Career Tracking of Doctoral Graduates from UK HEIs

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Total budget:
10/11 £2.55 billion
11/12 £2.60 billion
12/13 £2.57 billion
(Figures 2011/12)

Allocation of the Science Budget to Individual Councils (2011/12)

- EPSRC £759.7m (29%)
- MRC £536.2m (21%)
- STFC £375.8m (14%)
- BBSRC £370.3m (14%)
- NERC £298.6m (12%)
- ESRC £155.7m (6%)
- AHRC £99.9m (4%)
PhD starters by Domicile 1996-07 to 2009-10*

Figure 3 Number of PhD starters on a full-time course, by domicile

Note: EU category excludes those domiciled in the UK.

*PhD Study: Trends and profiles 1996-97 to 2009-10 (HEFCE 2011)
PhD starters by Domicile 1996-07 to 2009-10*

Figure 3 Number of PhD starters on a full-time course, by domicile

Notes

RCUK funding:
5,500 of 17,500 doctoral graduates p.a.

Mature PhDs significant especially in AHSS

Rest of world:
~ 42% overseas PhDs (30% non-EU, 13% other EU)

Current doctoral candidates 60,000 FT, 23,000 PT

Note: EU category excludes those domiciled in the UK.

*PhD Study: Trends and profiles 1996-97 to 2009-10 (HEFCE 2011)
A new survey needed to answer questions including:

- Motivations for undertaking PhD training and initial career aspirations:
- Employment history and reasons for changes in career:
- Current employment:
- Skills development:
- Job satisfaction:
- Future career aspirations:
- ‘Impact’ of career:

Advice: Existing data-sources cannot provide sufficient information, nor coverage of the target population.

Options

- Stand alone survey (c.f. USA SED)
- Piggy-back on existing Destinations of Leavers from HE (DLHE survey)

Impact: a demonstrable contribution to economic growth or policy development.
The RCUK Cohort study in outline

• Three cohorts: all UK and EU domiciled doctoral graduates from UK HEIs in 2004/05, 2006/07 and 2008/09
  – First survey at 6-18 months after graduation - HESA DLHE* survey e.g. early 2005
  – Second survey 3.5 years after graduation as part of L-DLHE e.g. winter 2008/09
  – Third survey stand-alone ~7 years after graduation planned winter 2012/13
• Results published in ‘What do Researchers Do?’ series by Vitae

* DLHE/L-DLHE (longitudinal) – Destination of Leavers from Higher Education
Some practical facts and issues

- 2004/05 DLHE - 6595 research postgraduate responses
- 2008/09 L-DLHE – 2501 responses (45%) of which 2073 doctorates
- 2012/13 resurvey – projected attrition problem – currently being addressed
- Use of Standard Occupation Coding (SOC)
  - Initial problems of subjective categorisation
  - Four-digit SOC allows grouping into clusters

  - HE research occupations
  - Research (not in HE sector)
  - Teaching and Lecturing in HE

  - Other Teaching Occupations
  - Other common doctoral occupations

  - Projected future problem of identifying researchers using SOC 2010

- Basic survey supplemented by qualitative research and/or case studies
Redefined objectives (7 year point)
RCUK Doctoral Cohort Study

- The aims of the Study are:
  - To better understand the career pathways of doctoral graduates
  - To improve knowledge of doctoral graduates’ impact in employment
  - To better understand how high level skills contribute to the long-term competitiveness of the UK

- It will help to inform:
  - Resource allocation and investments in doctoral training
  - Policies regarding research training and how it contributes to both excellence and impact
  - Policies regarding career pathways and how these might be influenced
  - The supply of information and guidance to researchers about the careers open to them

- Results expected – Autumn 2013
The RCUK Cohort study - Actors

Options analysis
Coding work

DLHE/L-DLHE data collection

3.5 year data analysis

Further analysis, publication and dissemination

7-year analysis of impact

Customer

the institute for employment studies
Outcomes from the study so far
Researchers careers

What do researchers do?
- First destinations by subject
- Career profiles
- Career profiles of doctoral entrepreneurs
- Doctoral graduate destinations and impact three years on

Career stories portal
- database of careers stories
- Career stories on film with icould

Employers’ briefings
- targeting the postgraduate and researcher market
- researchers’ skills and competencies
5 year trends of UK domiciled PhDs in 5 broad disciplinary areas

Unemployment averages 3.4% - lower than Bachelor (6.1%) or Master (4%)

72.7% entered work in the UK

49% employed in Education (mainly HE)
- 23% in HE research position
  (Bioscience 36%, SS 18%, A&H 14%)
- 14% in HE teaching jobs
  (Bioscience ~5%, SS 34% A&H 27%)

Overall 35% in research and 22% in teaching

* Analysis of information from 5-years of analysis 2003-2007 ~5000 responses p.a.
Employed in research roles: 35% overall
WDRD? Destinations and impact three years on

- Employment circumstances (2% unemployed)
- Employment sector and occupation
- Status (contract/mode of work)
- Median annual salary (£34k D; £25k B)
- Value of the doctorate (82% requirement or important)
- Satisfaction with career to date (93%)
- It fitted into my career plans (73.8%)
- It was exactly the type of work I wanted (65.7%)
- Unique doctoral occupations
Doctoral graduate occupational clusters

- HE research occupations
- Research (not in HE sector)
- Teaching and lecturing in HE
- Other teaching occupations
- Other common doctoral occupations
- Other occupations

Doctoral graduates | Masters graduates | First degree 1st/2:1

www.vitae.ac.uk
Importance of doctorate, skills and competencies for current employment

www.vitae.ac.uk
Evidence of impact

WDRD? Destinations and impact three years on

- Use of knowledge, skills and experience (research skills 82%; generic skills 91%)
- Make a difference in the workplace / innovation (94%)
- Access to, and progress, towards long term career aspirations (87%)
- Enhance social and intellectual capabilities and quality of life (89%)

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Use of knowledge, skills and experience

- Conduct research
- Interpret research data
- Critically evaluate research findings
- Use the research skills developed
- Draw on detailed research degree knowledge
- Use general disciplinary knowledge
- Use the generic skills developed
- Work autonomously
- Work as part of a team
- Work under close supervision
- Have responsibility for others

Legend:
- Most of the time
- Some of the time
- Occasionally
- Not at all

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HE versus non-HE research – findings from WDRD 3 years on

- Work autonomously most of the time:
  - HE Research 65.8%, non-HE research 48.8%
- Work as part of a team:
  - HE Research 30.1%, non-HE research 44.4%
- Be innovative in the workplace:
  - HE Research 48.9, non-HE research 50.9%
- Make a difference in the workplace:
  - HE Research 38.7%, non-HE research 49.3%
Job movement over time: HE and non-HE Researchers

- 435 doctoral graduates were in HE Research at 6 months and 280 were in non-HE research
- At 3.5 years the distribution between job clusters was:

<table>
<thead>
<tr>
<th>Location at 6 months</th>
<th>HE</th>
<th>non-HE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- HE Research</td>
<td>50%</td>
<td>18%</td>
</tr>
<tr>
<td>- Non-HE Research</td>
<td>13%</td>
<td>47%</td>
</tr>
<tr>
<td>- Teach/lecture in HE</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>- Other Teaching</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>- Other Common Doctoral</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>- Other</td>
<td>7%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Some weblinks

- RCUK: [www.rcuk.ac.uk/ResearchCareers](http://www.rcuk.ac.uk/ResearchCareers)
- Vitae: [www.vitae.ac.uk](http://www.vitae.ac.uk)
- What do researchers do? [www.vitae.ac.uk/wrd](http://www.vitae.ac.uk/wrd)
- Labour market information [www.vitae.ac.uk/lmi](http://www.vitae.ac.uk/lmi)
- Impact and evaluation [www.vitae.ac.uk/impact](http://www.vitae.ac.uk/impact)
- Vitae employers [www.vitae.ac.uk/employers](http://www.vitae.ac.uk/employers)

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