

Archived Information

Secretary of Education's
Commission on the Future of
Higher Education

Quality Subcommittee

Nashville, TN
December 9, 2005

1

Guiding Principle

Quality of Higher Education must
be Assessed and Enhanced from
a *Global Perspective*

2

Possible Starting Points for our Task

- Define Quality and Excellence.
- Consider Key Roles not included in A3.
- Delineate and sustain existing strengths of U.S. Higher Education..
- Focus on Urgent Recommendations of Recent National Reports

3

Defining Quality and Excellence

- Institutional
- For the Student
- Regional/Mission Context
- Utopian
- Utilitarian

4

Key Roles not included in Access/Affordability/Accountability

- Education
 - Undergraduate
 - Graduate
 - Professional
 - Life-Long/Continuing
- Development of the Individual
 - Creating Opportunity
 - Widening Vistas and Capabilities

5

Key Roles not included in Access/Affordability/Accountability

- Conservator of Values and Culture
- Independent Critic
- Knowledge Generation/Discovery
 - Research
 - Scholarship
 - Economic Development
 - Advancing Innovation

6

Delineate and sustain U.S. Higher Education's Existing Strengths

- Diversity of institutions
- Multiple Funding Sources
- Market Forces - Intellectual and Financial
- Magnet for International Students and Scholars
- Decentralized, Agile System
- Supportive Public Policies
- Research Partnership with Federal Government

7

Focus on Urgent Recommendations of Recent National Reports

- *Rising Above the Gathering Storm*, National Academies
- *Innovate America*, Council on Competitiveness
- *Sustaining the Nation's Innovation Ecosystem*, PCAST
- *Waiting for Sputnik*, CSIS
- *Engineering 2020*, NAE
- *Assessing the Capacity of the U.S. Engineering Research Enterprise*, NAE

8

Quality Subcommittee Focus on *Rising Above the Gathering Storm* for 12/9 Meeting

- Specificity and Timeliness
- Centrality of Higher Education in Recommendations
- Recommended by Sec. of Energy Bodman at Commission's first meeting
- Participation of Senator Alexander

9

Committee on Prospering in the 21st Century (National Academies)

- Study Requested by Senators Lamar Alexander and Jeff Bingaman, joined by others.
- Question addressed:
What ten actionable items should the Federal Government undertake to ensure that the U.S. will prosper in the global economy?

10

Rising Above the Gathering Storm **10,000 Teachers, 10 Million Minds**

- Increase America's talent pool by vastly improving K-12 science and mathematics education

11

Rising Above the Gathering Storm **Sowing the Seeds Through Science and Engineering Research**

- Sustain and strengthen the nation's commitment to long-term basic research.
 - Potentially transformational
- Maintain the flow of new ideas that
 - fuel the economy,
 - provide security, and
 - enhance quality of life

12

Rising Above the Gathering Storm
**Best and Brightest in Science
and Engineering Higher
Education**

- Make the United States the most attractive setting in which to study and perform research so that we can:
 - Develop, recruit, and retain the best and brightest students, scientists, and engineers
- From within the U.S.
- From around the world

13

Rising Above the Gathering Storm
**Incentives for Innovation and
the Investment Environment**

- Ensure that the United States is the premier place in the world to innovate.
 - Invest in downstream activities such as manufacturing and marketing.
 - Create high-paying jobs that are based on innovation by:
 - Modernizing the patent system
 - Realigning tax policies to encourage innovation
 - Ensuring affordable broadband access.

14

*Rising Above the Gathering
Storm*
**Recommendations relevant to
Higher Education's Opportunities
and Responsibilities**

15

Rising Above the Gathering Storm
**10,000 Teachers, 10 Million
Minds**

- 4-year scholarships annually for 10,000 college students
 - Bachelor's degree in science, engineering, or mathematics
 - Concurrent K-12 certification
 - Commitment to teach for 5 years in public K-12 schools

16

Rising Above the Gathering Storm
**10,000 Teachers, 10 Million
Minds**

- Strengthen skills of 250,000 teachers
 - Summer institutes
 - Science and mathematics master's programs
 - Train 70,000 AP or IB instructors, and 80,000 pre-AP or pre-IB instructors
 - Freely available K-12 curricular materials based on world-class standards

17

Rising Above the Gathering Storm
Sowing the Seeds

- Increase Federal investment in long-term basic research by 10% a year for the next 7 years.
- Research Grants to 200 outstanding Early-Career researchers
- \$500 million/yr research infrastructure fund for next 5 years
- 8% of agency research budgets for high-risk research

18

Rising Above the Gathering Storm
Best and Brightest

- 25,000 new 4-year UG scholarships to increase number and proportion of U.S. citizens earning BS degrees
- 5,000 new graduate fellowships for U.S. citizens in "areas of national need."
- Federal tax credits to employers for continuing education
- Continue to improve visa processing for international students and scholars.

18

Rising Above the Gathering Storm
Best and Brightest

- 1-year automatic visa for STEM PhD graduates to seek employment in U.S.
- New skills-based preferential immigration option
- Reform the "Deemed Export" system

20

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Some things we will explore going forward

21

Maintaining a robust group of world-class universities

- AAU-class public universities are particularly at risk.
- Pedagogy, learning and technology must be explored.
- Several topics associated with globalization must be developed.

22

Other Important Topics

- The purpose of education
- Leading vs. Reading
- Institutional Characteristics for the 21st century
 - Nimble
 - Resourceful
 - International
 - Diverse
 - Robust
- Flexible system of higher education; Not a centrally-planned monolith.

23