

Envisioning the New Century: On the Road to World Class Status

Revising the Georgia Tech Strategic Plan

Tech President G. Wayne Clough

Georgia Tech Advisory Board

October 29, 1999

Campus Planning History

- GT Strategic Plan - 1995
- Facilities Assessment and Space Study - 1996
- Capital Plan and Financing Proposal - 1996
- Campus Master Plan - 1997

Capital and Campus Plan Revision Timeline

- Revised Capital Plan and Financing Proposal - 2000
- Revised Campus Master Plan - North Avenue Research Area and Fifth Street developments - 2000
- Campus Master Plan Implementation - continuing.

Strategic Plan Revision Timeline

- Unit Strategic Plans - submitted
Fall 1999
- GT Strategic Plan Update - 2000
- GT Strategic Plan Implementation
Report - 2000/01

The Mission

- Mandate for engineering and architecture; special responsibilities in computing, sciences, and technology in humanities and social sciences
- Prepare extraordinary students for leadership in a technological world
- Conduct leading-edge research
- Inculcate expectation of excellence, respect for others and ethical behavior

The 1995 Agenda

- Enrich educational opportunities
- Improve student life
- Maintain and enhance research
- Take full advantage of technology
- Improve the infrastructure
- Identify optimum size and composition
- Expand collaboration, linkages, economic development efforts

Changing Context for Educating Students

- New admissions procedure
- Student Computer Initiative, revised curriculum with web enhancements
- Internet degree delivery
- GT Regional Engineering Program
- More students living on campus
- Shift in preference for majors

Changing Context for High-Tech Development

- Yamacraw Mission
- Metro Atlanta Chamber Industries of the Mind
- Growth of the Georgia Research Alliance
- Participant in Midtown renaissance, creation of high tech corridor

Changing Context for Resources

- Endowment has grown
- Capital Campaign is ahead of projections
- Faculty salaries for the USG have surpassed the national average
- Yamacraw Mission funds 45 faculty positions in CS and CmpE

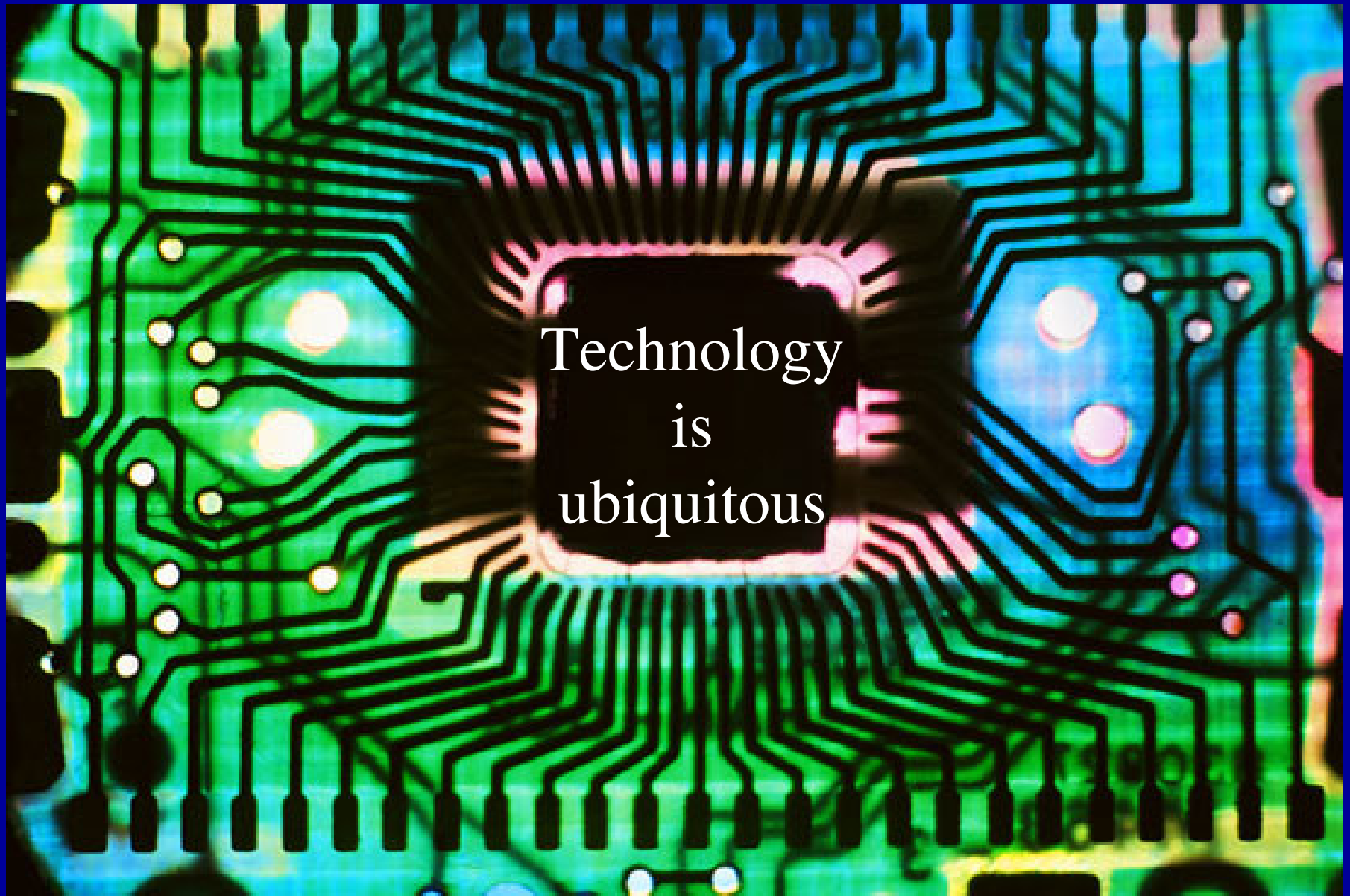
Changing Context for External Perceptions

- Rankings improvement on fast-track
- Increased involvement in state and national technology policy activities
- Recognized leader in diversity
- Perceptions still lag reality (strategic communications task force)

Revising the Plan Because...

- The context within which we operate has changed.
- Our most pressing problems have changed.
- Our level of outside recognition has increased.
- Opportunities have never been greater.
- It is time to recalibrate goals and strategy to complete with the best.

The Context of the Coming Century

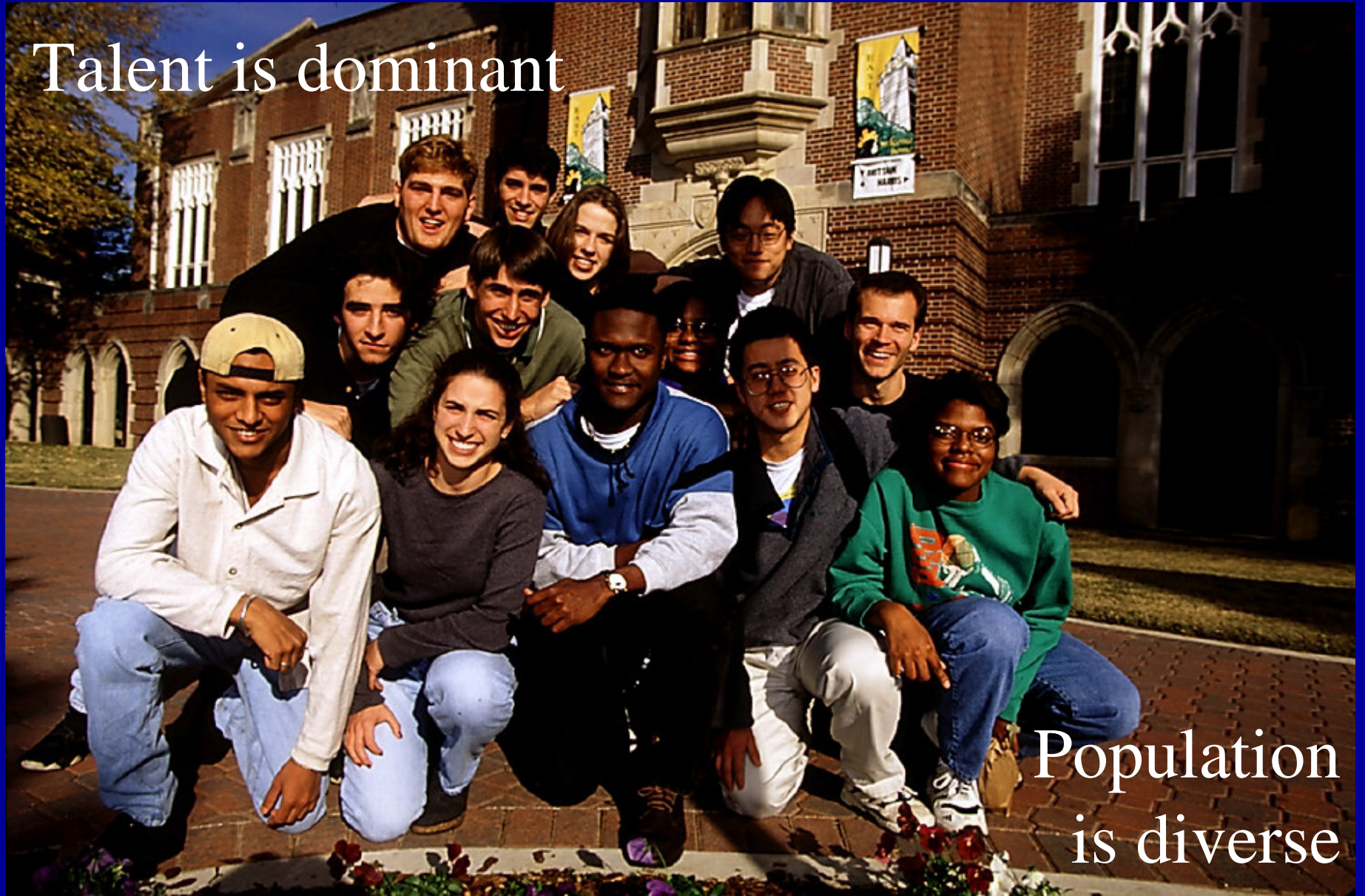


Computing
is pervasive

Internet +
Information =
Unlimited Access



Talent is dominant



Population
is diverse



Interdisciplinary
is in

Entrepreneurs have
the edge

The economy is globally networked



Research drives innovation

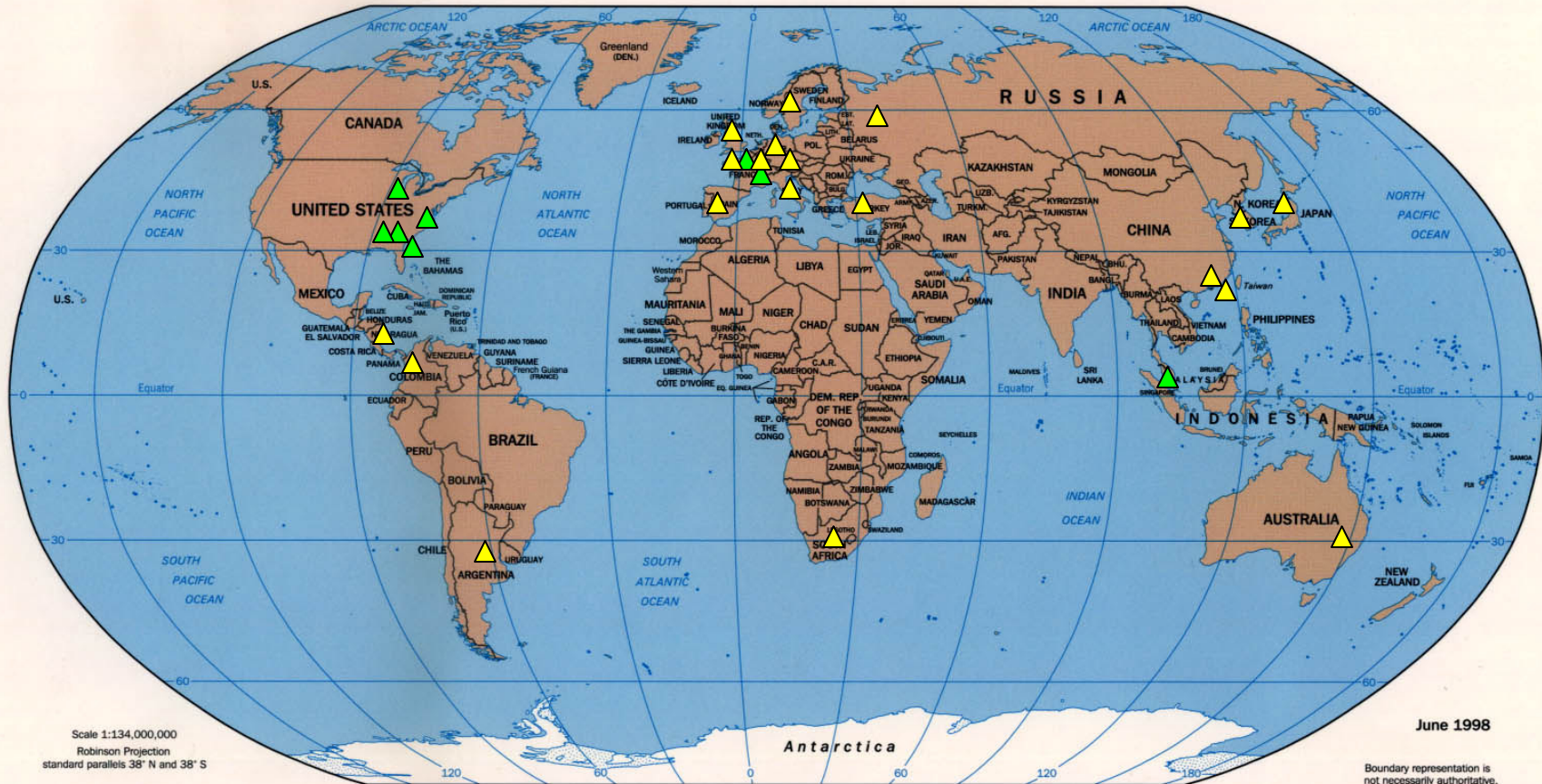


Opportunities and Challenges

Developing a Global Scope

- Sam Nunn School of International Affairs
- European Union Center
- Study abroad programs
- International beachheads

Georgia Tech's Global Reach



Opportunities and Challenges

Achieving World-Class Status

- Raise our Blue Chip profile
- Develop policy expertise and influence
- Build partnerships
- Achieve excellence across the board

Opportunities and Challenges

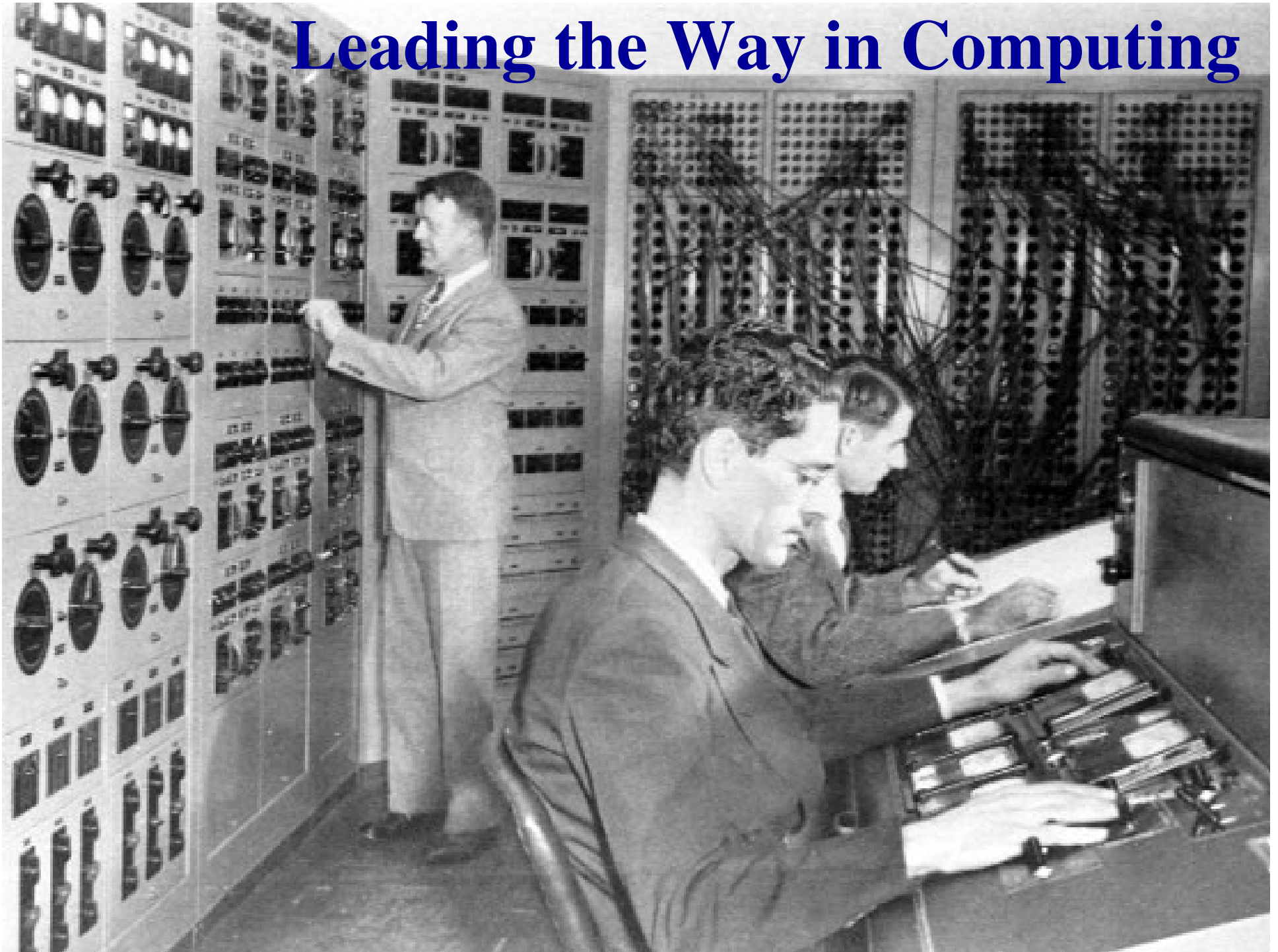
Exploring the New Economy

- DuPree Center for Entrepreneurship
- iXL Center for Electronic Commerce
- Executive master's degrees in the management of technology and international logistics
- Executive Education Center

Continuing Education and Executive Conference Center



Leading the Way in Computing

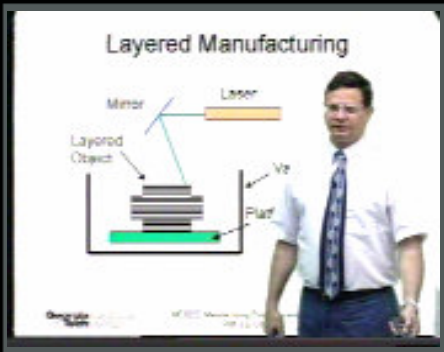


Visualizing a Virtual Future

- Enrollments double in CS and CmpE; constructing the ATC Building
- Virtual Reality: Graphic Visualization and Utilization Lab
- GT Information Security Center
- Internet education delivery

real RealPlayer: lecture2.smil
File View Options Presets Sites Help

Playlist: ME 6222 Lecture2 2 of 3



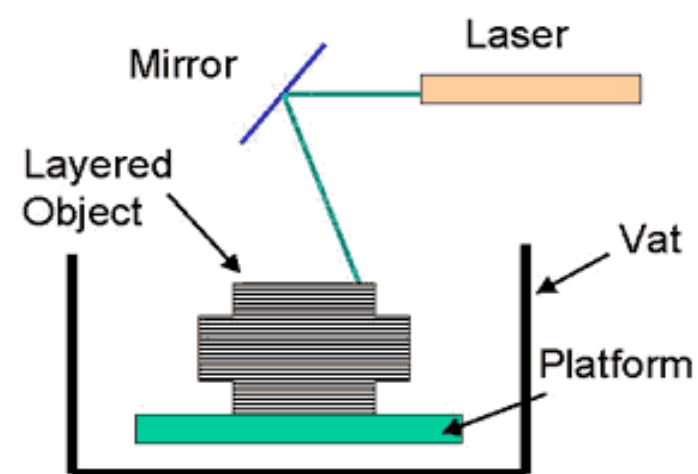
Layered Manufacturing

Mirror Laser
Layered Object Vat
Platform

Lecture 2: Bolt Manufacturing

- Beginning of Lecture
- Possible Manufacturing Methods for Metal Bolts
- Organize Processes
- Problems due to grain structure
- Mass Production
- Cost
- Flexibility
- Tolerance
-
-
-
-
-
-
-

Layered Manufacturing



Mirror Laser
Layered Object Vat
Platform

Georgia Institute of Technology

ME 6222 Manufacturing Processes and Systems
Prof. J.S. Colton

17

25.0 Kbps SureStream

G2

08:46.2/20:30.0

Opportunities and Challenges

Into the Community and Across the State

- Yamacraw Mission
- Metro Atlanta Chamber
Industries of the Mind
- GCATT
- ATDC



GCATT

Midtown Renaissance

▲ GT Facilities

▲ Start-ups

▲ Expanding
giants

◆ Atlantic Steel

— 17th St Bridge

Numerous loft/condo/
apartment projects



Changing the Neighborhood



Techwood Homes



Centennial Place

Opportunities and Challenges

Becoming Interdisciplinary From the Ground Up

- Biotechnology partnership with Emory
 - Joint department, joint degrees
 - Joint biotechnology research park
- Sustainable technology
 - Center for Sustainable Technology
 - Skidaway Institute of Oceanography
- BEM Complex

BEM Complex



Pushing the Leading Edge

- Engineering of living tissues and biotechnology
- Next generation semiconductors
- Internet 2; Southern Crossroads
- Nanostructures and miniaturization
- Advanced manufacturing
- Quality growth

Internet Hubs





John Williams
Center for Quality
Growth and
Regional
Development
SMARTAQ
Transportation
Research Institute

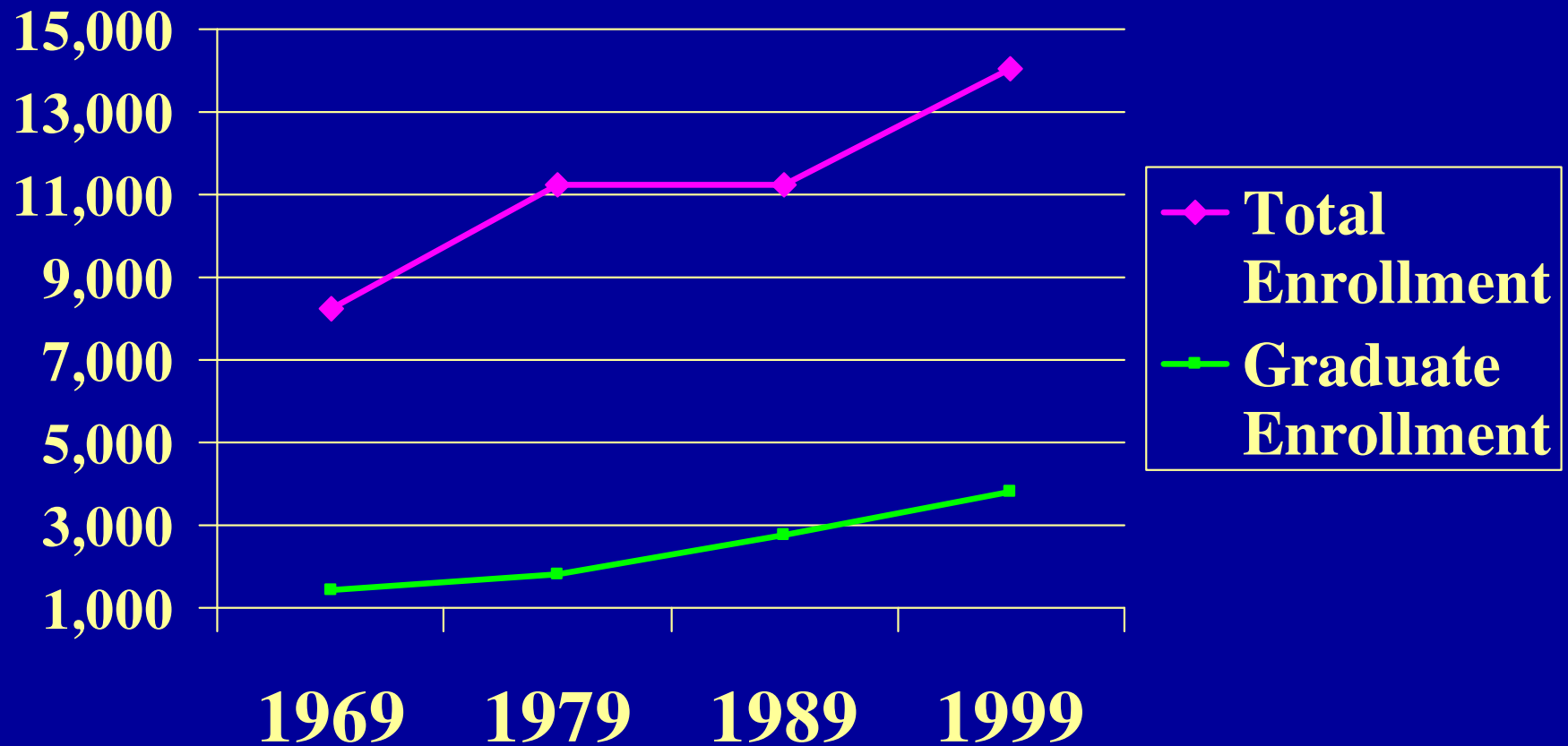
Opportunities and Challenges

Smart Growth for Georgia Tech



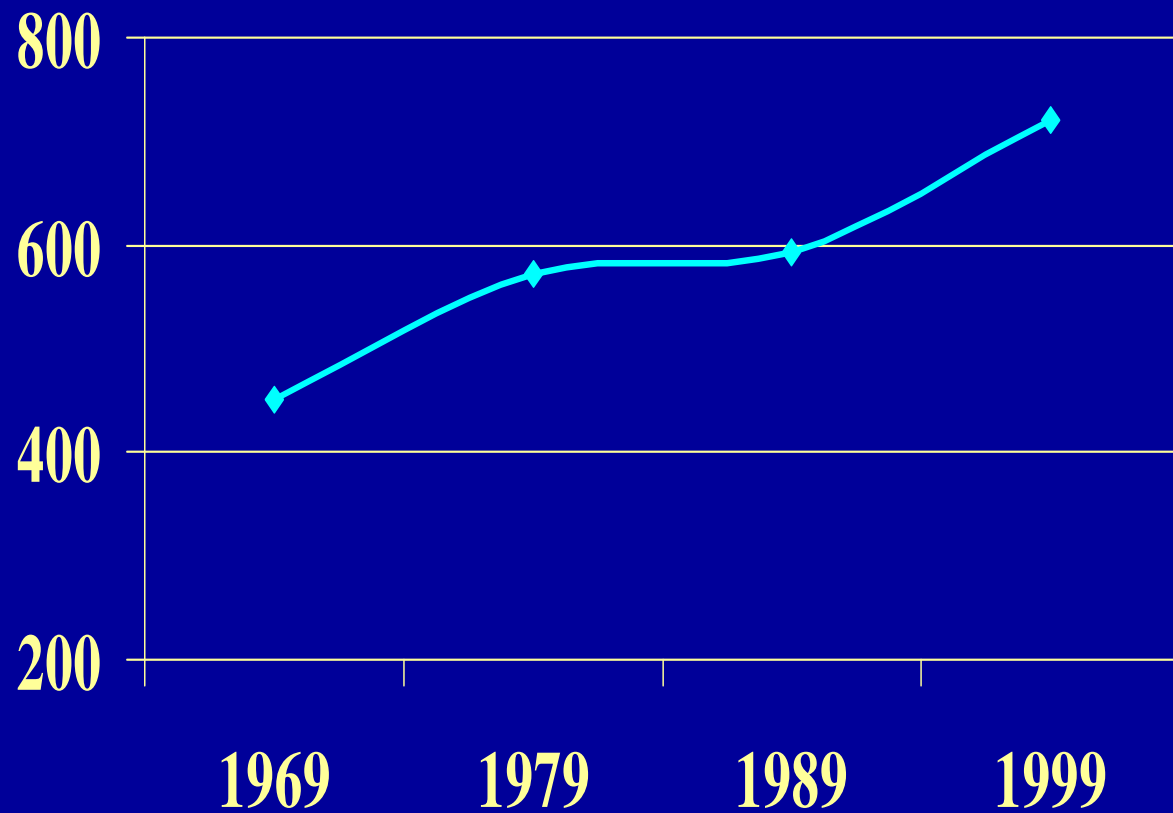
Enrollment

70% over past 30 years; graduate: 167%



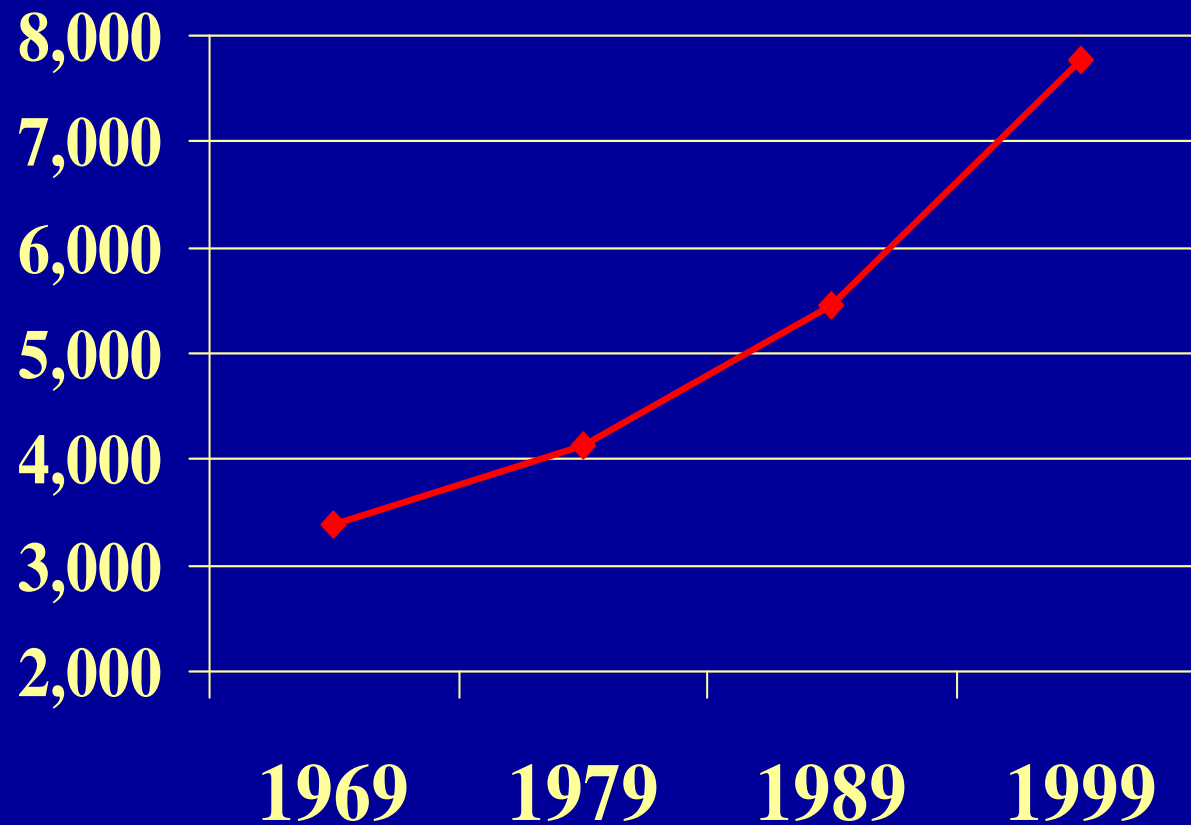
Academic Faculty

60% over the past 30 years



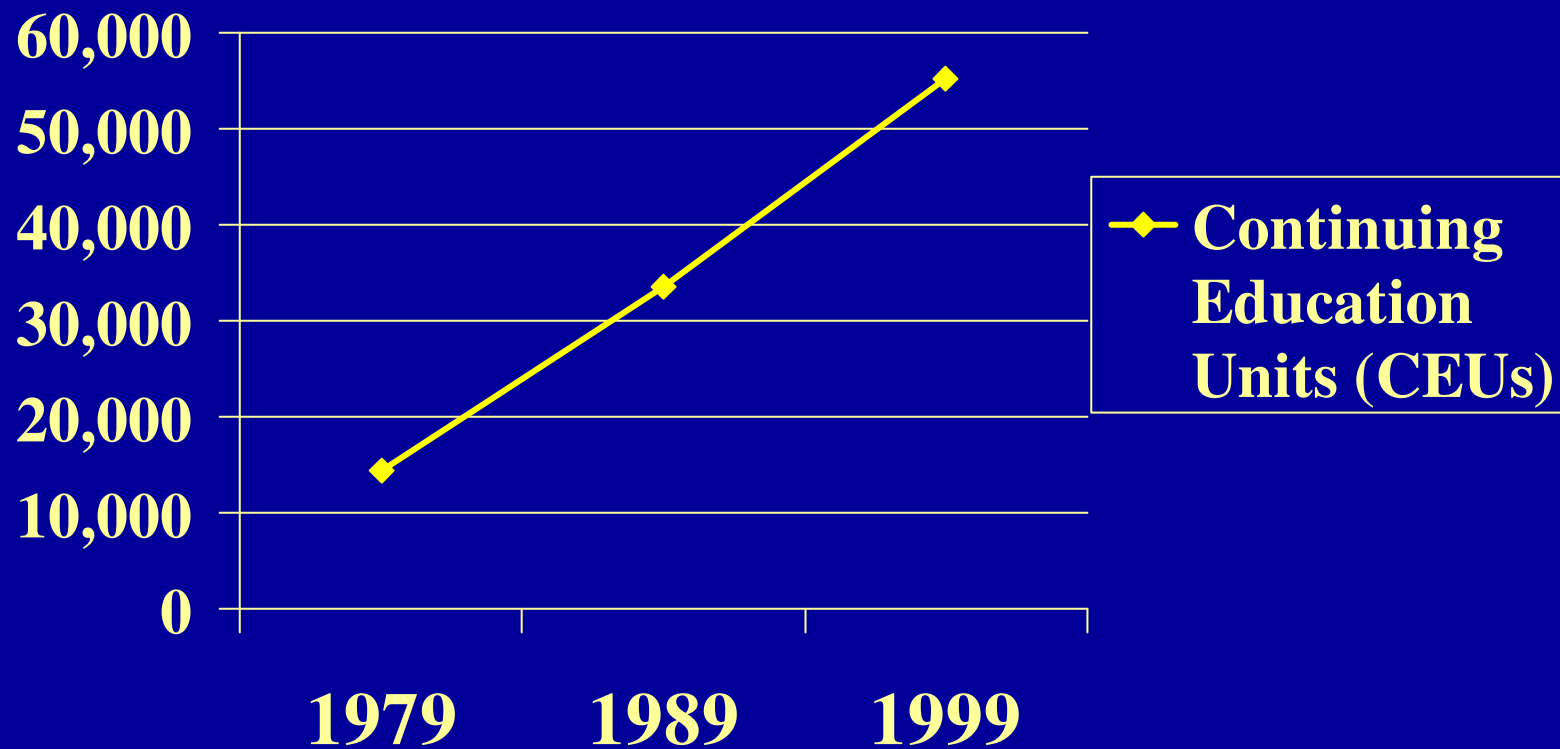
Student Housing on Campus

129% over the past 30 years



Continuing Education

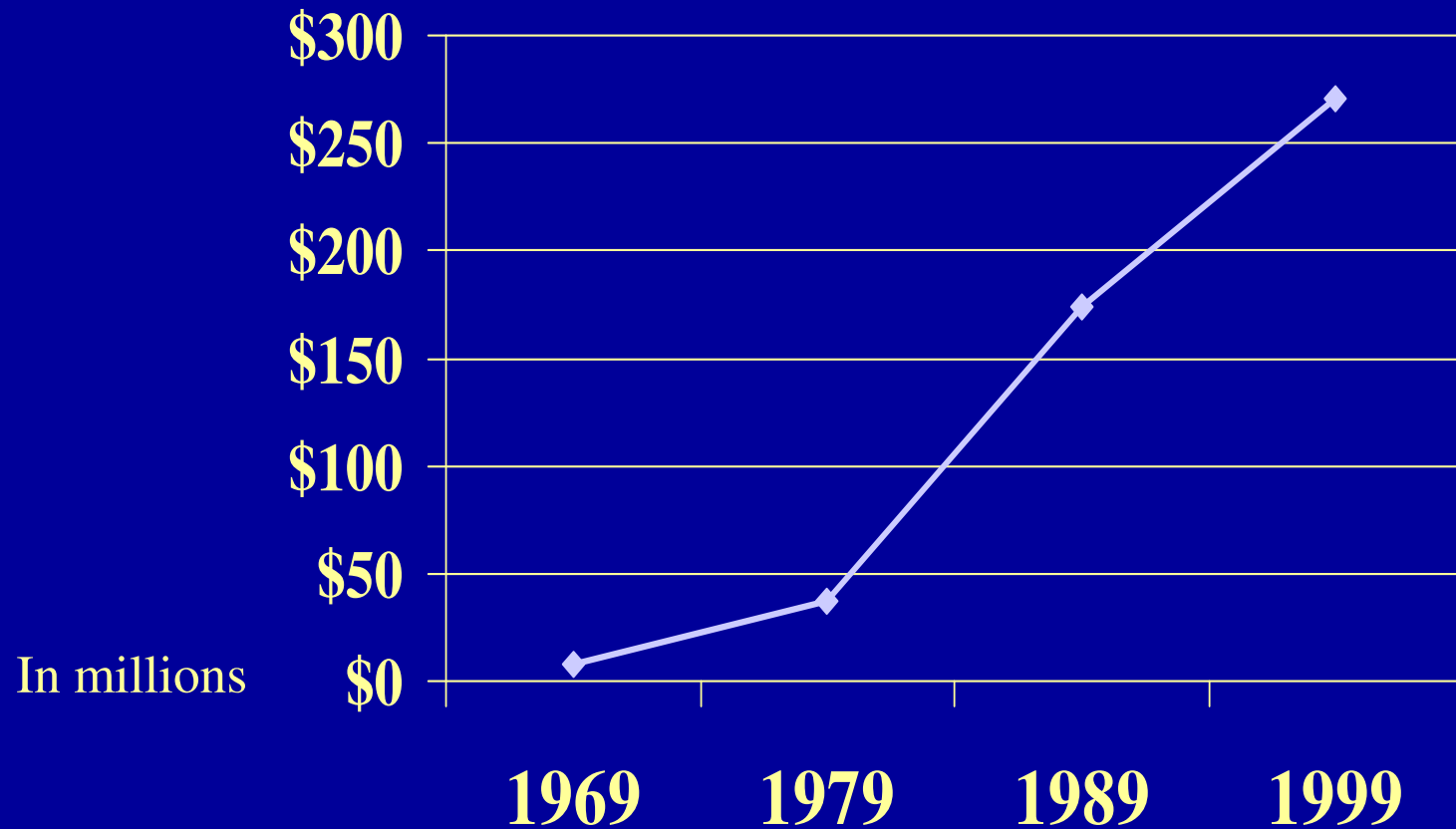
285% over the past 20 years*



*CEUs did not yet exist in 1969.

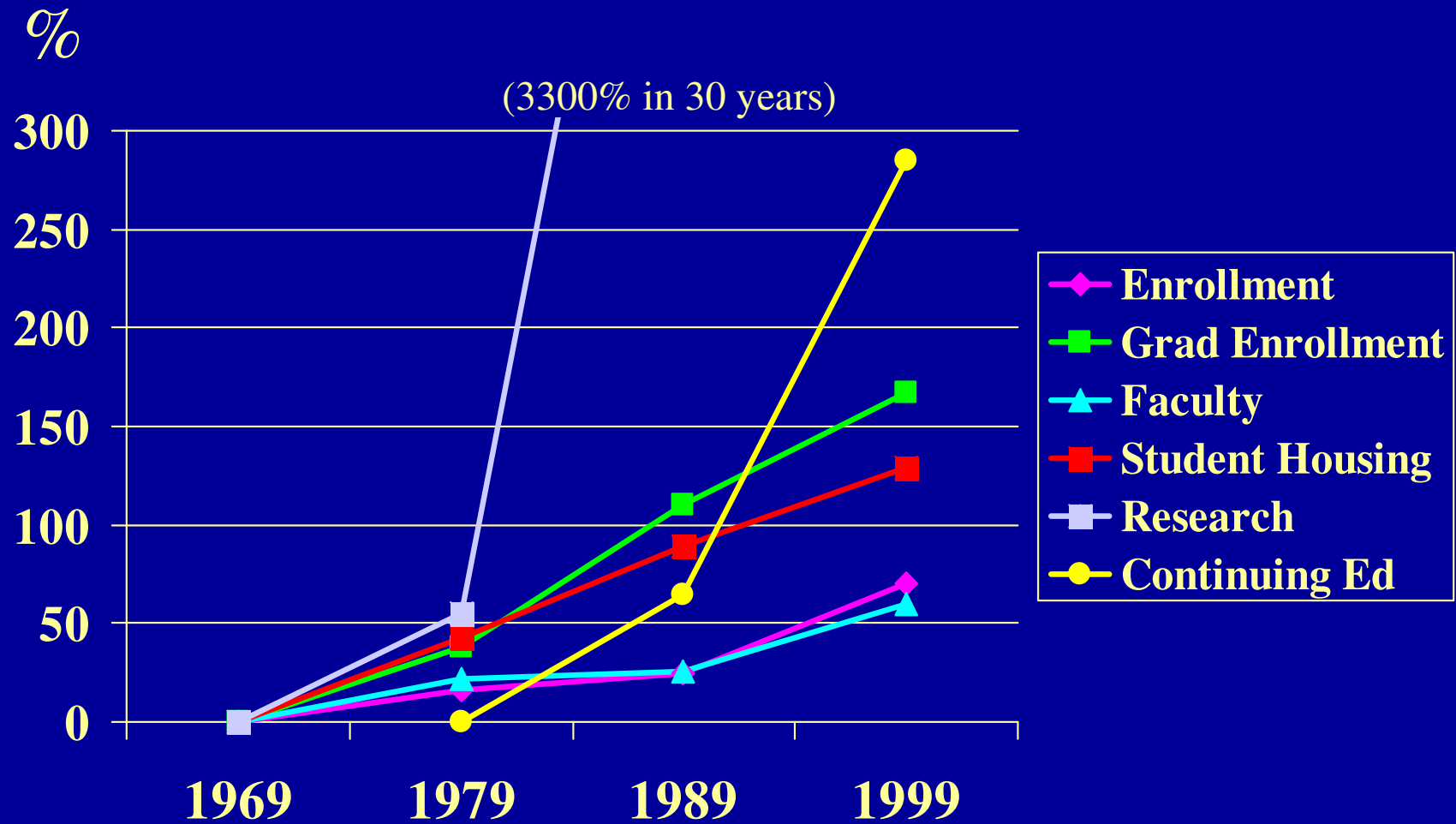
Sponsored Research

3300% over the past 30 years



Adding It All Together

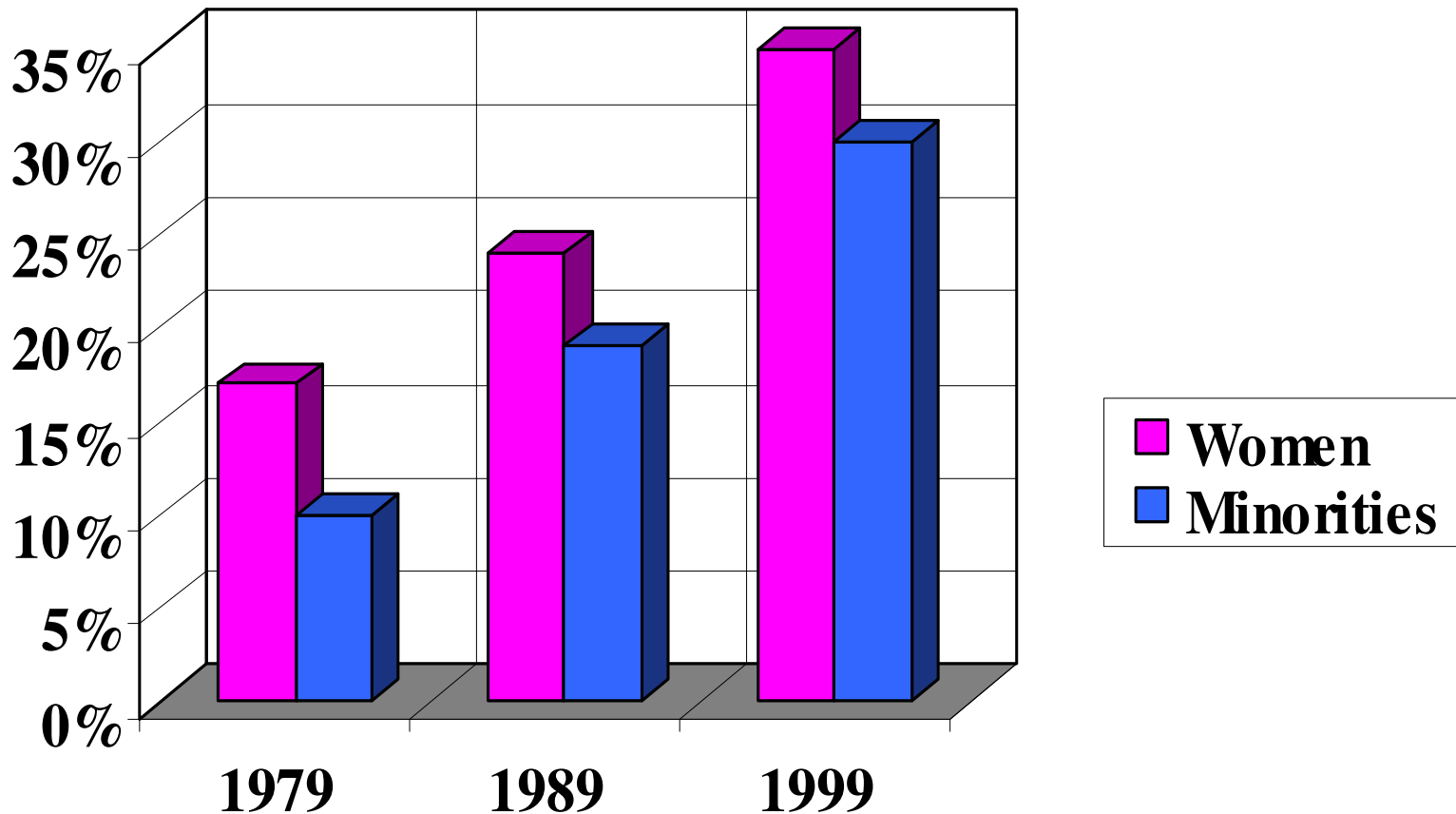
30-Year Growth by Percentage



Managing and Focusing Growth

- Hold the line on enrollment
- Improve student:faculty ratio
- Catch up infrastructure with growth
- Target research growth
- Meet market needs for continuing education

Committed to Diversity



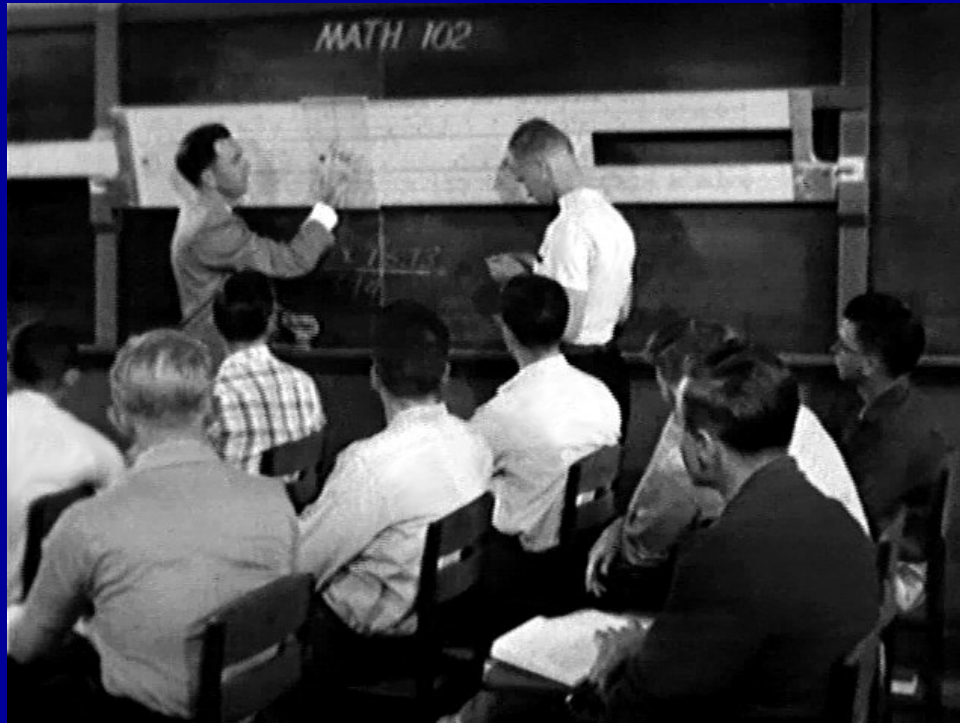
**Percentage of New Students
Entering Fall Term**

Improving Basic Infrastructure

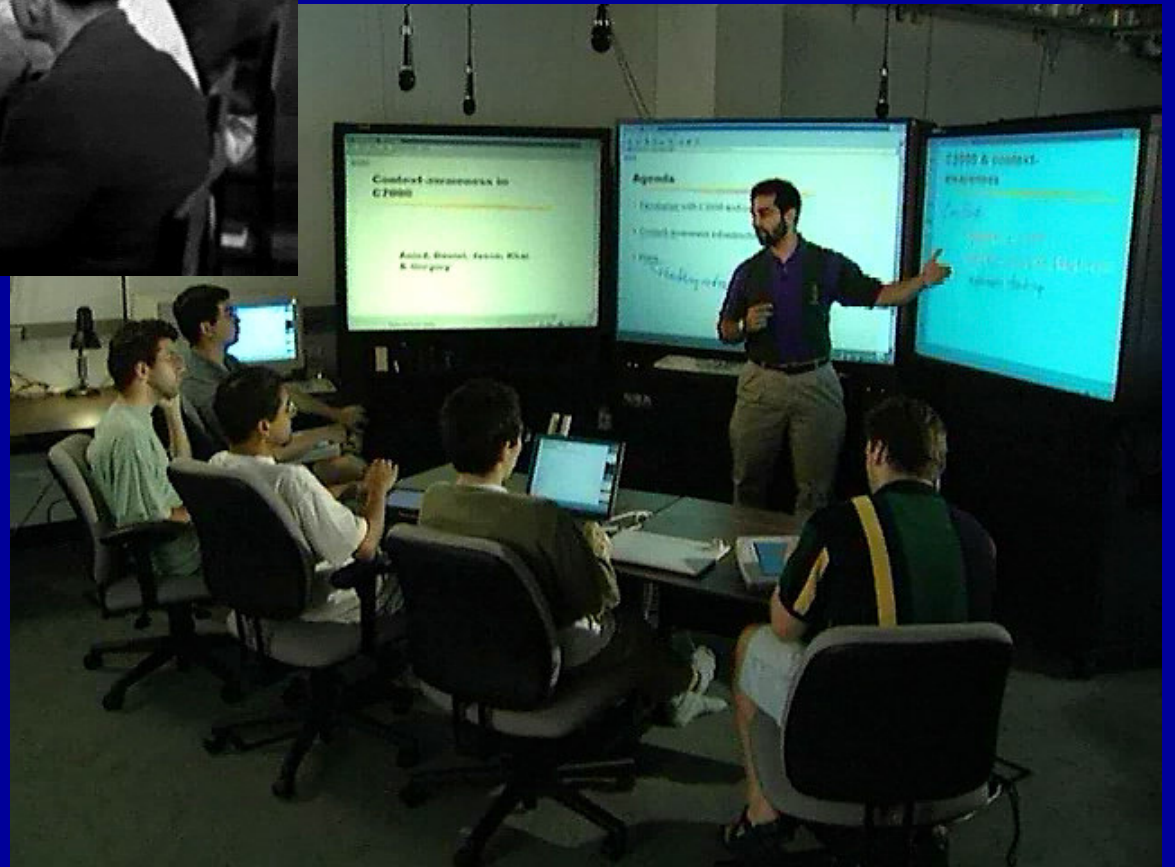
- Classrooms
- Educational technology
- Athletics
- Campus community



ES&M
Built 1938

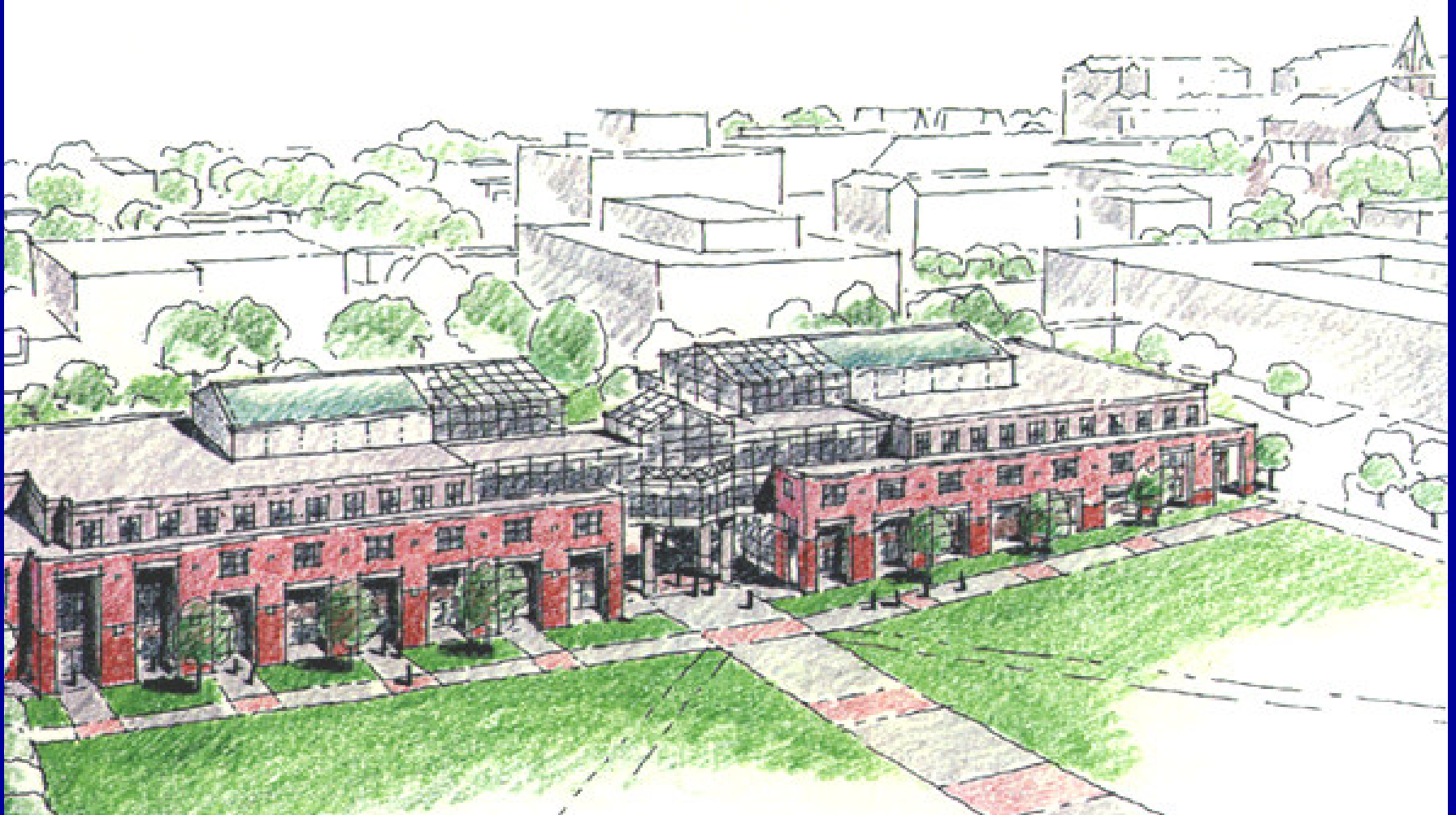


From the slide rule



to the computer
slide

Undergraduate Learning Center



SAC and the Aquatic Center





“Unless an organization sees that its task is to *lead* change, that organization -- whether a business, a university or a hospital -- will not survive.”

Peter F. Drucker

Management Challenges for the 21st Century