Personal and Professional Development of Doctoral Candidates in the British Doctoral System

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Agenda

• Background to role of skills training in British doctoral system
• Key developments re: skills training
• Introduction to Vitae, the Researcher Development Framework and other resources
British Doctoral System

- 3, 3.5 and 4 year PhDs – no formal taught component, research focused
- Professional doctorates (e.g. Ed.D, D.ClinPsy, DBA etc) – formal taught component
- New Route PhD – formal taught component
British Doctoral System

Doctorates awarded to those who demonstrate:

“The general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems” (QAA 2001, Annex 1: qualification descriptors)
The PhD shall...

- (a) consist of the student's own account of her/his investigations, the greater proportion of which shall have been undertaken during the period of registration under supervision for the degree;
- (b) form a distinct contribution to the knowledge of the subject and afford evidence of originality by the discovery of new facts and/or by the exercise of independent critical power;
- (c) be an integrated whole and present a coherent argument;
- (d) give a critical assessment of the relevant literature, describe the method of research and its findings, include discussion on those findings and indicate in what respects they appear to the student to advance the study of the subject; and, in so doing, demonstrate a deep and synoptic understanding of the field of study, (the student being able to place the thesis in a wider context), objectivity and the capacity for judgment in complex situations and autonomous work in that field;
The PhD shall...

- (e) be of satisfactory literary presentation;
- (f) not exceed 100,000 words (inclusive of footnotes but exclusive of appendices and bibliography, the word limit not applying to editions of a text or texts);
- (g) include a full bibliography and references;
- (h) demonstrate research skills relevant to the thesis being presented;
- (i) be of a standard to merit publication in whole or in part or in a revised form (for example, as a monograph or as a number of articles in learned journals); and
- (j) where ethical approval is required, indicate that such approval has been granted by the appropriate body.

(King’s College London Regulations for Research Degrees)
The British Doctorate…

• Focuses on research
• Originates from the master/apprentice model
• Only allows a very short period of time in which to develop additional skills
• But emphasis on transferable skills has increased hugely over past 10 years
The Role of the Funders and Regulatory Bodies

- 1/3 (approx) UK doctorates are funded by Research Councils
  http://www.rcuk.ac.uk/Pages/Home.aspx
- Quality of doctorates governed by the Quality Assurance Agency (QAA)
Research Councils

- Take keen interest in developing wider skills sets in researchers:
  i. 2001 Joint Skills Statement
  ii. Funding for UK-GRAD, now Vitae
  iii. Roberts funding for skills training
  iv. Support for Concordat, Vitae Researcher Development Framework

- JSS, then Vitae RDF incorporated into QAA Code of Practice for Postgraduate Research Degrees
Background

- 1968: First GRADSchool run by CRAC
- 1996: Research Careers Initiative
- 2002: SET for Success report
- 2003: UK GRAD programme launched
- 2003: Roberts money allocated for skills training
- 2004: QAA Code of Practice on Postgraduate Research Degrees
- 2008: Concordat for the Career Development of Researchers
- 2008: Vitae launched (all researchers)
- 2010: EC HR Excellence in Research awards start, UK alignment with European Charter and Code
- 2011: End of ring-fenced Roberts funding
Roberts Review – SET for Success - April 2002

- Supply of researchers in science, engineering, technology & mathematics
- 2 weeks “transferable” skills training per year for both PhD students & postdoctoral research staff
- Research Councils followed this with funding & monitoring for the training
• Sir Gareth Roberts’ review highlighted development of transferable skills as important for all careers and all disciplines.

• The report recommended that higher education institutions should provide:
  o “at least two weeks of dedicated training a year, principally in transferable skills, for which additional funding should be provided an over which the student should be given some control.” (Roberts, 2002, Para. 0.44)
“Interpersonal” Skills??

- Initially defined by Sections C-G of the JSS:
  - Research / project management
  - Personal effectiveness
  - Communication skills
  - Networking and team working skills
  - Career management

- Roberts signified that personal, professional and career development for researchers would be taken seriously in UK universities
UK Context

- Collegiate and “best practice” approach to researcher development
- Support from Vitae
- Some compliance aspects but intended to encourage excellent researcher development
Some data from ‘A Review of Graduate Schools in the UK’ published by the UK Council for Graduate Education 2010

Table 1b  Existing graduate schools (of UKCGE member institutions from forms returned)

<table>
<thead>
<tr>
<th></th>
<th>Pre 1992</th>
<th>Post 1992</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number who responded</td>
<td>49</td>
<td>41</td>
<td>90</td>
</tr>
<tr>
<td>Number with Graduate Schools</td>
<td>40</td>
<td>28</td>
<td>68</td>
</tr>
<tr>
<td>Considering setting one up</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>% with Graduate Schools</td>
<td>82%</td>
<td>68%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Table 1c  Models of graduate schools in institutions

<table>
<thead>
<tr>
<th></th>
<th>Pre 1992</th>
<th>Post 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution-wide</td>
<td>61%</td>
<td>89%</td>
</tr>
<tr>
<td>Faculty/Department based</td>
<td>33%</td>
<td>11%</td>
</tr>
<tr>
<td>Disciplinary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Inter-institutional</td>
<td>2%</td>
<td>0</td>
</tr>
<tr>
<td>Cross Institutional</td>
<td>2%</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>0</td>
</tr>
</tbody>
</table>

(Note, three Pre 1992 institutions have two different models of Graduate Schools)
Figure 1  Histogram of Institutions with at least one graduate school

Figure 2  Histogram of percentage of Institutions with graduate schools with an institution-wide graduate school
### Table 3: Importance of aims for graduate schools

<table>
<thead>
<tr>
<th>Aim</th>
<th>Pre 1992</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>N/A</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>N/A</td>
<td>Total</td>
</tr>
<tr>
<td>Improving the quality of graduate education</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Improving the student experience</td>
<td>98%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>96%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>97%</td>
</tr>
<tr>
<td>Improving research progression and completion rates</td>
<td>83%</td>
<td>13%</td>
<td>2%</td>
<td>2%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>89%</td>
</tr>
<tr>
<td>Sharing good practice on research supervision</td>
<td>85%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
<td>89%</td>
<td>11%</td>
<td>0%</td>
<td>0%</td>
<td>87%</td>
</tr>
<tr>
<td>Representing graduate issues within and/or outside the institution</td>
<td>80%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>79%</td>
<td>21%</td>
<td>0%</td>
<td>0%</td>
<td>79%</td>
</tr>
<tr>
<td>Improving PGR degree administration</td>
<td>60%</td>
<td>23%</td>
<td>10%</td>
<td>7%</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
<td>74%</td>
</tr>
<tr>
<td>Increasing the number of PGR students</td>
<td>63%</td>
<td>33%</td>
<td>2%</td>
<td>2%</td>
<td>68%</td>
<td>29%</td>
<td>3%</td>
<td>0%</td>
<td>65%</td>
</tr>
<tr>
<td>Promoting interdisciplinary work</td>
<td>53%</td>
<td>33%</td>
<td>6%</td>
<td>0%</td>
<td>46%</td>
<td>29%</td>
<td>25%</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>Increasing the number of PGT students</td>
<td>25%</td>
<td>38%</td>
<td>7%</td>
<td>30%</td>
<td>14%</td>
<td>0%</td>
<td>11%</td>
<td>75%</td>
<td>21%</td>
</tr>
<tr>
<td>Sharing good practice on PG teaching</td>
<td>23%</td>
<td>16%</td>
<td>8%</td>
<td>7%</td>
<td>11%</td>
<td>38%</td>
<td>11%</td>
<td>42%</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>18%</td>
</tr>
<tr>
<td>Improving PGT degree administration</td>
<td>20%</td>
<td>25%</td>
<td>13%</td>
<td>42%</td>
<td>11%</td>
<td>7%</td>
<td>11%</td>
<td>71%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Percentages are calculated on a total number of responses of 40 pre 1992 and 28 post 1992 institutions.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Student training programmes – generic skills training</td>
<td>High</td>
<td>Some</td>
<td>None</td>
</tr>
<tr>
<td>Quality assurance/monitoring</td>
<td>85%</td>
<td>15%</td>
<td>0</td>
</tr>
<tr>
<td>Monitoring student progress</td>
<td>63%</td>
<td>28%</td>
<td>9%</td>
</tr>
<tr>
<td>Research supervisor training</td>
<td>53%</td>
<td>35%</td>
<td>12%</td>
</tr>
<tr>
<td>Central co-ordination of responses to national consultations</td>
<td>53%</td>
<td>33%</td>
<td>14%</td>
</tr>
<tr>
<td>Liaison with research Councils</td>
<td>55%</td>
<td>35%</td>
<td>15%</td>
</tr>
<tr>
<td>Award of Studentship</td>
<td>60%</td>
<td>28%</td>
<td>12%</td>
</tr>
<tr>
<td>Recruitment/admission (PGR)</td>
<td>45%</td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td>Student records</td>
<td>46%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Website – internal and/or external</td>
<td>43%</td>
<td>57%</td>
<td>0</td>
</tr>
<tr>
<td>Research Student training programmes – research methods</td>
<td>50%</td>
<td>45%</td>
<td>5%</td>
</tr>
<tr>
<td>Provision of learning resources for PG/Research students</td>
<td>48%</td>
<td>50%</td>
<td>2%</td>
</tr>
<tr>
<td>Registration/matrículation</td>
<td>28%</td>
<td>38%</td>
<td>34%</td>
</tr>
<tr>
<td>Preparing returns to HESA, funding councils etc</td>
<td>24%</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>Liaison with student organisations</td>
<td>30%</td>
<td>63%</td>
<td>7%</td>
</tr>
<tr>
<td>Publicity/postgraduate prospectus</td>
<td>23%</td>
<td>60%</td>
<td>17%</td>
</tr>
<tr>
<td>Research Students training programmes – learning to teach</td>
<td>33%</td>
<td>55%</td>
<td>12%</td>
</tr>
<tr>
<td>Development of new taught PG programmes</td>
<td>20%</td>
<td>48%</td>
<td>32%</td>
</tr>
<tr>
<td>Social Provision for Students</td>
<td>20%</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Liaison with employers/industry etc</td>
<td>13%</td>
<td>52%</td>
<td>34%</td>
</tr>
<tr>
<td>Recruitment/admission (PGT)</td>
<td>28%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Specific support for international students</td>
<td>15%</td>
<td>60%</td>
<td>25%</td>
</tr>
</tbody>
</table>
More Recent Developments

- Vitae Researcher Development Framework
- Research Excellence Framework
  - 3 elements:
    - Output, impact and environment
  - Environment includes support for early stage researchers
- Realising that developing our researchers is here to stay in the UK
More Recent Developments

Such developments in the UK should not be seen in isolation to the rest of Europe for instance

Tuning Chemistry Subject Area Group and European Chemistry Thematic Network
Recommendations for the Third Cycle

November 2006
About Vitae…

**Vitae**

A national organisation playing a major role in the drive for high-level skills and innovation and in the UK's goal to produce world class researchers.

**Vision**

“To support world-class personal, professional and career development for researchers”

**Mission**

Championing the personal, professional and career development of doctoral researchers and research staff in higher education institutions (HEI) and research institutes.
Vitae aims

- Build human capital by influencing the development and implementation of effective policy relating to researcher development
- Enhance higher education provision to train and develop researchers
- Empower researchers to make an impact in their careers
- Evidence the impact of professional and career development support for researchers
Who and What is Vitae?

Vitae is funded through the Research Careers and Diversity Unit of Research Councils UK and managed by CRAC, an educational charity, in partnership with eight Hub host institutions.

It is supported by a range of sector based bodies and advised by a range of expert advisory groups drawn from across the sector.

National team managing and coordinating the programme activity

Eight Regional Hubs supporting local universities

www.vitae.ac.uk
Vitae main objectives (1)

- Championing the development and implementation of effective policy
  - Research Councils and UK government – Policy Forum
  - Concordat development and implementation
  - Vitae researcher development conference
  - Vitae engagement with Europe

- Enhancing higher education provision through sharing practice and resource
  - Hub activities
  - Hub events
Vitae main objectives (2)

Providing access to development opportunities and resources

- Effective researcher, Broadening horizons
- Strategies for busy researchers, leadership training
- Development of innovation activities

Building an evidence base to support the researcher development agenda

- Impact and Evaluation Group
- Career profiles project
- Careers in Research Online Survey
- Principal Investigators and Research Leaders Survey
Vitae Researcher Development Framework

- UK professional development framework
- Knowledge, behaviour and attributes of successful researchers
- Common framework across institutions in UK
- Universal language for understanding researcher capabilities
- Developed by researchers for researchers
The RDF describes the knowledge, behaviours and attitudes of researchers and encourages them to aspire to excellence through achieving higher levels of development. Applies to researchers of all levels and an online personal developing planning tool is available.

4 domains
12 sub-domains
63 descriptors
Vitae resources for researchers(1)

Vitae website

- provides information for PhD students and research staff (example below)
- Exploring wider career options
- Skills development opportunities
Courses and Resources

- The researcher booklet series
- Broadening Horizons
- Effective Researcher
- Careers in Academia
- Leadership in Action
- Collaborative Researcher
- Digital Researcher
- Social Enterprise
- And more…

www.vitae.ac.uk
International Work

- RDF trials in Europe and the US
- Development of an online professional development planner – subscription
- Courses for researchers
- Train the trainer, master classes and professional development
- Projects and research
- International newsletter (register at www.vitae.ac.uk/international)
Next steps for Vitae

- Sustainability of researcher development
- Consolidation (realise value of past investments, demonstrate value and achievements)
- Focus on employability, managing career transitions, value in the workplace, leadership, collaborative working, enterprise
- Embed the RDF
- Extend the number of institutions with the HR Excellence in Research award
- Extend international collaborations; the global researcher

www.vitae.ac.uk