Doctoral Studies in the European Higher Education Area – Warsaw 17-18 June 2010

Session II

Doctoral education in the UK

Gill Clarke

University of Bristol /

UK Council for Graduate Education

UK research student numbers 2008-09[1] by subject

Subject area	Full-time			Part-time			Totals
	Male	*Female*	*Total f/t*	*Male*	*Female*	*Total p/t*	
Arts and Humanities	6,035	6,350	**12,385**	3,405	3,390	**6,795**	**19,180**
Physical Sciences	7,950	5,010	**12,960**	855	560	**1,415**	**14,375**
Biological sciences	4,705	8,140	**12,845**	1,225	2,380	**3,605**	**16,450**
Engineering (inc.comp sci)	10,075	2,990	**13,065**	2,240	630	**2,870**	**15,935**
Social Sciences	8,415	7,490	**15,905**	5,045	5,465	**10,510**	**26,415**
Medicine, Dent., Vet Sci.	3,565	4,845	**8,410**	2,170	2,950	**5,120**	**13,530**
Combined	5	5	**10**	0	5	**5**	**15**
Totals	40,750	34,830	**75,580**	14,940	15,380	**30,320**	**105,900**

[1]Source: Higher Education Statistics Agency: HE Information Database for Institutions (HEIDI)

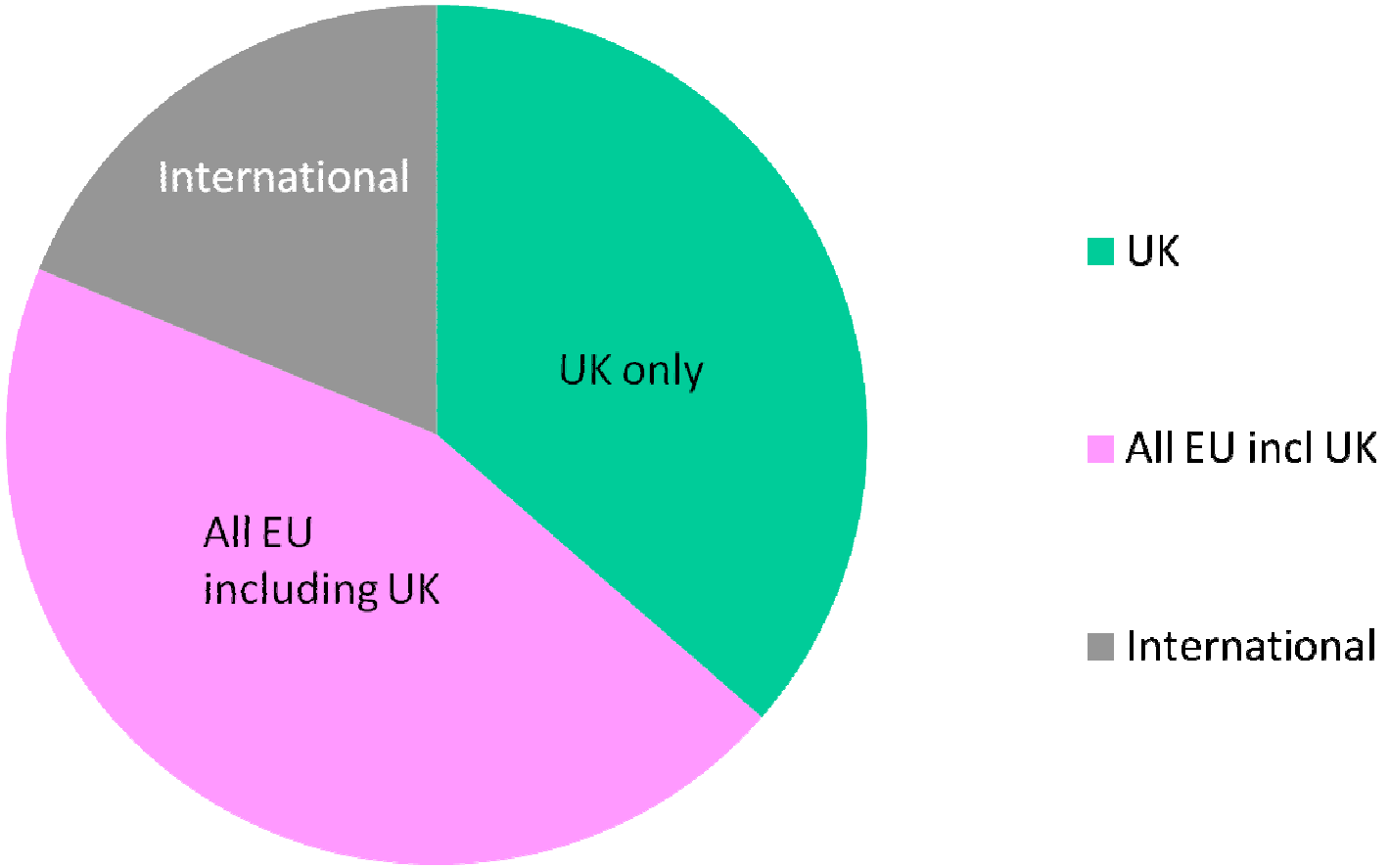
Sources of funding[1] for UK research candidates

Source	% of full-time[2]	% of part-time[2]
Self-funded	27%	60%
Research Councils and British Academy	21%	1%
University scholarships and other fee waivers	19%	12%
Overseas sources (non-EU)	11%	1%
Suspended study and unknown	9%	12%
Charities	4%	1%
Government – central and local	4%	4%
Industry/commerce/employers	3%	8%
Local authority grant or discretionary award	0.6%	0.5%
European Union funded	0.2%	0.05

[1] Source: UK Higher Education Statistics Agency : HE Information Database for Institutions (HEIDI)

[2] Less than 1% is shown as a fraction; other percentages have been rounded up or down

UK research candidates by nationality 2008-09




The UK, continental Europe … and the rest of the world

Some UK / global comparative statistics[1]

- UK has 15% of all international research students
- Around 42% of research students studying in the UK are international (non-UK EU and non-EU)
- Subjects with more than 50% international students:
  - law (59%)
  - engineering and technology (58%)
  - business and management (58%)
  - maths and computing (51%)

[1] Figures are taken from 'The UK's Competitive Advantage: the Market for International Research Students', UK HE International Unit Research Series 2, July 2008

Standards and frameworks for doctorates

UK materials

Framework for Higher Education Qualifications

Quality Assurance Agency Code of Practice

Research Councils UK

Dublin descriptors

Cross-European materials

European Qualifications Framework (Annex 1, descriptors)

Framework for qualifications of the European Higher Education Area (Appendix 8 - outcomes and credits)

Salzburg Principles

Types of doctorate

Broadly two types:

- Doctor of Philosophy (PhD or D Phil)
- Professional doctorates, e.g. Doctor of Education, Doctor of Engineering, Doctor of Clinical Psychology (Ed D, Eng D D Clin Psych)
- Within each type, there are different structures /models…

Profiles of UK doctoral programmes (1)

- STEM* subjects: higher numbers, with candidates likely just to have completed first degree (aged around 22-23); more PhD than professional doct.
- Arts, humanities and social sciences: PhD and professional doctorate. Entrants to some doctoral programmes may be older and study part-time while working
- Doctoral candidates have student status, although they are treated as early stage researchers along with other colleagues

*Science, Technology, Engineering, Mathematics

Profiles of UK doctoral programmes (2)

- Some doctorates have ‘built-in’ Master’s qualification
- Common in some subjects to enter doctorate with masters (integrated / stand-alone)
- In some subjects, enter with Bachelor’s degree
- Some doctorates have credit attached; others do not
- Funding sources often influence models
- Competitive entry for university scholarships

Sources of funding[1] for UK research candidates

Source	% of full-time[2]	% of part-time[2]
Self-funded	27%	60%
Research Councils and British Academy	21%	1%
University scholarships and other fee waivers	19%	12%
Overseas sources (non-EU)	11%	1%
Suspended study and unknown	9%	12%
Charities	4%	1%
Government – central and local	4%	4%
Industry/commerce/employers	3%	8%
Local authority grant or discretionary award	0.6%	0.5%
European Union funded	0.2%	0.05

[1] Source: UK Higher Education Statistics Agency : HE Information Database for Institutions (HEIDI)

[2] Less than 1% is shown as a fraction; other percentages have been rounded up or down

How do 1st, 2nd and 3rd cycles fit together?

- Full-time* models include:

Bachelors	Masters	Doctorate
3 +	1 +	3-5
3 +		3-5
4 + UK Integrated		3-5
3 +	2+	3-5

  - Length of time differs with discipline?
  - Learning outcomes approach to 3rd cycle?

* Approximately double these periods for part-time candidates

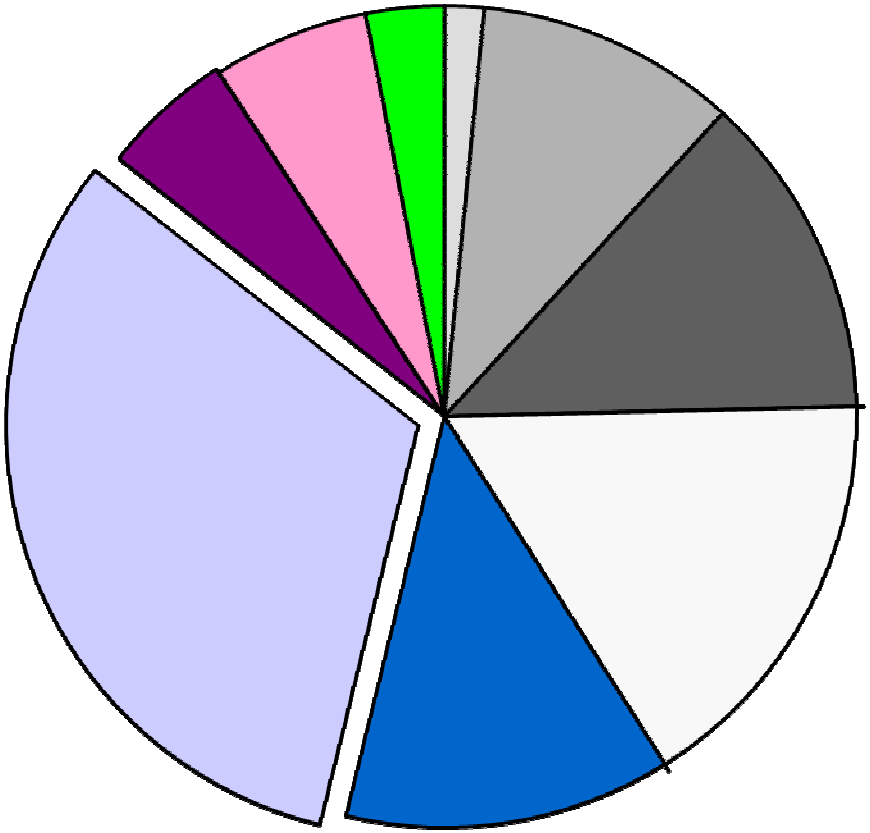
Quality assurance of the doctorate in the UK

- Frameworks and guidance
- Research council monitoring of submission rates;
- Most effective: providing examples of and rewarding good practice
- Institutional audit/enhancement-led institutional review (Scotland)
- Special review in England and Northern Ireland (2006)

General context

- 124 institutions involved in special review, of which 10 were in Wales, and 114 in England and Northern Ireland
- Examples of good practice were identified in 105 (85%) of the reports
- Areas for further consideration were identified in 100 (81%) of the reports
- All institutions received an **overall** judgement of 'appropriate and satisfactory'

Distribution of good practice examples



Institutional arrangements 2%

Research environment 10%

Admissions, induction 13%

Supervision 16%

Progress/ review 13%

Skills development 32%

Student feedback 5%

Assessment 6%

Student representations 3%

Developments in last five to seven years

- Funding councils' threshold requirements for research degrees
- QAA Code of Practice – section 1
- Roberts funding
- Introduction of more structured doctoral programmes in all subjects
- Developing role of supervisor
- Graduate schools and centres for doctoral training

Graduate schools in the UK

- UK Council for Graduate Education: updated survey of graduate schools, at

http://www.ukcge.ac.uk/publications/reports

- Multiple models of graduate school, depending on:
  - subject
  - critical mass of researchers
  - type of institution and funder
  - research intensity of institution/region
  - collaboration

Centres for doctoral training - objectives

Introduced by research councils to:

- Promote more structured doctoral training
- Assure critical mass in a single location
- Achieve economies of scale
- Concentrate training in centres of research excellence
- Support themed research

Centres for doctoral training - characteristics

- Structures depend on:
  - Discipline
  - Critical mass
  - Whether single or multi-discipline
- Typical size of award per candidate varies from:

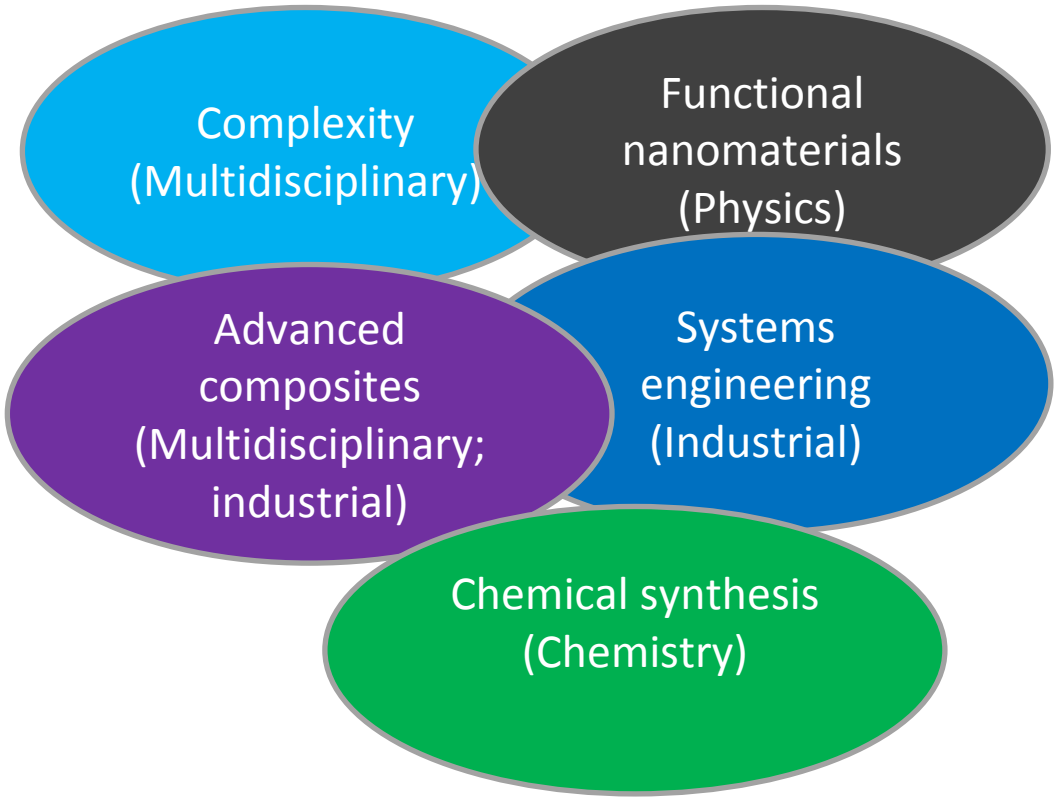
  £13,000, 65,700 Zloty, 15,700 Euros p.a. to

  (Arts, Social Sciences and Law)

  £16,000, 81,000 Zloty, 19,300 Euros

  (Science, Engineering, Medicine)

Examples of centres for doctoral training at Bristol University



Some of these school-based DTCs are single-discipline, others, multidisciplinary; graduate schools at faculty and school/department level are separate.

Arts
Multi-disciplinary
Institution level
Block grant from RC
Doctoral training centre part of Graduate School

Social Sciences / Law
Applied for regional, interdisciplinary DTC with two other similar institutions

Challenges facing the UK

- Concentration of research in a small number of universities
- Economic situation (reduction in research council funding) and new government
- Themed research promoted by research councils can discourage ‘risky’ research projects and make it difficult to get funding for them
- Competition for international students

Challenges 2

- Relationships between graduate schools and centres for doctoral training
- Differences in research council requirements
- Maintaining parity and equality of opportunity
- Sustainability of doctoral programmes for candidates and universities