



# Education for Services Innovation

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# Employment Outlook

## Global Projections

- 91 million jobs to be created within 10 years
- 5.4 million jobs to be created in 2004

***Where will the jobs be?***



# Skills, Jobs and Growth

## *Rising demand for new IT jobs*

- Business & Security Analysis
- Vendor & Service Management
- System Integration
- Data Mining
- Business Intelligence
- Database Administration
- Network Engineering & Architecture
- Network Architecture
- Web Architecture
- Web Services

# Ensign-Lieberman National Innovation Act

## Selected Provisions

- Fund 5,000 graduate fellowships and traineeships for math, science and engineering students
- Double US basic research budget
- Focus increases for physical sciences and engineering
- Support multi-disciplinary programs, research and curricula
- Establish Innovation Advisory Council in the White House
- Fund federal study of services science, mgt & engineering, leading to federal investment through research, education and training
- Support innovative manufacturing process research
- Strengthen & extend permanently the R&D tax credit
- Authorize NSF grants for K-12 experiential learning programs

## Section 106 – Service on Service Science

- “Service science” refers to **training regimens being developed to teach individuals how to apply technology to solving complex problems** in the industrial sector. It is the sense of the Congress that the **Federal Government should develop a better understanding of service science as a learning discipline** in order to strengthen the competitiveness of U.S. institutions and enterprises. The Director of the National Science Foundation (NSF) shall conduct a **study for Congress** on how the Federal Government should **best support service science through research, education and training**. During the course of this study, the Director will consult with leaders from institutions of higher education and from the private sector.

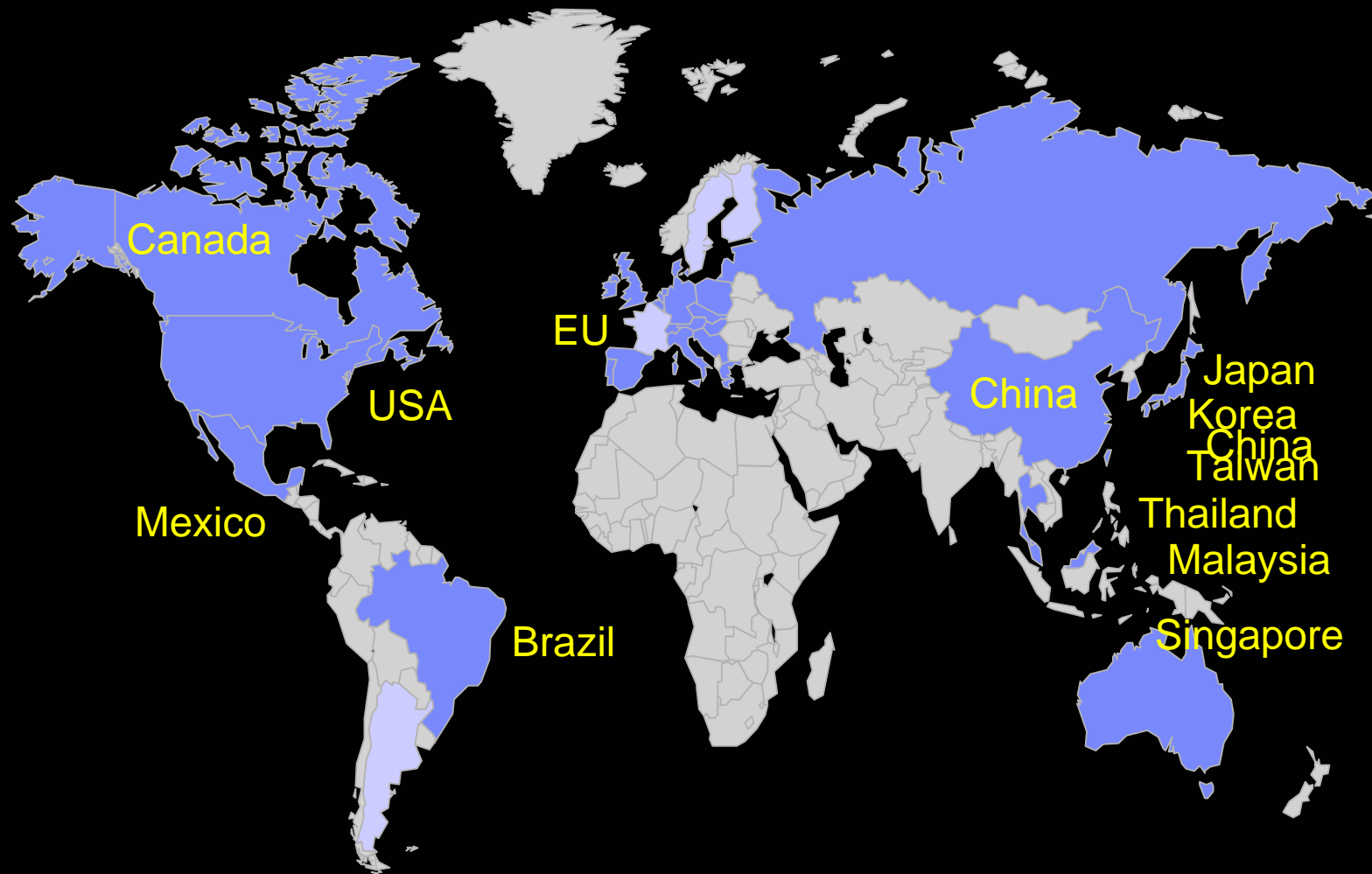
# Protecting America's Competitive Edge (PACE) Act – Graduate Research Fellowships Proposal

- “Areas of National Need – The Secretary (of Energy) may establish a **fellowship program** to provide tuition and financial support for eligible **students pursuing master's and doctoral degrees in mathematics and science (including engineering)** or other areas of national need.”
- “The Secretary may establish ...areas of national need and determine the specific fields of study to be supported by fellowship awards .....

# Higher Education Act Reauthorization potential

- Passed the House, passed the Senate committee, awaiting Floor Action, expected in May
- HEA Graduate Assistance in Areas of National Need (GAANN) – funding to academic departments ...
- Key disciplines in designated areas...biology, chemistry, computer and information sciences, engineering, geological and related sciences, mathematics, physics and nursing...multidisciplinary and interdisciplinary projects

# Services Innovation Activities





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