

Worldwide Universities Network Initiative  
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# Changes in Doctoral Education Worldwide

## Past Differences, Current Commonalities, and Future Trends



Center for Innovation  
and Research in  
Graduate Education

**Associate Professor Maresi Nerad**  
Associate Graduate Dean, The Graduate School  
Director, CIRGE  
University of Washington, Seattle

# Overview



- 1. The context: a series of 3 international working conferences on *Forces and Forms of Change in Doctoral Education Worldwide* funded by the US National Science Foundation (NSF)**
- 2. Findings: Past differences, current commonalities, future trends**
- 3. The beginning of a conceptual framework for understanding doctoral education within globalization**

# 2 CIRGE International Working Conferences

## *Forces and Forms of Change in Doctoral Education Worldwide*



**2005 Seattle US; 2007 Melbourne, Australia**

### Goals:

- Research synthesis of selected topics
- Development of an international network of experts in doctoral education

Countries: 6 continents, 16 countries

Argentina, Australia, Brazil, Canada, Czech Republic, Denmark, Germany, Iceland, India, Japan, Malaysia, Mexico, Pakistan, South Africa, UK, US,

Participants: Graduate Deans, national funding agencies (i.e. NSF, NIH), researchers of doctoral education, University provosts for research, early career researchers (ECR)

### Outcomes:

- Books, University of Washington Press ( April 2008 and 2009)
- Research agendas
- Seattle and Melbourne declarations (see CIRGE website)

# Past Differences



- 1. Major difference between US doctoral education and else where in the world. Except US, most doctoral programs had:**
- 2. No formalized admission process and admission standards**
- 3. Access only with a master's degree**
- 4. No structured doctoral program, no course work**
- 5. One supervisor**
- 6. Job markets of PhDs- a central European tradition that PhDs enter a variety of non-academic fields**
- 7. No emphasis on data collection other than PhDs awarded**
- 8. Quality assurance only at the student level (dissertation)**
- 9. Inequality of resources and positioning in the global context.**

# Current Commonalities



1. Defining feature of the PhD - **original research** embodied in a **dissertation**
2. PhDs are expected to have **substantial knowledge** in their area of study
3. A minimum of 3 years length to the doctorate
4. More **structure** doctoral **program**
5. Increase in PhD production
  - steady increase of **women** in doctoral education
  - increase in enrollment of **international students** mainly in the sciences outside the US
6. Long time to doctoral degree is a concern in many countries; average length 4-7 years
7. External thesis examiner(s) except in US, Canada, UK
8. Some form of response to the Bologna process, the European Union's rapidly moving program of higher education reform.

# Future Trends

## ALREADY EXISTING EXAMPLES



1. Shifting emphasis on doctoral degree acquisition for the purpose of employment, less solely for knowledge creation **All countries**
2. Access to doctoral program after 3 years or after bachelor degree **Australia, Mexico, Japan**
3. Stated, selective admission standards, **Germany (GK), Japan**
4. Fully funded doctoral students **Australia, Brazil (95%), Denmark (salary), EUI, Mexico (selected students studying abroad), Netherlands, China (2 years)**
5. Agreement on the inclusion of transferable/professional skills/competencies (teaching, leadership, communication, project management, working in teams), but the absence of uniform offerings of such skills; **Australia, UK, US, Netherlands, Denmark**

# Future Trends

ALREADY EXISTING



6. Introduction of graduate schools/research schools **Australia, China, Germany, Denmark, Japan, UK**
7. More than one supervisor **all (except Cambridge)**
8. Concern with diversity among student and faculty **US, South Africa, Canada**
9. Introduction of formal doctoral program evaluation **Japan, South Africa, Mexico**
10. Proliferation of professional doctorates (nursing, business administration, etc.) **Australia, Netherlands, Japan, US**
11. Dimension of international involvement/collaborations – joint degrees **France/Australia, Canada**, –(requirement) to spend research time in another country **Denmark, EU Countries, Japan, (China), Mexico**

# Future Trends



12. Data collection efforts on doctoral education – time-to-degree, attrition, employment, **EU countries- OECD, Canada, Australia, Japan, US**
13. Increase of interdisciplinary programs **Australia, Brazil, Germany, Norway, Japan, Mexico, US**
14. Governmental initiated innovations in doctoral education ( **Germany** - Graduate colleges, **US-IGERT**, **Australia**–Co-operative Research Centers).
15. Undertake more socially relevant dissertation research- **national policy debates**



# National Policies Respond to Globalization



- Establishment of national governmental research training schemes, research quality frameworks, central council for education: **Australia, EU, Canada, Denmark, Japan, UK, Mexico (Conacyt), New Zealand, Norway,**
- Industrial representation on national PhD program evaluation: **Denmark, Norway**
- Establishment of “sandwich doctoral programs” and exchange programs of both professors and students: **Brazil, Malaysia, Mexico, South Africa**
- Innovative, theme-oriented doctoral programs: **Germany, US, Australia**

# Towards a Conceptual Framework for Understanding Doctoral Education within Globalization



## Conceptual framework

- Unequal context of doctoral education – **rich and poor countries/universities**
- Globalization and Rule Set- **embrace, resist, both & local solutions**
- Internationalization

## Dimensions of Globalization in Doctoral Education

- Commodification of the degree- **be sellable on an international market**
- Market economy- **national government sets research agendas**
- Mode 2 education (Gibbons, et.al. 1994)
- Brain drain
- The use of English- **dominant scholarly language (published, oral)**
- Increase of standardization-
- Quality Assurance- **accountability movement, outcome/benchmark**
  - **Input/throughput/output measures**

Prototype of embracing globalization: **Bologna process- mobile PhDs**

# Thank you!



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## CIRGE website

<http://www.cirge.washington.edu>