# Understanding the Impact of Higher Education Policies on the Academic Profession in the United States

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# Qualifications of the Presenter

- Expertise in **organizational theory** and **organizational behavior** in higher education
- Extensive research on **faculty development** and the **academic workplace**
- Author of books and articles on college and university **leadership**

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# Outline of the Presentation

- Overview of the U.S. Higher Education System
- Policy Context: Effects on Academic Profession
- Market Forces: Effects on Academic Profession
- Academic Careers and Workplaces
- Research Areas: Questions for Further Study

# U.S. Higher Education System

- Institutional Types and Enrollment

| | *Number and percentage of institutions* | | *Number and percentage of student enrollments* | |
|---|---|---|---|---|
| **Public institutions** | 1,704 | 36.8% | 14,996,000 | 70.9% |
| **Private institutions** | 1,714 | 37.0% | 3,976,000 | 18.8% |
| **For-profit institutions** | 1,216 | 26.2% | 2,175,000 | 10.3% |
| TOTAL | 4,634 | | 21,147,000 | |

Source: Carnegie Classification of Higher Education Institutions, 2010; U.S. Department of Education, Digest of Education Statistics, 2012

# U.S. Higher Education System

- Institutional Types and Faculty Members

| | *Number and percentage of institutions* | | *Number and percentage of faculty* | |
|---|---|---|---|---|
| **Public institutions** | 1,704 | 36.8% | 967,000 | 61.8% |
| **Private institutions** | 1,714 | 37.0% | 442,000 | 28.2% |
| **For-profit institutions** | 1,216 | 26.2% | 157,000 | 10.0% |
| TOTAL | 4,634 | | 1,565,000 | |

Source: U.S. Department of Education, Digest of Education Statistics, 2012

# U.S. Higher Education System

- Appointment Type by Institutional Type

| | Public | Private, non-profit | For-profit | All institutions |
|---|---|---|---|---|
| **Full-time faculty** | 52.8% | 56.7% | 26.3% | 51.1% |
| **Part-time faculty** | 47.2% | 43.3% | 73.7% | 48.9% |

Source: U.S. Department of Education, Digest of Education Statistics, 2012

# U.S. Higher Education System

- Appointment Type, All Faculty

| | | |
|---|---|---|
| **Part-time faculty** | 765,000 | 48.9% |
| **Full professor (top rank)** | 236,300 | 15.1% |
| **Full-time, non-tenure** | 200,300 | 12.8% |
| **Assistant professor** | 184,700 | 11.8% |
| **Associate professor** | 178,400 | 11.4% |
| | 1,565,000 | |

Source: U.S. Department of Education, Digest of Education Statistics, 2012

# U.S. Higher Education System

- Appointment Type, Tenure Appointment Faculty

| | | |
|---|---|---|
| **Assistant professor** | 184,700 | 30.8% |
| **Associate professor** | 178,400 | 29.9% |
| **Full professor** | 236,300 | 39.3% |
| | 599,400 | |

Source: U.S. Department of Education, Digest of Education Statistics, 2012

# U.S. Higher Education System

- Women Faculty by Academic Rank

| | Assistant professors | Associate professors | Full professors | Total |
|---|---|---|---|---|
| **Women** | 46% | 38% | 23% | 38% |
| **Men** | 54% | 62% | 77% | 62% |

Source: American Association of University Professors, Salary Report, 2012

# Higher Education Policy Context

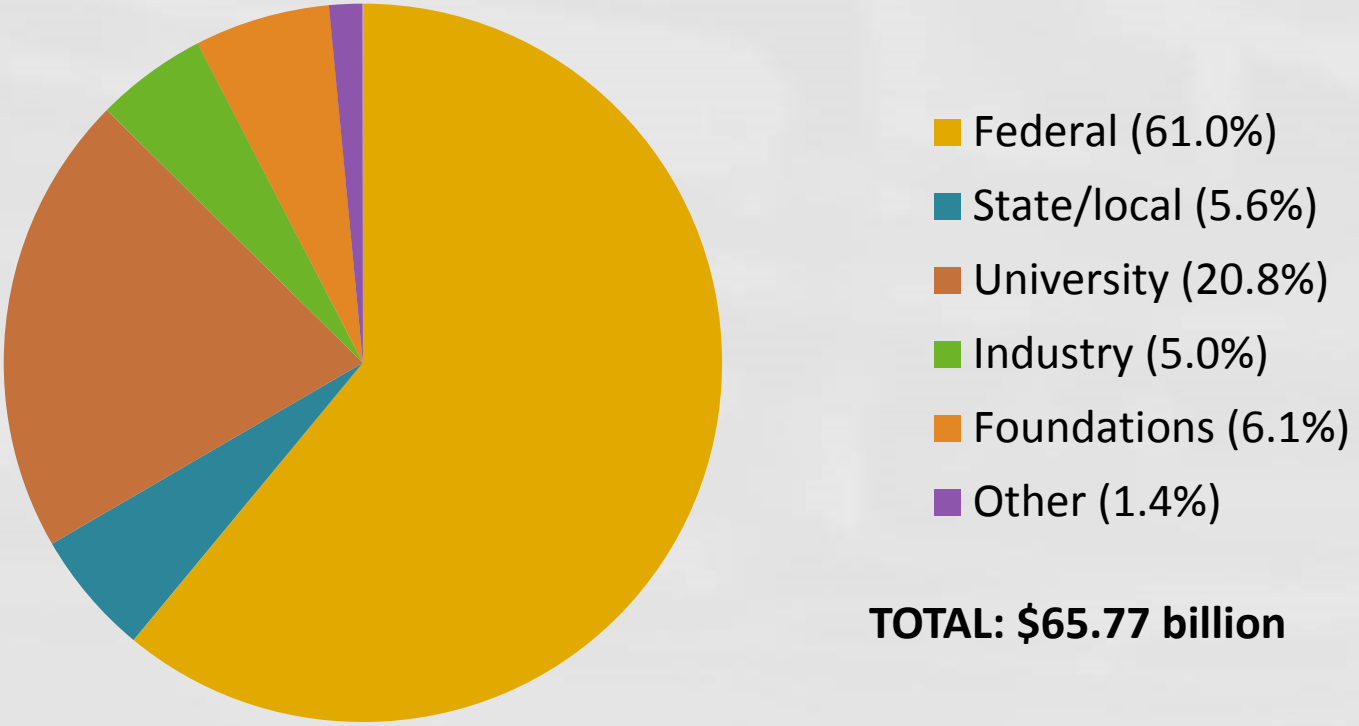
- Research funding
- Technology transfer
- Accountability

# Higher Education Policy Context

- **Research Funding**
  - **Increasing competition**: The academic as entrepreneur
  - Growing emphasis on **relevance** (“third mission”): technology transfer, economic development, and public value (community/regional engagement)
  - U.S. university research: **75% basic, 25% applied** (National Science Foundation, Science and Engineering Indicators, 2012)

# Higher Education Policy Context

**Sources of Research Funding: U.S. Universities**




**TOTAL: $65.77 billion**

Source: National Science Foundation, Higher Education Research and Development Survey, 2012

# Higher Education Policy Context

**Total U.S. Higher Education Research Expenditures by Field**

| | | |
|---|---|---|
| Medical sciences | $20.36 billion | 31.0% |
| Biological, agricultural, & other life sciences | $16.86 billion | 25.6% |
| Engineering | $10.30 billion | 15.7% |
| Physical sciences | $4.72 billion | 7.2% |
| Psychology & other social sciences | $3.24 billion | 4.9% |
| Environmental sciences | $3.17 billion | 4.8% |
| Computer sciences and mathematics | $2.49 billion | 3.8% |
| Education | $1.23 billion | 1.9% |
| Other fields and uncategorized | $3.39 billion | 5.1% |
| **TOTAL R&D** | **$65.77 billion** | |

Source: National Science Foundation, Higher Education Research and Development Survey, 2012

# Higher Education Policy Context

- **Technology transfer**
  - Research discoveries with **commercial applications**, especially in biotechnology, pharmaceuticals, engineering
  - **Partnerships** between **university** faculty and scientists in **industry**
  - **Triple helix** (university-industry-government): market mechanisms rather than state steering
- **National Science Foundation** (NSF)
  - **Three programs**: Industry-University Cooperative Research Centers, Science and Technology Centers, Engineering Research Centers
  - Partially funded by NSF and fees from industrial partners

# Higher Education Policy Context

- **Accountability**
  - Concerns regarding **graduation rates** -- 57% graduation rate in public universities, 66% in private universities (NCES, 2012)
  - Concerns regarding **employability and skills**
- **Quality assurance**: Shift from inputs to outcomes
  - **Accreditation associations**
  - **State government** policies for public institutions (performance-based funding)
- **Impact on academics**
  - **Assessment** of student learning outcomes
  - Participation in **institutional improvement** initiatives
  - Documentation of **public value** of academic work

# Market Forces

- International rankings
- Institutional striving and mission stretch
- Privatization
- Academic capitalism

# Market Forces

- **International competition and rankings**
  - Global rankings of universities and academic programs by the media
  - University strategies: pursue revenues and prestige
- **Institutional striving and mission stretch**
  - **Isomorphism**: Teaching-oriented institutions seeking to become research universities – with the goal of attracting prestige and revenues
  - **"Arms race"** between universities
  - **Implications**: Reductions in institutional diversity; expansion of expectations for academics; stratification of pay and working conditions

# Market Forces

- **Privatization**
  - U.S. public higher education institutions: 27% of revenues from state governments -- 43% in 1985 (U.S. Department of Education, National Center for Education Statistics, 2010)
- **Academic capitalism**
  - Engagement of managers, academics, and students in entrepreneurial activities aimed at revenue generation (Slaughter & Rhoades, 2004)
  - **Implications**: tension between academic values and market values; professional identities of academics: scholars or entrepreneurs

# Academic careers and workplaces

- Managerialism
- Interdisciplinary work
- Teaching-research nexus
- Faculty development

# Academic Careers and Workplaces

- **Managerialism**
  - Growth in number and type of administrative units
  - Decline in the role of academics in university decision making

**Percentage of Academics who Strongly Agree or Agree**

| | Germany | UK | US | Korea | China |
|---|---|---|---|---|---|
| **There is good communication between management and academics.** | 29% | 22% | 30% | 30% | 35% |
| **There is collegiality in decision-making processes.** | 31% | 14% | 31% | 18% | 36% |

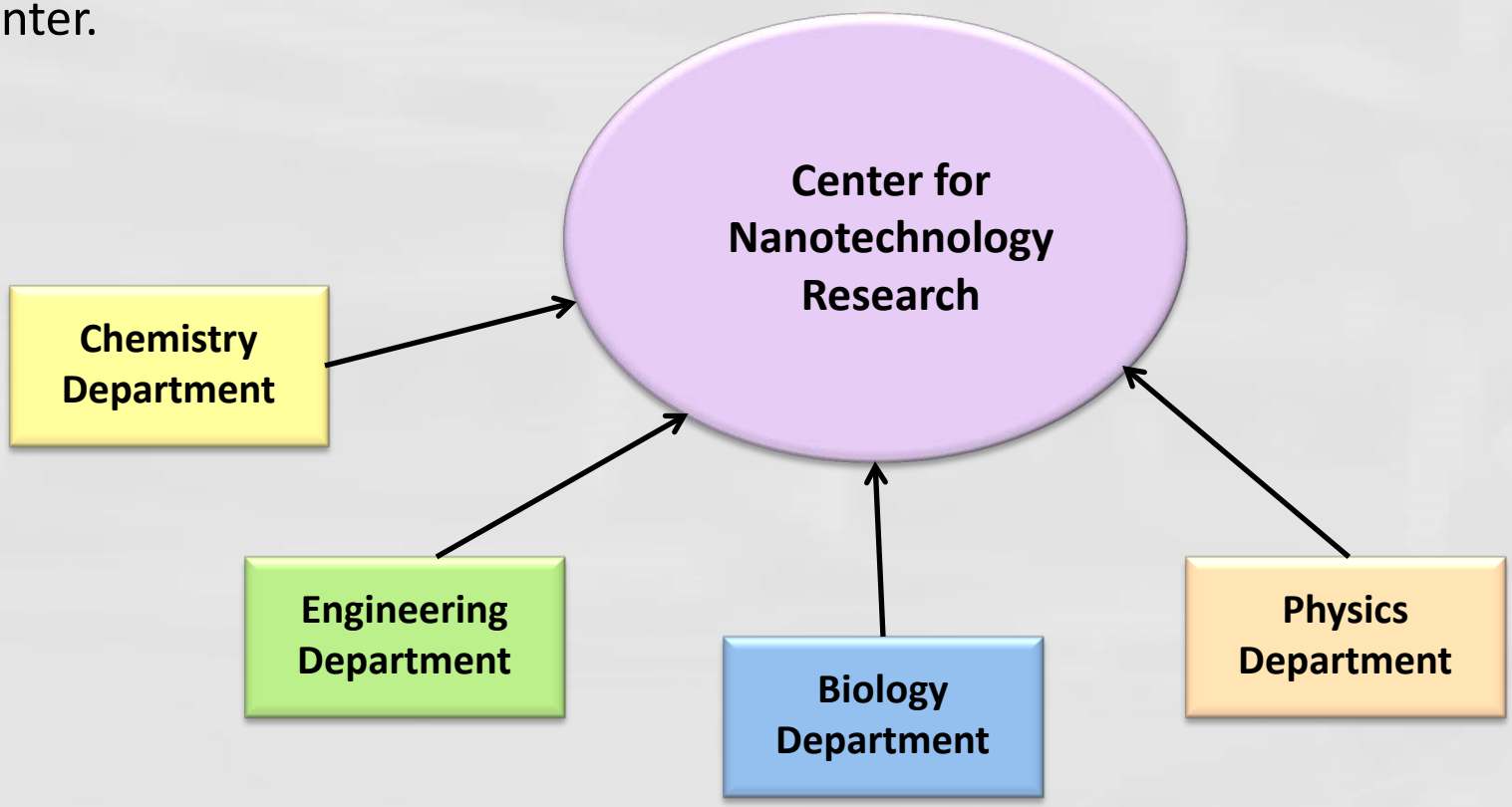
Source: Changing Nature of the Academic Profession (CAP) Project, Carnegie Foundation, 2008

# Academic Careers and Workplaces

- **Interdisciplinary Work**
- Research centers can bring together faculty from different departments to engage in **interdisciplinary research**
- Faculty affiliation with a research center may have positive effects on **productivity**
  - Bunton & Mallon (2007): in a study of life sciences, center-affiliated faculty **published more** and were more likely to attract external **grant funding**

# Academic Careers and Workplaces

Universities may begin to evolve toward a **matrix structure** in which faculty have affiliations with both an academic department and a research center.



# Academic Careers and Workplaces

- **Teaching-research nexus**
  - Teaching-only and research-only appointments
  - Universities: tenured faculty focusing more on research

Hours worked per week, annualized.
Full-time university academics with teaching and research responsibilities

| | Teaching | Research | Admin. | Service | Other | TOTAL |
|---|---|---|---|---|---|---|
| **U.S. universities** | 15.9 | 17.6 | 7.4 | 5.2 | 3.1 | 49.3 |
| **German universities** | 12.7 | 22.5 | 4.7 | 6.2 | 3.5 | 49.6 |

Source: Changing Nature of the Academic Profession (CAP) Project, Carnegie Foundation, 2008

# Academic Careers and Workplaces

## Faculty Development Programs at Colleges and Universities

- Workshops on **teaching practices**
- Workshops on **instructional technology**
- **Faculty Learning Communities** (FLC)
  - groups of faculty work collaboratively in seminars and workshops to refine and advance their **pedagogical expertise**
  - FLCs are typically **cross-disciplinary**
  - FLCs may focus on **developing faculty skills in a particular pedagogical area**, such as service learning, collaborative learning, or technology

# Summary

- Changes in the **university environment** have influenced faculty work activities
  - Competition for research funding
  - Policy emphasis on relevance of research for industry and economic development
  - Accountability systems
  - Competition for rankings and prestige

# Summary

**Effects on the Work of Academics**

- Higher levels of interdisciplinary activity
- Higher levels of collaboration with industry, government
- Higher levels of research productivity
- Decline in authority in institutional governance
- Complicated effects on faculty autonomy – “academic” research vs. “relevant” research
- Complicated effects on faculty identity – scholars and entrepreneurs
- Increasing separation of teaching and research roles

# Research Areas

- **Faculty appointments**
  - How will hiring more part-time faculty affect institutional outcomes such as student learning?
    - Ehrenberg & Zhang, 2005; Gappa & Leslie, 1993; Umbach, 2007
- **Shared governance: academics and managers**
  - How can power and authority be shared between academics and managers, given new demands for accountability?
    - Bess & Dee, 2014; Eckel, 2000; Kezar & Lester, 2009; Rhoades, 1998; Tierney & Minor, 2003

# Research Areas

- **Academic capitalism and striving**
  - How are academics balancing the pursuit of revenue with the pursuit of knowledge?
  - Will the balance between basic and applied research change as a result of academic capitalism?
  - How are academics affected by institutional striving (mission stretch)?
    - Eckel, 2007; Fairweather, 2005; Gardner, 2010; Geiger, 2004; Gonzales, 2012; Mendoza, 2007; Morphew, 2009; O'Meara, 2007; Slaughter & Rhoades, 2004
- **Interdisciplinary activity**
  - How can institutions promote interdisciplinary activity when most academics have primary affiliations with academic departments?
    - Hart & Mars, 2009; Holley, 2009; Lattuca, 2001

# Research Areas

- **Teaching-research nexus**
  - To what extent are teaching-only and research-only appointments decoupling the nexus?
  - Does maintaining the nexus contribute to institutional effectiveness (student learning outcomes)?
    - Colbeck, 1998; Milem, Berger, & Dey, 2000; O'Meara, 2005; Schuster & Finkelstein, 2006
- **Faculty diversity**
  - How can the pathways to the academic profession be improved for women and other under-represented groups?
    - Baez, 2000; Perna, 2005; Turner & Myers, 1999; Ward & Wolf-Wendel, 2007

# Research Areas

- **Academic work environment**
  - How can the academic work environment promote faculty job satisfaction and intent to stay in the profession (attract and retain the "best and brightest")?
    - Daly & Dee, 2006; Gappa, Austin, & Trice, 2007; Rice, Sorcinelli, & Austin, 2000; Rosser, 2004; Trower, 2012
- **Faculty development**
  - How can faculty development programs provide incentives for ongoing professional improvement?
    - Baldwin & Chang, 2006; Beach & Cox, 2009; Cox, 2004; Dee & Daly, 2009; Sorcinelli, Austin, Eddy, & Beach, 2006

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