Changes in Doctoral Education Worldwide

Past Differences, Current Commonalities, and Future Trends

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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:**
- Research agendas
- Seattle and Melbourne declarations (see CIRGE website)
Past Differences

1. Major difference between US doctoral education and elsewhere 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 then 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


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