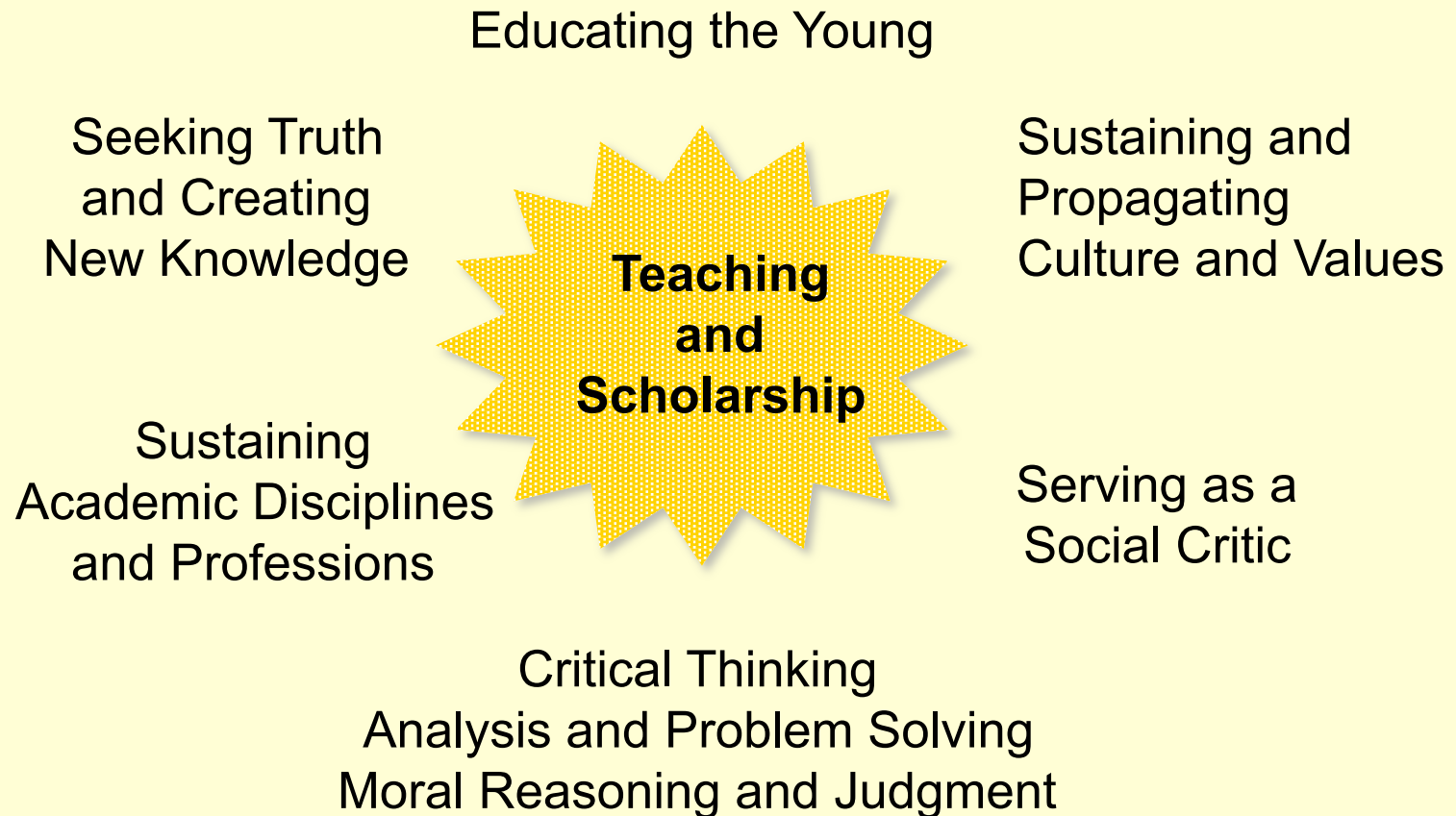
– *William Wulf*

“I wonder at times if we are not like the dinosaurs, looking up at the sky at the approaching comet and wondering whether it has an implication for our future.”

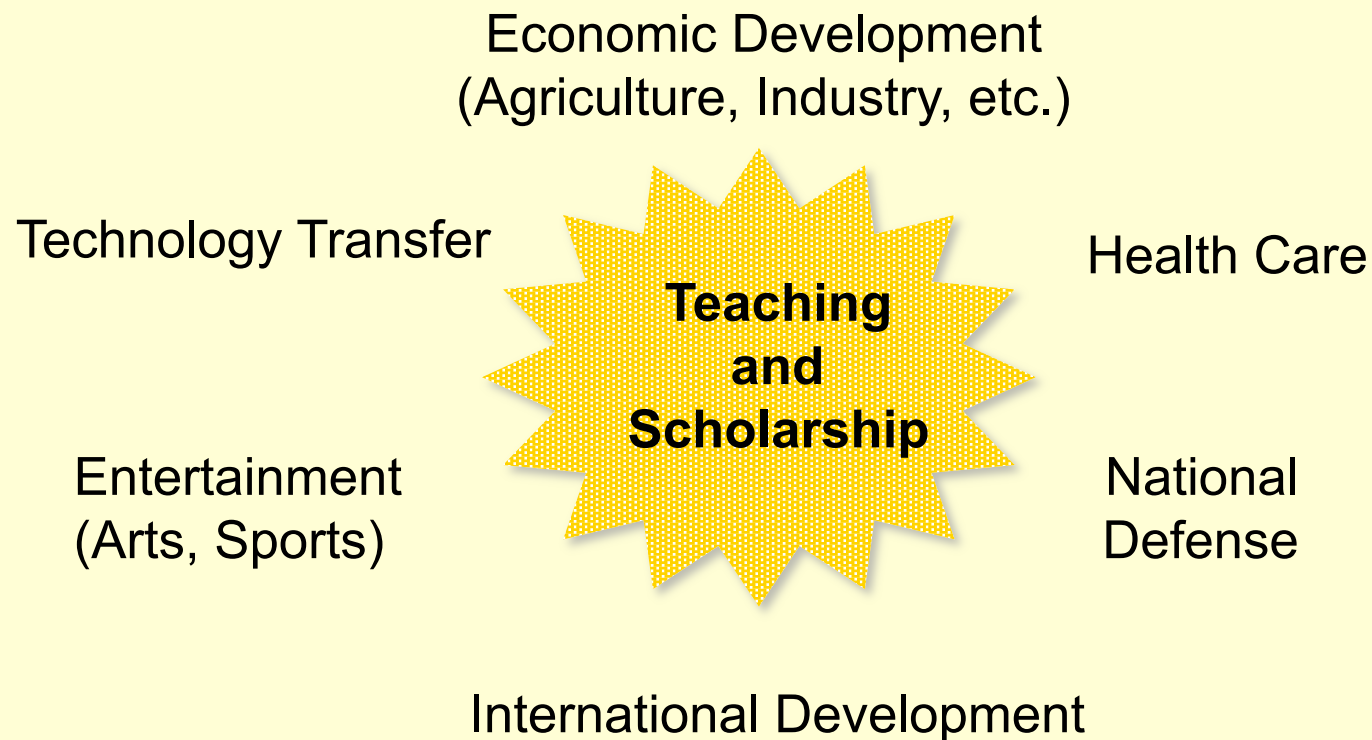
– *Frank Rhodes*



# Traditional Roles of the University: The Core



# The Traditional Roles of the University: The Periphery





# The Evolving U.S. Education System



## **Knowledge Infrastructure**

(production, distribution, marketing, testing, credentialing)

# The Forces of Change





# Forces of Change

## A Changing World

The Knowledge  
Explosion

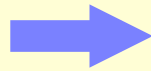
Globalization

High Performance  
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Diversity

Technological Change

Knowledge Transfer



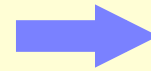
## Forces on the University

Societal Needs

Economics

Technology

Markets



**Brave New World?**

**Society of Learning?**

# Forces on the University

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- Changing Societal Needs
- Financial Imperatives
- Technology
- Market forces



# Changing Societal Needs

- Increasing population of “traditional” students
- The “plug and play” generation
- Education needs of adults in the high-performance workplace (lifelong learning)
- Passive student to **active** learner to **demanding** consumer
- “Just-in-case” to “just-in-time” to “just-for-you” learning
- Diversity (gender, race, nationality, socioeconomic,...)
- Global needs for higher education

**Concern: There are many signs that the current paradigms are no longer adequate for meeting growing and changing societal needs.**

# Global Needs

Half of the world's population is under 20 years old.

Today, there are over 30 million people who are fully qualified to enter a university, but there is no place available. This number will grow to over 100 million during the next decade.

To meet the staggering global demand for advanced education, a major university would need to be created every week.

“In most of the world, higher education is mired in a crisis of access, cost, and flexibility. The dominant forms of higher education in developed nations—campus based, high cost, limited use of technology—seem ill-suited to addressing global education needs of the billions of young people who will require it in the decades ahead.”

Sir John Daniels



# Financial Imperatives

- Increasing societal demand for university services (education, research, service)
- Increasing costs of educational activities
- Declining priority for public support
- Public resistance to increasing prices (tuition, fees)
- Inability to re-engineering cost structures

**Concern: The current paradigms for conducting, distributing, and financing higher education may not be able to adapt to the demands and realities of our times**

# Technology

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Since universities are knowledge-driven organizations, it is logical that they would be greatly affected by the rapid advances in information and communications technologies

We have already seen this in administration and research.

But the most profound impact could be on education, as technology removes the constraints of space, time, reality (and perhaps monopoly ... )

**Concern: The current paradigm of the university may not be capable of responding to the opportunities or the challenges of the digital age.**

# Market Forces

Changing societal needs, economic realities, and rapidly evolving technology are creating powerful market forces in the higher education enterprise. The traditional monopolies of the university, sustained in the past by geography and certification, are breaking apart.

We may be seeing the early signs of a **restructuring** of the higher education enterprise into a global knowledge and learning industry.

**Concern: The current faculty-centered, monopoly-sustained university paradigm is ill suited to the intensely competitive, technology-driven, global marketplace.**



# Early signs

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- Open University, University of Phoenix, etc.
- Bologna Process, European Research Council
- Universitas 21, Nakoya, Glion
- United Nations, OECD, EEC
- U.S. efforts?

# Possible UM Effort



# So what are we thinking about?

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- A think tank?
- A convenor?
- A clearinghouse?
- A pollinator?
- An access point (to One Dupont Circle, National Academies, OECD, etc.)
- An “institute for advanced studies” a la Santa Fe?



# What can we bring to table?

- UM capacity
  - \* International activities?
  - \* Social sciences?
  - \* IT efforts (CLEAR, SAKAI, Internet2)
  - \* “Michigan Mystique”?
- Linkages
  - \* National and global higher ed leadership
  - \* Scientific community
  - \* Governments, business, NGOs?
- Affiliates (beyond UM faculty)
  - \* JSB, HTS, Zemsky, Newby, Lohmann, Vest, ...

# Funding

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- Foundations
  - \* Sloan, Hewlett, Mellon, Kellogg, etc.
  - \* Feds? (NSF?)
- Industry
  - \* Relate to outsourcing?
- Affiliates Programs
- Private gifts