CGS Annual Meeting

Doctorate Recipients and Doctoral Outcomes: US and UK Perspectives

Dr Janet Metcalfe, Vitae

www.vitae.ac.uk

Vitae is supported by Research Councils UK (RCUK), managed by CRAC: The Career Development Organisation and delivered in partnership with regional Hub host universities
Developing researchers’ skills and employability

- UK drivers
- Vitae vision, aims and activities
- Postgraduate Research Experience Survey (PRES)
- Employability
  - What do researchers do?
  - RCUK cohort study
- Careers in Research Online Survey (CROS)
- Researcher development framework

www.vitae.ac.uk
2004
Quality Assurance Agency
Bologna Process

2008
Research funders and universities
European Charter and Code

National organisations:
Funding Councils, Research Councils, Universities UK, British Council, Vitae and others

Roberts funding
£20m+ per year for skills and career development

Maximising investment
Networks, information, policy and practice

120 research-active institutions

90,000 doctoral researchers

40,000 research staff

Excellence with impact

www.vitae.ac.uk
Vitae vision and aims

“For the UK to be world-class in supporting the personal, professional and career development of researchers”

- Building human capital by influencing the development and implementation of effective policy relating to researcher development
- Enhancing higher education provision to train and develop researchers
- Empowering researchers to make an impact in their careers
- Evidencing the impact of professional and career development support for researchers
Support for researchers

- Website
  - doctoral researchers
  - research staff
  - careers
- GRADBBritain
- GRADschools
- PhD planner
- PGR tips
- Balanced researcher
- Creative researcher

www.vitae.ac.uk
Support for staff supporting researchers

Networks
- Vitae connections
- National & regional events

Databases
- Trainers and developers
- practice/resources

Programmes
- Effective researcher
- Careers in focus: academia, other sectors

Publications
- Hub newsletters, bulletins, Overview
- Supervising a doctorate
Based on Australian survey PREQ

Parallel confidential online surveys run by HEIs combined for aggregate analysis

2009: 82 HEIs, 18,644 respondents, 28.6%

Experiences of doctoral researchers against expectations

Scales relate to QAA Code of Practice
  - Supervision
  - Skills development
  - Infrastructure
  - Intellectual climate
  - Goals and standards
  - Thesis examination
  - Professional development and career
PRES 2009 - experiences

- Supervisory support and guidance: 80%
- Opportunities to develop research skills: 86%
- Opportunities to develop transferable skills: 85%
- Access to appropriate facilities: 81%
- Research environment: 77%
- Guidance on institutional standards and expectations for research degree programme: 77%
- Overall experience of research degree programme: 84%

met or exceeded expectations

2009: 82 HEIs, 18,644 respondents, 28.6%
Employability: careers projects

- Vitae ‘What do researchers do?’
- Vitae careers stories portal
  - UK searchable repository for researchers’ stories and projects
- International doctoral graduates destinations project
  - annual survey of international graduates (DLHE)
  - tracking study
- RCUK ten year cohort study
- Employers’ survey and briefings
- Careers website section

www.vitae.ac.uk
What do researchers do?
First destinations by subject

- 2003 - 2007 doctoral graduates
- Cohort 12.5k - 14.5k
- 54-58% UK-domiciled
- 46-48% female
- 26-27% part-time
- 65-70% response rate
- 30 subjects and 6 ‘others’
Doctoral graduates by subject 2003-07

[Graph showing doctoral graduates by subject, with the categories listed as follows: Arts and humanities, Biological sciences, Biomedical sciences, Physical sciences and engineering, Social sciences. Specific numbers for each category are provided.]
Percentage employed in the UK

[Diagram showing percentage of employment and study in the UK across different disciplines]
Employed in the education sector
49% overall

Varies from 28% (psychology) to 79% (modern languages)
Employed as research staff in higher education: 23% overall

Varies from 6% (theology) to 43% (biology, biochemistry, molecular biology and biophysics)
Employed as in HE lecturing and teaching: 14% overall

Varies from less than 1% (physics, chemistry, microbiology) to 56% (law)
Employed in research roles
35% overall

Varies from 7% (theology) to 71% (some biological subjects)
Vitae career stories portal

- Searchable database of researcher career stories
  - video, oral, written stories (600)
  - narrative journeys; turning and tipping points
  - demonstrate the wider impact of researcher careers on society/the economy
  - upload individual stories
  - post information on related career stories projects (30)

- Complement statistical information on researchers’ careers

- Share approaches, methodologies and questions relating to the collection of career stories

- Community of practice for those building libraries of career stories
What do researchers do?  
Career profiles

- 40 career stories
- 1000 1st destination occupations
- Two emerging themes:
  - significant impact on employability
  - influence on career journey

I have ‘drawn on my experience as a doctoral student in virtually all the jobs I have had since leaving university.’

Andrew Hann (history), English Heritage

‘My doctorate changed my life. It opened doors, and it also opened my mind. I take on challenges now, in my life and my career, because I have faith in my own abilities.’

Cora Beth Knowles (Latin literature), Open University
RCUK cohort study

- Ten year study
- 3.5 year destination study (L-DLHE)
  - follow up on 1 year DLHE study
- 7 year tracking study
- Employers’ views of the value of doctoral graduates
- Career stories (identifying impact)
L-DLHE: importance of education and work experience in obtaining current role

<table>
<thead>
<tr>
<th></th>
<th>Formal requirement or important</th>
<th>Not important</th>
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</thead>
<tbody>
<tr>
<td>Skills and competencies</td>
<td>92% (44, 48)</td>
<td>3%</td>
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<tr>
<td>Qualification</td>
<td>82% (50, 32)</td>
<td>6%</td>
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<tr>
<td>Subject knowledge</td>
<td>82% (40, 42)</td>
<td>7%</td>
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<tr>
<td>Relevant work experience</td>
<td>78% (26, 52)</td>
<td>8%</td>
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<td>[It fitted into my career plans: 73.8%]</td>
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<tr>
<td>[It was exactly the type of work I wanted: 65.7%]</td>
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<tr>
<td>[Very or fairly satisfied with career to date: 91%]</td>
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</table>

N= 1750 - 1883
L-DLHE: use of skills, knowledge and experience

<table>
<thead>
<tr>
<th>Activity</th>
<th>Most of Time</th>
<th>Not at All</th>
</tr>
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<tbody>
<tr>
<td>Use your general disciplinary knowledge</td>
<td>65%</td>
<td>4%</td>
</tr>
<tr>
<td>Conduct research</td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td>Use your research skills</td>
<td>47%</td>
<td>6%</td>
</tr>
<tr>
<td>Use your generic skills</td>
<td>58%</td>
<td>2%</td>
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</table>

2046 respondents, 45% of early DLHE (74%)
L-DLHE: Extent of impact in current job

<table>
<thead>
<tr>
<th>Statement</th>
<th>Great extent</th>
<th>Some extent</th>
<th>not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress towards your long term career aspirations</td>
<td>50%</td>
<td>41%</td>
<td>10%</td>
</tr>
<tr>
<td>Be innovative in the workplace</td>
<td>47%</td>
<td>47%</td>
<td>6%</td>
</tr>
<tr>
<td>Make a difference in the workplace</td>
<td>40%</td>
<td>53%</td>
<td>7%</td>
</tr>
<tr>
<td>Access immediate or short-term job opportunities in your chosen career</td>
<td>36%</td>
<td>43%</td>
<td>22%</td>
</tr>
<tr>
<td>Enhance your social and intellectual capabilities beyond employment?</td>
<td>41%</td>
<td>48%</td>
<td>11%</td>
</tr>
<tr>
<td>Enhance quality of your life generally</td>
<td>39%</td>
<td>51%</td>
<td>10%</td>
</tr>
</tbody>
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N= 1866 - 1951
CROS 2009

- Parallel confidential online surveys run by HEIs combined for aggregate analysis
- Very representative of overall population – high validity

Overall, most researchers feel:
- valued and satisfied with work-life balance (72%)
- integrated in their department (71%)
- stimulated by research culture (74%)
- their HEI supports training and career development
- belief in HEI commitment to equality and diversity

2009: 51 HEIs, 5908 respondents, 21%
Support and career development

- Half have undertaken appraisal in last 2 years *(up from 32% in 2002)*
- Most are encouraged to consider career development *(40% talked to manager)*
- 2/3 received an induction to their role *(up from half in 2002)*
- 2/3 participated in training in last year *(up from 1/3 in 2006)*

**Room for improvement:**
- Few talk to careers service or seek advice from development staff
Researchers’ responsibilities

• Most are well-informed about current employment and research (although less so about their progression)

• Half have a career plan (taking ownership of career appears to be a strong factor driving attitude/engagement)

Room for improvement:

• Strong appetite for development (and believe access is open); but many appear not yet to have taken advantage

• Many feel contributions like teaching, supervision and management not valued

• Half do not think treated equally to lecturing staff re: career progression or participation in decision-making
Researcher development framework

- Tool for planning, promoting, supporting personal, professional and career development of researchers in HE
- Primarily for researchers and those supporting researchers
- Describes knowledge, skills, behaviours and personal qualities of researchers at different stages of being a researcher
- Recognises individual difference and different career paths/aspirations
- Realistic, but encourages researchers to aspire to excellence
- Couched in accessible language but providing a lexicon for communicating research qualities
- NOT intended for job descriptions, person specs or appraisal systems
Structure of RDF: stages

- New researcher
  - researcher in training
- Researcher
  - early career, postdoctorate
- Established researcher
  - level of independence, national reputation
- Advanced researcher
  - research leader, international reputation
- Eminent researcher
  - international leader, world expert
Structure of RDF: domains

- Professional and intellectual attributes
  - knowledge base
  - cognitive skills
  - creativity

- Personal effectiveness
  - personal qualities
  - self-organisation
  - career development skills

- Research organisation and governance
  - professional conduct
  - project management
  - finance, funding and resources

- Impact and influence
  - Communicating effectively
  - working with others and leadership
  - relating to the broader context
  - application of research and knowledge exchange
# RDF: examples of descriptors

<table>
<thead>
<tr>
<th>Proficiency level</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
<th>Phase 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptors</strong></td>
<td></td>
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<tr>
<td><strong>Time Management</strong></td>
<td>Manages own time effectively to complete research project; sticks to clear plan</td>
<td>Makes timely decisions. Delivers a project on time; quick and efficient; responds flexibly.</td>
<td>Manages multiple or complex projects to time; balancing constraints</td>
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<tr>
<td><strong>Response to change</strong></td>
<td>Adapts approach with guidance when required to; carefully considers risk</td>
<td>Adapts to changes; balances risk and opportunity</td>
<td>Engages with change; expects change and is prepared for it; manages risk accordingly</td>
<td>Finds change stimulating; anticipates change</td>
<td>Drives change, takes personal risk</td>
</tr>
<tr>
<td><strong>Self-reliance</strong></td>
<td>Recognises boundaries and draws upon and use sources of support as appropriate (D6)</td>
<td>Self reliant (D7) capable of directing others</td>
<td>Builds and uses own support structures effectively; contributes to others’ support</td>
<td>Maintains a range and variety of support structures. Independence established; recognises need for collegiality</td>
<td>Exploits focussed and targeted support mechanisms</td>
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</tbody>
</table>
References

- Vitae  www.vitae.ac.uk
- PRES 2009  www.heacademy.ac.uk/pres
- What do researchers do?  www.vitae.ac.uk/wdrd
- Career stories portal  www.vitae.ac.uk/careerstoriesportal
- CROS  www.cros.ac.uk / www.vitae.ac.uk/cros
- RCUK cohort study  www.rcuk.ac.uk/rescareer/rcdu/impact.htm
- Researcher development framework (RDF)  www.vitae.ac.uk/rdfconsultation