Linking Higher Education to the Future of States and Regions

U.S. and the Commonwealth of Kentucky
OECD Valencia
Day 3: Friday 21 September 11.00-12.30
Aims McGuinness
National Center for Higher Education Management Systems

Context

- Growing Concerns Among Policy Leaders About Competitive Position of U.S. in Terms of Education Attainment of the Population
- Concern is that Institutions Are Not Connected to Strategies to Improve Education Attainment and Economic Competitiveness of States and Nation as Whole

Context (Continued)

- Calls for Fundamental Reform:
  - U.S. Secretary of Education Spellings’ Commission
  - National Conference of State Legislatures
  - National Governors’ Association

Spellings Commission

“We remained so far ahead of our competitors for so long . . . that we began to take our postsecondary superiority for granted. The results of this inattention, though little known to many of our fellow citizens, are sobering....

Where once the United States led the world in educational attainment, recent data from OECD indicate that our nation is now ranked 12th among major industrialized countries in higher education attainment.”

_A Test of Leadership: Charting the Future of Higher Education, Secretary Spellings’ Commission on the Future of Higher Education, 2006_
“The American higher education system no longer is the best in the world. Other countries outrank and outperform us…. It is a national imperative that we join together to transform the American higher education system for the 21st century. It is a state responsibility to design the goals and strategies to accomplish that. The cost of doing nothing affects not only students, but also families, our states, and our country.”


“In today’s knowledge-based and innovation-driven economy, colleges and universities are critical sources of talent and technology. Yet, America’s postsecondary institutions are having difficulty producing the needed workforce and R&D. They are also losing ground to their counterparts abroad....”

National Governors Association, July 2007

**Percent of Adults with an Associate Degree or Higher by Age Group—Wisconsin, the U.S. and Leading OECD Countries, 2004**

- **Age 25-34:**
  - Canada: 53.3
  - Japan: 51.6
  - Korea: 49.1
  - Sweden: 42.3
  - Belgium: 40.7
  - Ireland: 40.4
  - Norway: 40.4
  - U.S.: 40.4
  - Wisconsin: 40.4

- **Age 35-44:**
  - Canada: 42.7
  - Japan: 45.1
  - Korea: 33.5
  - Sweden: 32.3
  - Belgium: 28.9
  - Ireland: 28.9
  - Norway: 28.9
  - U.S.: 28.9
  - Wisconsin: 28.9

- **Age 45-54:**
  - Canada: 39.2
  - Japan: 39.0
  - Korea: 37.6
  - Sweden: 34.6
  - Belgium: 31.0
  - Ireland: 31.0
  - Norway: 31.0
  - U.S.: 31.0
  - Wisconsin: 31.0

- **Age 55-64:**
  - Canada: 53.3
  - Japan: 51.6
  - Korea: 49.1
  - Sweden: 42.3
  - Belgium: 40.7
  - Ireland: 40.4
  - Norway: 40.4
  - U.S.: 40.4
  - Wisconsin: 40.4

Source: Education at a Glance 2005, OECD

**Mean Score and Variation in Student Performance on the OECD Assessment (PISA) Mathematics Scale, 2003**

- **OECD Average:** 513
- **Canada:** 544
- **Korea:** 515
- **Japan:** 513
- **Netherlands:** 513
- **Japan:** 508
- **Canada:** 506
- **Belgium:** 503
- **Switzerland:** 503
- **Australia:** 503
- **New Zealand:** 503
- **Czech Republic:** 499
- **Iceland:** 498
- **Denmark:** 498
- **France:** 498
- **Sweden:** 498
- **Austria:** 498
- **Germany:** 498
- **Ireland:** 498
- **Slovak Republic:** 498
- **Norway:** 498
- **Luxembourg:** 498
- **Poland:** 498
- **Hungary:** 498
- **Spain:** 498
- **United States:** 498
- **Portugal:** 498
- **Italy:** 498
- **Greece:** 498
- **Turkey:** 498
- **Mexico:** 498

Source: OECD PISA 2003 database
Commonwealth of Kentucky
Postsecondary Reform Act of 1997

Background
- HB 1, the Kentucky Education Reform Act of 1997, Widely Cited as a Model for State-Level Reform
- Focus:
  - On the Developing a “Public Agenda” Linking Higher Education to the Future of the State
  - Not on Higher Education Institutions, Per Se

State Profile
- Population: 4 million
- Kentucky Higher Education System Enrolls Approximately 225,000 students at:
  - Eight State-supported universities
    - Research University
    - Metropolitan Research University
    - Six Comprehensive Universities
  - Kentucky Community and Technical College System with 16 Colleges on 65 campuses
  - 21 private (independent) colleges.

Key Findings of 1997 Assessment
- Traditional Economic Sectors Declining
- Kentucky Trailing Nation in Per Capita Income
- Low Education Attainment Is Principal Reason for Low Per Capita Income
Barriers Identified in 1997

- A System Driven by Institutional Interests and Regional Political Pressures—not Needs of the State and its Citizens
- Lack of Policy Leadership
- No Linkage to Statewide Mission
- Lack of Strategic Financial Planning
- Lack of Strategic Planning for Technology
- Financial Barriers for Students

The Central Idea Behind HB1

- Use Commonwealth’s System of Higher Education to Drive Improvements to Economy of the State and Quality of Life of Citizens
- Better Serve:
  - Individuals
  - Employers
  - Communities/Regions
  - State

Elements of Reform

- Enact Policies (Fiscal Policy, Governance, Accountability)
- To Increase Capacity (Institutions)
- To Achieve Benefits for Individuals, Employers, Regions, State
- To Increase Per Capita Income

Capacity Building—A Seamless System of Different Kinds of Institutions

- Top 20 Research University
- Premier Metropolitan Research University
- Comprehensive Universities with Programs of Distinction that Assure Statewide Access to Quality Bachelor’s and Master’s Programs
- Community Colleges—Associate Degrees, Transfer, Workforce Development, Remedial and Continuing Education
Benefits: Capacity Utilization—Goals

- High School Graduates Prepared for College
- College Remains Affordable
- Students Complete Degrees
- Graduates Prepared for Work
- Citizens, Communities, and the Economy Benefit

Policy Tools Put in Place/Called for

- Developed “Public Agenda” – a Long-Term Strategic Plan Organized Around Five Areas:
  - Preparation
  - Participation
  - Affordability
  - Completion
  - Benefits to the State: Economy and Quality of Life

Policy Tools

- New Funding Policy:
  - Base Funding
  - Strategic Incentive and Investment Trust

Funds Aligned with Goals:
- Major Research University
- Metropolitan Research University
- Regional University Programs of Excellence
- Workforce Development (Community and Technical College System)

Policy Toll (Continued)

- Endowment Matching Program “Bucks for Brains”: Matching Program to Encourage private investment in public higher education research to:
  - Stimulate business development,
  - Generate increases in externally sponsored research,
  - Create better jobs and a higher standard of living,
  - Facilitate Kentucky’s transition to knowledge economy.
Review After 10 Years

- **Questions:**
  - Are Goals Still Valid? Can They Be Reached?
  - Has Progress Been Made in Creating Capacity?
  - Do Barriers Identified in 1997 Still Exist?
  - Are Improvements Being Made to Economy and Quality of Life? Are There Effective Mechanisms for Linking Higher Education to Economic Development?
  - Effectiveness of Policy Tools—Are Changes in Order?

Preliminary Findings

Participation

- **Sharp Increase In Participation Rates And Enrollments.**
  - College-going rates directly out of high school increased from 52.9% (below the national average of 58.5%) to 57.4% in 2004 (above the national average of 55.7%).

Pipeline Leaks at Every Seam

- **Despite Progress in Participation, Education Pipeline Leaks:**
  - Of 100 9th graders:
    - Only 65 complete high school in four years.
    - Only 37 directly enter college.
    - Only 24 enroll in a second year.
    - Only 12 complete either an Associate Degree in three years or a Bachelor’s Degree in six years.
**Student Pipeline, 2004**

![Bar chart showing the percentage of 9th graders progressing through high school and college.](chart.png)

Of 100 9th Graders, How Many…

- Graduate from High School: 91.3%
- Directly Enter College: 69.7%
- Enroll in Second Year: 57.3%
- Graduate Within 150% of Program Time: 42.0%
- Age 25-44 with Bachelor’s Degree: 27.3%

Source: Tom Mortenson, public high school graduation rates and college-going rates of students directly from high school, 2004; NCES, IPEDS Fall 2004 retention rates and 2004 Graduation Rate Survey; U.S. Census Bureau, 2005 ACS.

**Impact of “Bucks for Brains”**

- **Between 1997 and 2006**
  - Annual philanthropic support at Kentucky’s research universities grew from $88 million to $129 million, or by 47%.
  - Market value of research university endowments grew from $454 million to $1.5 billion, or by 230%.

- **As Of June 30, 2006, $302 Million In Dispersed State Funds Matched with $282 Million In Private Cash Gifts.**

**Endowed Chairs and Professors (1997-2006)**

![Bar chart showing the number of endowed chairs and professorships from 1997 to 2006.](chart.png)

- Chairs: 55 in 1997, 211 in 2006
- Professorships: 53 in 1997, 312 in 2006

**R & D**

- **Significant Gains in R&D, But Only Modest Gains Compared to Other States:**
  - Total R&D funding ($) per capita increased from 45.1 to 108.4, but the state’s rank increased only from 45th to 41st.
  - Federal R&D ($) per capita (an indication of the competitiveness of research) increased from 19.1 to 53.2, but again, the state’s rank increased only from 45th to 43rd.
R & D (Continued)

- Total R&D as a percent of Gross State Product increased from 1.82% in 1997 (compared to the national average of 2.95%) to 3.22% in 2005, improving the state’s rank from 43rd to 33rd.

Preliminary Assessment

- Institutions Have Improved
  - Capacity
  - Performance
  - Leadership

- State Has Not Reaped the Desired Benefits
  - Per Capita Income
  - Health
  - Other Social and Economic Indicators
  - Regional Differences Are Becoming Wider – Growing Gap Between Haves and Have Nots

Kentucky Metro and Rural Area Per Capita Personal Income as a Percent of U.S. Average, 1970-2005

Percent Change in Per Capita Personal Income Relative to U.S. Average, 1970-2005

Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce

Source: U.S. Bureau of Economic Analysis
New Priority: Regional Stewardship

- Promising Model Developed on Basis of Experience of Northern Kentucky University (NKU)
- Focus: Engaging Faculty and Staff of Comprehensive Universities the Initiatives in Their Regions to Improve Economy and Quality of Life

Regional Stewardship (Continued)

- Emphasis: Partnerships Between Regional Civic and Business Initiatives:
  - Example: Vision 2015 for Northern Kentucky that Includes Both Regional Strategy for Economic Review and University’s Strategic Plan
- State Strategic Incentive and Investment Fund Provides Support for Each of Six Universities

* 1990 and 2000 CPI Adjusted
Source: U.S. Census Bureau, Decennial Census and 2005 American Community Survey
Four-Year Institutions, Including UK, Where Most Students Enroll by County,

Common Policy Barriers on Other States

- No Clear Definition of State and Regional Needs and Priorities—
- Division of State Functions (Education, Economic Development, Financing) Among Separate Agencies That:
  - Splinter State Strategy
  - Create “Picket Fence” “Stove-Pipe” Ties to Regions

Barriers (Continued)

- Finance Policy Focused on Institutional Priorities, Not on Incentives for Partnerships and Collaboration
- “One-Size-Fits All” Policies
- Lack of Institutional Leadership Focused on Stewardship
- Lack of Institutional Reward Systems (e.g., Faculty Promotion and Tenure Policies) to Provide Incentives for Engagement

Lessons for KY Reforms

- Focus on Long-Term “Public Agenda” Linking Higher Education to Future Economy and Quality of Life of State/Region
Lessons (Continued)

- **Recognize Multiple Ways That Institutions Can be Engaged:**
  - Research As Economic Development
  - Research that Spins Off New Companies
  - Supporting Entrepreneurship
  - Investing in Scholarship of Application
  - Creating Environment for “Creative Class”
  - Workforce Development

Lessons (Continued)

- **Recognize and Support Diverse Regional Strategies**
- **Align Financing Policy with Long-Term Goals**
- **Develop Accountability Aligned with Long-Term Goals: Statewide, Region-by-Region, and Institutional**
- **Develop Mechanism for Sustainability and Renewal Over Economic and Political Cycles**