

Vitae response to the review of postgraduate education by Professor Adrian Smith

December 2009

Executive summary

Vitae welcomes the forthcoming BIS review of postgraduate education. Our response focuses primarily on aspects that relate to postgraduate researcher employability and career development. It has been developed through consultation with key players from our HE network and in conversation with other sector-wide organisations. Vitae's unique strength is in drawing together input and perspectives from a wide variety of networks which have common interest in researcher development.

There has been a strong focus over the last seven years on issues relating to research degree programmes in the UK, in particular in embedding the development of researchers' skills and careers alongside the production of the thesis. The work of Vitae (previously the UK GRAD Programme (2003-8)) has led this change in how doctoral programmes are delivered.

The strong engagement by HEIs to develop researchers alongside research means that embedded skills and career development programmes contribute to the distinctiveness of UK doctoral programmes. This is becoming an important aspect of the UK's ability to attract international researchers and there is an opportunity to promote this distinctiveness more fully.

The Roberts review in 2002 recommended that a greater focus was brought to the training and career development of both postgraduate researchers and research staff in order to ensure that researchers were properly prepared for careers inside and outside academia. Since the recommendations were progressively funded from 2003 through the research councils approx £22m per year has been allocated to institutions¹ to enhance their provision of skills and career support. The 'Roberts funding' as it has become known has been part of a wide-ranging strategic drive to transform doctoral programmes to ensure that UK businesses and the academy benefit from highly and appropriately trained researchers. Funding has been confirmed until the academic year 2010/11.

A wider recognition of these aspects of doctoral education for all researchers and all institutions is embodied in the revised QAA Code of Practice for Research Degree Programmes² (2004) and more recently for research staff in universities via the Concordat to Support the Career Development of Researchers (2008). There is evidence, for example from the QAA Special Review of postgraduate research programmes in 2005-06³, that Roberts funding is having a direct impact on the quality and volume of development opportunities available to all research postgraduates.

Vitae provides strategic leadership, policy input, networks, events, courses, resources and research to enable UK HEIs to implement the relevant principles of the QAA code of practice and the Concordat effectively. Building capacity within the sector to provide targeted professional development for doctoral researchers is essential in order to meet the spirit and obligations of the

¹ Approx £800 per research council funded student per year has been paid to institutions since 2003/4 to provide skills and career development provision

² Code of Practice for the assurance of academic quality and standards in higher education, Section 1: Postgraduate Research Programmes, Quality Assurance Agency for Higher Education, September 2004, at: <http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section1/postgrad2004.pdf>

³ Report on the Review of Research Degree Programmes in England and Northern Ireland, and in Wales, Quality Assurance Agency for Higher Education, 2007, ISBN 978 1 84482 643 8, at: <http://www.qaa.ac.uk/reviews/postgraduate/>

Roberts review, subsequent policy initiatives and our ambition to 'train the next generation of world-class researchers'⁴.

The sector itself has been keen to evaluate the impact and value of this work. This has been led by a cross-sector working group set up to evaluate the impacts of researchers' skills called the Rugby Team⁵. The development of a sector-wide impact framework has been significant in understanding the benefits for various stakeholders⁶. The latest report⁷ indicated that the training and development interventions have strengthened research outputs, grant writing success, fellowship success and performance in research' and that skills training enhances the postgraduate researcher and supervisor experience and employability.

The 2009 results from the Postgraduate Research Experience Survey⁸ show an increase in satisfaction with skills development and professional and career development.

At a time when institutions are under financial pressure, the progress made to date remains substantial, yet precarious.

Vitae recommends that all stakeholders work together to ensure that professional development of researchers is appropriately funded and integral to doctoral programmes.

Ensuring that our researchers are equipped with high level skills for their future careers is essential in the UK's ability to emerge successfully from the economic downturn and to our continued economic prosperity.

⁴ RCUK strategy www.rcuk.ac.uk

⁵ www.vitae.ac.uk/rugbyteam

⁶ www.vitae.ac.uk/rtif

⁷ Rugby Team Impact Framework: one year on report

www.vitae.ac.uk/policy-practice/375-142971/Rugby-Team-Impact-Framework-one-year-on.html

⁸ Postgraduate Research Experience Survey <http://www.heacademy.ac.uk/ourwork/research/surveys/pres>

About Vitae

Vitae builds on previous work by the UK GRAD Programme and UKHERD. Vitae is supported by Research Councils UK (RCUK), managed by CRAC: The Career Development Organisation and delivered in partnership with regional Hub host universities.

Vitae works with UK higher education institutions (HEIs) to embed professional and career development in the research environment. Vitae plays a major role in innovating, sharing practice and enhancing the capability of the higher education sector to provide professional development and training of researchers.

Our vision is for the UK to be world-class in supporting the personal, professional and career development of researchers.

To achieve our vision we have four aims:

- **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.

www.vitae.ac.uk

About the Rugby Team

The mission of the Rugby Team is to '*propose a meaningful and workable way of evaluating the effectiveness of skills development in early career researchers*'. Set up following a policy forum in Rugby in 2005, this is a cross sector working group with representatives from the funding councils, research councils, Quality Assurance Agency, UK Councils for Graduate Education, Universities UK, the Association of Graduate Careers Advisory Services, UK higher education institutions and Vitae.

The current terms of reference (2008 - 2012) are to:

- inform national and agency policies and practices relating to the evaluation of skills development of researchers
- provide sector input into shaping a programme to build an evidence base on the effectiveness of developing researchers' skills
- act as a sector 'sounding board' to the new 'researcher development' programme with respect to their engagement in helping to build the evidence base.

Each year it agrees a range of projects, based on the recommendations of the Vitae policy forum. Vitae supports the Rugby Team. It's work and activities are included in the Vitae response.

www.vitae.ac.uk/rugbyteam

Full Vitae response

Our response primarily focuses on the personal, professional and career development of those undertaking doctoral degrees in the UK and aspects of policy and provision impacting on successful outcomes both for individuals and for the UK.

1. International

The UK needs to remain internationally competitive in both attracting overseas students and in the prospects of UK postgraduates in the global employment market. International Students provide a crucial fee income for many institutions, as well as enriching the UK's international networks.

- How can the UK remain an attractive place for postgraduate study?
- How can those who have studied in the UK continue to be competitive in the international marketplace for talent?
- Does the proportion of UK domiciled students in the UK PG population matter?

Vitae response:

1.1. The comprehensive PGR support [including skills and career development programmes] provided in the UK plays a key role in attracting international students to UK institutions

- 1.1.1 With 45% of doctoral researchers in the UK coming from abroad our international researchers make a significant contribution to HEIs and the UK research base
- 1.2.1 An increasing part of international marketing by UK institutions includes highlighting the comprehensive levels of support available for all postgraduate researchers at UK institutions. The level of development opportunities for postgraduate researchers is a significant benefit when marketing doctoral programmes internationally [see RCUK response for quote from the University of Oxford]

1.2. The UK is regarded as a world leader in the training and career support it provides as part of its doctoral degrees, and plays a leading role in Europe in this area

- 1.2.1 The European Commission look to the UK for significant input into policy around their 'People' programmes. The 1996 Concordat for research staff and the revised QAA Code of Practice contributed significantly to the development of the European Charter and Code for researchers launched in 2005. The UK has lead the way with a national approach [via the Concordat to Support the Career Development of Researchers and the QAA revised code of practice for research degree programmes] to ensure UK HEIs' policies and practice are aligned with the European Charter and Code principles
- 1.2.2 There is a growing interest in postgraduate provision from European universities and institutes. The development of the European Universities Association Council for Doctoral Education (launched 2008) is evidence of this. The UK have played a significant role in providing input to conferences and debates in this area in a range of fora. As professional development becomes more embedded in doctoral programmes across Europe, UK doctoral provision needs to remain competitive

- 1.2.3 The well developed doctoral training in the UK is contributing to capacity building internationally⁹. For example, 'the information gained from the discussions and in particular the very good example of the UK served as a basis in similar events that the National Hellenic Research Foundation (Greece) plans to organise in other countries where the level of the awareness and the adoption of the [European] charter and code is relatively low.'
- 1.2.4 Vitae is in the process of surveying the views of key international contacts about the UK's comprehensive professional and career development support for doctoral researchers and the role of Vitae as a UK-wide organisation championing these developments. Further information on the outcomes of this survey will be available in early 2010. Initial views suggest that the UK is recognized for its leading approach to this area:
- "...having this kind of organisation [Vitae] that thinks about the cultivation and development of people that are professionals and that can help research and researchers is something that we don't have in the US that we really miss and maybe we can develop something like that here because on reflection it is fairly unique to the UK." Vice President for Research and Dean of the University Graduate School, Florida International University
- "... impressed by the coordinated efforts done by Vitae in the UK, and of course it's more efficient and probably has better quality if you can make these strategies and courses at the national level rather inventing it in parallel locally." Executive Director, Research Council of Norway

1.3 The research environment is a global one. In order to ensure that UK research remains competitive UK researchers need to be equipped for working in a globalised research environment

- 1.3.1 The proposed UK Researcher Development Framework¹⁰ [out for sector consultation until 11 December; final framework to be launched in March 2010] will provide an underpinning framework for how we develop and prepare researchers for their future careers. The ability of UK researchers to seek and engage in meaningful collaborations and to work across cultural boundaries will be important for our future success
- 1.3.2 UK researchers are not traditionally internationally or inter-sectorally mobile. There is a need to provide encouragement, for example through placements, to expose UK domiciled researchers to other research and working cultures

1.4 Further work to better understand the motivations of PGRs, particularly international researchers, should be a priority

- 1.4.1 As part of this, more and appropriate data - including data on the destinations of international researchers who have studied in the UK - should be collected nationally via HESA. The Vitae 'What do researchers do?'¹¹ series analyses data for UK domiciled doctoral graduates and has become widely used. Vitae, alongside many in the HE community, recognizes a gap in information and supports the BIS project to review the quality of data on international postgraduate researchers. international doctoral graduates destination data, already collected in many universities, should be included in the standard HESA DLHE surveys.

Key points:

1.5 Vitae acknowledges widespread calls from within the UK HE community which endorse the recommendation in the 'Promoting the UK doctorate'¹² report that relates to the

⁹ <http://www.vitae.ac.uk/policy-practice/916-86363/all/120851/Vitae-researcher-development-conference-2009-realising-the-potential-of-researchers-.html#pageInfo> From Vitae conference session run by NHRF

¹⁰ www.vitae.ac.uk/rdconsultation

¹¹ www.vitae.ac.uk/wdrd

¹² www.universitiesuk.ac.uk/Publications/Documents/research_report_doctorate.pdf

international context: Universities UK should, on behalf of the higher education sector, work with key stakeholders such as the British Council, the Europe Unit and the International Unit to promote the UK doctorate

1.6 Ensuring our researchers are equipped to work in a globally competitive research environment is a priority. The UK needs to ensure that there are sufficient resources to train researchers for successful careers in a global marketplace

1.7 Further work should be undertaken to better understand the motivations of international postgraduate researchers in choosing to study, or not, in UK institutions

2. Value of PG

The highly skilled postgraduates that the UK produces power our research base and drive our innovative businesses. Undertaking postgraduate education provides individuals with pathways into a wide range of careers.

- What are the benefits of postgraduate education, to the individual, to HEIs, to businesses and to the wider economy and society?
- Is there an optimal number of taught/research postgraduates studying in the UK?

Vitae response:

Much has already been done in the UK to evidence the benefits to stakeholders of high level skills gained through doctoral research and the value of postgraduates¹³.

2.1 There is clear evidence that the skills – both technical and high-level – of UK-trained doctoral researchers are used and valued by a range of sectors

2.1.1 The Vitae ‘What do researchers do?’¹⁴ series analyses the first destinations of UK domiciled doctoral graduates in the UK. Initial employment rates are higher than undergraduate and masters graduates. About half are employed outside of higher education across all employment sectors and occupations

2.1.2 The recently undertaken [unpublished] analysis of postgraduate researchers’ views three and a half years after they graduated RCUK doctoral cohort study¹⁵ has some useful findings. Respondents report using to some extent their disciplinary knowledge (96%), research skills (94%) and their generic skills (98%) in their current employment. On average more than half are using these skills and knowledge most of the time.

2.2 There is clear evidence that researcher training and development is valuable to a range of stakeholders

2.2.1 The Rugby Team Impact Framework¹⁶ was developed specifically to evaluate and evidence the wider value of trained [doctoral] researchers. Launched in 2008 the framework has been widely used by UK HEIs and ‘the Rugby Team Impact Framework: one year on’ report launched in September 2009 identified that researcher training and development activity:

¹³ See Universities UK and HEPI

¹⁴ www.vitae.ac.uk/wdrd and www.vitae.ac.uk/careerstoriesportal

¹⁵ <http://www.rcuk.ac.uk/rescareer/rcdu/impact.htm>

¹⁶ www.vitae.ac.uk/policy-practice/1418/Rugby-Team-activities.html

- improves research outputs, grant writing success, fellowship success and performance in research
- enhances the postgraduate researcher and supervisor experience
- enhances employability
- enhances and increases the public understanding and outreach activity of researchers

2.2.2 Evaluation of training and development activities has been a key theme for universities in recent years. The 'RTIF: one year' on report highlights evidence from 27 evaluation projects across the sector. In addition, case studies of evaluation activities can be found on the Vitae Database of practice¹⁷

2.3 The value of postgraduate level employees to business

2.3.1 The Rugby Team undertook a meta-analysis in 2007 of 'employers views of researchers skills: a comprehensive review of the existing literature into employers views of the skills of early career researchers'¹⁸. Over 40 studies were examined in detail. Findings included that 'more recent studies... highlight faster career progression and higher salaries of research staff and PhD graduates, and report on the benefits of hiring postgraduate researchers and research staff'

2.3.1 Vitae's work in the area of 'Recruiting PhDs: what works'¹⁹ found that despite many barriers to communication and recruitment, employers acknowledged that competition for PhD graduates was increasing

2.3.2 Vitae's most recent employer survey is referenced in section 3.4.1

2.3.3 The European Universities Association DOC-Careers project 'Collaborative Doctoral Education: University-Industry Partnerships for Enhancing Knowledge Exchange' (2009) involved 33 universities, 31 companies, and 18 other stakeholder organisations, from 20 different countries across Europe. This report underlines that collaborative doctoral programmes, established between universities and industry, are becoming increasingly important across Europe²⁰

2.4 The benefits to individuals

2.4.1 Vitae has undertaken many interviews with doctoral graduates to explore the value of their doctoral experience on their future careers. What do researchers do? career stories and films provide a collection of 60 stories from recent doctoral graduates. An analysis of the impacts evidenced within these stories will be published in January. A UK database of career stories of researchers will be launched in January which will pull together over 400 publicly available stories from a range of UK sources.

Examples of doctoral researchers' views of the benefits of doctoral training from the impact analysis include:

"The process of conducting research, writing working papers, getting comments, presenting at seminars, going back to the data, then honing the research into a publishable paper, which I learned doing my doctorate, is absolutely central to the job I have now."

"I use the management, writing, presenting and problem solving skills that came with [the doctorate] every single minute. I also use the reserves of resilience and resourcefulness that

¹⁷ www.vitae.ac.uk/practice The evaluation section lists 122 examples of practice in UK HEIs including cross-HEI evaluations of researcher training.

¹⁸ www.vitae.ac.uk/cms/files/Rugby-Team-Employers'-views-of-researchers'-skills-September-2007.pdf p6

¹⁹ www.vitae.ac.uk/cms/files/UKGRAD-Recruiting-PhDs-what-works-Mar-2007.pdf p5

²⁰ <http://www.vitae.ac.uk/policy-practice/916-86363/Workshops/127901/Vitae-researcher-development-conference-2009-realising-the-potential-of-researchers-.html#pageInfo>

being a researcher breeds. The ability to weigh up a big problem and deal with it in bits is highly prized in certain sectors.”

- 2.4.2 Doctoral researchers surveyed in 2006 overwhelmingly saw their research training as a positive element in their future careers. Some were actively trying to ‘stand out from the [first degree graduate] crowd’, for others it was a necessary step on an academic career path. See 5.2
- 2.4.3 The responses from the PRES survey²¹ to enhanced skills development provision indicate that doctoral researchers are improving their capacity for independent learning, project management and communication during their doctoral studies

Key points:

- 2.5 **Vitae’s work with stakeholders in this area suggests that continued and more effective dialogue between non-HE employers and HEIs is important to continue. The range of high level skills found in doctoral graduates is not always understood or appreciated by employers, especially by SMEs**
- 2.6 **Enabling doctoral graduates to articulate their skills and experiences to employers is key. This should remain a priority for institutions**
- 2.7 **There is data relating to the career motivations of current doctoral researchers²² but we know much less about the attractiveness, or not, of doctoral study to potential candidates. More work should be done in this area**
- 2.8 **More focus should be put on providing prospective doctoral candidates with information on career opportunities in order to enable them to make more informed career decisions**

3. Business, employment and skills

Postgraduates have the higher-level skills required in key sectors of the economy, in particular in the growth industries identified by the Government in New Industry, New Jobs. Many employers and professions require postgraduate qualifications for entry or offer postgraduate-level continued professional development.

- Are postgraduates equipped with the right skills, experience and knowledge to progress in employment and get significant value from the investment in their education?
- Do businesses in the UK make good use of the experience and skills that postgraduates can offer?
- How can postgraduate provision in the UK better respond to the needs of business, especially new and emerging industries?

Vitae response:

Roberts funding (for transferable skills and career development) and the broader focus on employability and transferability, highlighted in the revised QAA code of practice for research degree programmes, has enabled HEIs to significantly increase their careers support (information, education and guidance) for doctoral holders since 2002.

²¹ <http://www.vitae.ac.uk/CMS/files/upload/Vitaeconference2009-A1-PRES.pdf> Slide 15 onwards

²²

http://www.heacademy.ac.uk/ourwork/supportingresearch/alldisplay?type=resources&newid=ourwork/postgraduate/pres_2009_technical_report&site=york PRES three year report, p20

3.1 Ensuring the employability of researchers in the UK has been a focus since the Roberts review in 2002; it remains a key issue as cited in the HE debate and in responses to this review²³

- 3.1.1 The Roberts funding for skills and career development of approx £22m per year made available through the research councils, combined with the QAA revised code of practice for research degree programmes has embedded a significant and broad range of provision for the development of transferable employability skills within doctoral programmes. However, in 2007 the Council for Science and Technology report 'Pathways to the future: the early careers of researchers in the UK' said 'much needs to be done to realise the vision that Sir Gareth Roberts had for researchers in his report 'SET for success', and... many of the issues that he raised still need to be addressed'²⁴. The future provision of skills, career and employability development beyond the confirmed Roberts funding (2011) is a key issue.
- 3.1.2 The 1994 group 2008 report 'Survey of the Impact of the Roberts funds at 1994 group institutions'²⁵ concluded that 'as a result of this funding, skills training and related support for early career researchers are now firmly embedded within institutions, and that the amount, range, and quality of training and other support has improved considerably. However, it is also clear that although institutions have invested a significant amount of their own resources to supplement Roberts' funding, they are nevertheless reliant on the continued provision of the ring-fenced Roberts' income so that they are able to build on many of the innovative forms of training and support that are currently at an early stage of development.

3.2 The role of career and professional development for researchers, including the Roberts funding and its benefits and impact, have been well scrutinised. The importance, particularly in the current economic climate, of an identifiable funding stream to enable HEIs to continue to build their capacity to ensure postgraduate researchers are able to make a significant impact in their future careers has been widely recognized, for example:

- 3.2.1 Professor Nigel Thrift's report²⁶ 'Research careers in the UK: a review' commissioned as part of the HE debate recommended to the Research Councils that 'the Roberts funding for universities should be sustained over the long-term to ensure high-quality researcher development programmes become embedded across the sector'
- 3.2.2 The recent 1994 group report 'The importance of the HE research base in addressing major global challenges and ensuring the UK's future prosperity'²⁷ sets out recommendations for the future of research funding. The report recognises that Roberts funding has enabled vital infrastructures to be put in place and argues that it has made a real difference to research

²³ Including UKCGE, NUS and Universities UK

²⁴ www.cst.gov.uk/reports/files/science-government/cst_pathways.pdf p7

²⁵ Summary of Institutional 'Impact Points' identified in the 1994 Group Roberts' Survey (Neiland, Reddy & Winn 2008)

- increased financial resources available for skills training of all postgraduate research students and postdoctoral researchers; promoted more effective resource management and planning; improved coordination of training provision; widened scope and extent of training programmes; motivated engagement of researchers with skills development; enhanced support for Supervisors and Principal Investigators; assisted provision of researchers' induction; improved personal development planning and record keeping practices; encouraged researchers' feedback and representation; facilitated better inter- and intra-university collaborations; stimulated researcher-led innovations; extended networking and mentoring within the research community; raised awareness of and skills in knowledge transfer; broadened employer engagement and researcher-specific careers' advice

²⁶

www.dius.gov.uk/higher_education/shape_and_structure/he_debate/~media/publications/N/Nigel%20Thrift%20contribution%20to%20HE%20Debate

²⁷ 'The importance of the HE research base in addressing major global challenges and ensuring the UK's future prosperity', October 2009. www.vitae.ac.uk/policy-practice/167-165491/New-report-by-the-Group-1994-sets-out-recommendations-for-the-future-of-research-funding-.html

effectiveness. It calls for 'the necessary resources to train the world-leading researchers of the future' to 'ensure our future intellectual sustainability'

- 3.2.3 See 5.1.1 for survey of HEI views on the sustainability of skills and career development provision as part of doctoral programmes
- 3.2.4 The recent UUK report 'Promoting the UK Doctorate' launched in Parliament calls for securing the support for the development and the future employability of PhD students. Speaking at the House of Commons to an audience including MPs and Vice-Chancellors on 28 October²⁸, Professor Steve Smith, President, Universities UK said; "Transferable employability skills for PhD graduates, allowing them to work effectively within industry as well as academia, are critical." Professor Smith underlined the importance of Roberts Funding to be continued "beyond the current timeframe of 2010/11 in a clear and identifiable way."

3.3. Over the last several years, researcher development has benefited enormously from marked increases in practice sharing and collaboration between institutions. Much of this has been facilitated by Vitae

- 3.3.1 One example is the 'Effective researcher'²⁹ programme; developed by Vitae and reaching over 700 postgraduate researchers in its pilot phase. Over 30 UK HEIs now run this programme. A major evaluation of its impact and effectiveness is currently underway (outcomes available Easter 2010)

3.4 Employers are increasingly recognising and making good use of employees with high-level skills developed as part of postgraduate research programmes

- 3.4.1 The Vitae employers survey, conducted during 2009, found that of just over 100 employers surveyed a third were actively targeting postgraduate researchers in their recruitment³⁰. Also see section 2.3 on benefits to employers
- 3.4.2 The Vitae employer survey found that those employers actively engaging in recruiting researchers were likely to value their skills and potential more highly. Employers may not yet recognise that postgraduate researchers have different and highly developed skills/experience and could do more to make best use of them

3.5 The new UK Researcher Development Framework (RDF)³¹ aims to underpin the training and development of researchers with the appropriate skills for their future careers

- 3.5.1 The RDF was developed by Vitae and the Rugby Team during 2009. The full framework was available for consultation during November and December. There was a very positive response to the consultation, with over 200 responses including Rolls Royce and Qinetiq. The RDF will replace the previous 'Joint Skills Statement' in the QAA Code of practice for research degree programmes. The responses to the consultation will be analysed and a final framework will be launched in March 2010
- 3.5.2 The RDF aims to enable researchers to be better able to articulate their skills to employers
- 3.5.3 The RDF also acknowledges the closely related agendas of enterprise, knowledge exchange, public engagement and research into policy

²⁸ 'Promoting the UK Doctorate' published by UUK. Authored by Janet Metcalfe and Faye Emery, Vitae <http://vitae.ac.uk/policy-practice/375-165451/President-of-UUK-highlights-doctoral-employability-as-key-priority-for-postgraduate-review-.html>

²⁹ www.vitae.ac.uk/effectiveresearcher

³⁰ Final report to be launched in January 2010 at the Vitae Policy Forum and will be available at www.vitae.ac.uk/employers

³¹ Developed by Vitae and the Rugby Team, based on empirical evidence from interviews with researchers and open to wide sector consultation in November and December 2009. www.vitae.ac.uk/rdfconsultation

Key points:

3.6 It's important to recognize the wide-ranging employability of doctoral graduates and value to all employment sectors. Our doctoral programmes need to continue to provide postgraduate researchers with sufficient breadth of skills and awareness of opportunities to realise their widest potential for the UK

3.7 Consideration could be given to a UK employers forum in order to gather employers views on the demand and forecast for high level skills requirements from doctoral graduates

4. Participation

The recent report *Higher Ambitions* states the Government's continuing commitment to widening participation in Higher Education. Although much is known about the make-up of the undergraduate population, more information is required about those undertaking postgraduate study.

- What factors affect decisions of individuals as to whether or not to undertake postgraduate study?
- How important are alternative models of postgraduate provision (eg part-time, distance learning) in supporting expanding and widening participation?

Vitae response:

We welcome this focus of the review as part of UK strategy to ensure we attract the right people into research.

4.1 In relation to the provision of personal and career development for postgraduate researchers, Vitae believes it is important to ensure that access to these opportunities are open to all researchers irrespective of how their research is funded

4.1.1 Professor Paul Wellings report³² on 'Intellectual property and research benefits' as part of the HE debate recommended that 'the 'Roberts Funding' for postgraduate students and post-doctoral researchers, designed to cover the costs of additional transferable skills should be continued and expanded. Additional resources should build on the current 'employability' agenda and be expanded to include a broader set of courses specifically to assist in progressing the commercialisation of research. In addition the eligibility criteria should be expanded to cover all postgraduates and post-doctoral fellows, including international students, rather than just being directed to those funded by RCUK. DIUS [now BIS], RCUK and HEFCE should agree a mechanism to achieve this outcome.

4.2 Many institutions have focussed on providing tailored support for different groups of postgraduate researchers

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www.dius.gov.uk/higher_education/shape_and_structure/he_debate/~media/publications/l/int_property_and_research_benefits_131008

- 4.2.1 The Vitae part-time researcher training package and research report was developed by a consortium of 19 institutions in the Midlands. An initial exploration of the needs of part-time researchers led the development of now nationally available resources for a range of workshops to support part-time doctoral researchers. These materials are now used in a range of institutions. An analysis of the Postgraduate Research Experience Survey results for part-time researchers is included as part of the research report³³

4.3 There are many motivations for undertaking doctoral research, including to pursue a career in research, to ‘stand out from the crowd’ in terms of graduate employability, for mid-career or continuing professional development and to facilitate a change in career path

- 4.3.1 Understanding the motivations of all doctoral researchers is an important part of planning appropriate support for their development. A survey undertaken by Vitae (then UK GRAD Programme) published in 2006 found that of the 650 postgraduate researchers surveyed 72% felt that their PhD would enhance their career prospects. Outcomes from the PRES survey³⁴ suggest that around a third of respondents were motivated to undertake doctoral research to enhance their career prospects for a research/academic career. Another third were motivated by an interest in the subject

Key points:

4.4 Institutions should continue to ensure that professional development opportunities are available to all researchers irrespective of their funding source

4.5 More work could usefully explore the career motivations of doctoral researchers, including barriers to undertaking doctoral research and awareness levels of doctoral programmes in undergraduates and young people

5. Fees and Funding

The findings of this review will inform the Independent Review of Higher Education Funding and Student Finance, which will consider the affordability of the current system and the link between financial support and the goal of widening participation.

- Is the current model of funding postgraduate provision sustainable, and does it offer the best possible value for money?
- Are there models of providing postgraduate financial support that would be more efficient and productive?
- Are the current sources of financial support for postgraduate students widely understood by potential and existing students?

Vitae response:

5.1 Given the current financial climate HEIs are reporting that training and development budgets are already under threat. The culmination of existing internal cuts and a change in the scope/levels/access to Roberts funding for skills and career development could have a

³³ <http://vitae.ac.uk/CMS/files/upload/Part-time%20researcher%20experience.pdf>

³⁴ http://www.heacademy.ac.uk/ourwork/supportingresearch/alldisplay?type=resources&newid=ourwork/postgraduate/pres_2009_technical_report&site=york

serious short term impact on the capacity of institutions to continue to provide training for enhancing the employability of their doctoral researchers

5.1.1 A sector consultation³⁵ following the Vitae Roberts Policy Forum in 2009 highlighted that significant progress has been made by institutions in enhancing provision of personal and career development opportunities for researchers. However, many respondents to the consultation following the 2009 Vitae Roberts Policy Forum highlighted that skills development is not yet permanently embedded in most institutions and the loss of funding will seriously threaten the progress made and could have a wider impact on the research base.

‘...the purpose of Roberts funding, since its introduction in 2004, has been to facilitate a change in culture within higher education institutions and to build the early career research community. Effecting this kind of change in culture so that the change is permanent takes far longer than the initial period of Roberts funding to 2011.’ *Response to consultation*

5.1.2 The 1994 group of research intensive universities recognise that Roberts funding has enabled vital infrastructures to be put in place and in their 2009 report³⁶ argues that it has made a real difference to research effectiveness. They urge the Government to do more to develop national research policy and target funding to boost the impact of UK research.

Key points:

5.2 Funding should reflect the changed nature of doctoral programmes which now include a valuable emphasis on future employability, career development and the wider impact of our trained researchers

5.3 Vitae recommends that all stakeholders work together to ensure that professional development of researchers is appropriately funded and integral to all doctoral programmes

6. Student experience

The student experience is vitally important, and cuts across each of the other themes:

- What are the key elements of a high quality PG student experience?
- Are there innovative delivery models or mechanisms that benefit the student experience, which could be applied more widely?

Vitae response:

6.1 The revised Code of Practice for research degree programmes and associated Special Review which took place in 2005 has done much to underpin the experiences of postgraduate researchers in UK institutions

6.1.1 Vitae particularly welcomes the aspects of the Code relating to supervisory practice, employability and career development and personal development planning.

6.2 One of the particular strengths of UK doctoral education is the access to comprehensive and flexible training and development for postgraduate researchers

³⁵ [/www.vitae.ac.uk/CMS/files/upload/VRPF_consultation_results_Jul09.pdf](http://www.vitae.ac.uk/CMS/files/upload/VRPF_consultation_results_Jul09.pdf)

³⁶ ‘The importance of the HE research base in addressing major global challenges and ensuring the UK’s future prosperity’ 1994 Group, published 5 October 2009.
<http://www.vitae.ac.uk/policy-practice/167-165491/New-report-by-the-Group-1994-sets-out-recommendations-for-the-future-of-research-funding-.html>

- 6.2.1 The Postgraduate Research Experience Survey³⁷, run by the Higher Education Academy, has shown a progressive improvement in the experiences of researchers over the three years it has been run. The 2009 survey, in which 82 institutions and over 18,000 postgraduate researchers, found that 'opportunities to develop research and transferable skills were the areas in which research students' expectations were met or exceeded the most' (an increase in satisfaction in skills development (64.9%)). The survey also highlighted the need to introduce 'more effective ways of encouraging research students to reflect on their professional and career development needs' and 'more effective ways of increasing research students' understanding of the range of career opportunities open to them'.
- 6.2.2 The PRES survey has been particularly important for highlighting and bringing attention to the postgraduate research experience. Many institutions found the process of review useful in enhancing their practice and support for postgraduate researchers

6.3 Over the last few years we have seen a growing number of researcher-led activities in the area of personal, professional and career development

- 6.3.1 There are many examples of institutions providing mechanisms for postgraduate researchers to shape and influence provision provided by the universities and of ways that researchers can bid for funding to enable them to run development activities themselves³⁸.
- 6.3.2 Vitae innovate³⁹ has provided funding to the National Union of Students for a project: 'researcher-led initiatives: generating frameworks for promoting a postgraduate researcher stake in researcher development'⁴⁰. This project will explore supporting postgraduate researchers to operate as stakeholders in the intellectual culture of which they are a part; and the rationale, value and impact of supporting researcher-led initiatives

6.4 Supervision is clearly a defining factor in the experiences of postgraduate researchers in the UK

- 6.4.1 The Rugby Team developed a short survey, STaRSS (Skills Training and Research Supervision Survey) which was designed to provide a national tool that can be used to measure the extent of the awareness and cultural acceptance of the skills agenda by academics. Three volunteer universities piloted it during the summer of 2007. The initial results from the successful STaRSS trial were presented at the Vitae (then UK GRAD Programme) conference in September 2007. Feedback from the trial and two workshops has been used to further refine the survey which is now available on BOS for institutions to use⁴¹. Several HEIs have adapted STaRSS for their own use

Key points:

6.5 The Postgraduate Research Experience Survey is a useful tool for gauging and giving profile to the postgraduate researcher experience. The survey should continue to be run and supported by the Higher Education Academy

6.6 Institutions should continue to find ways for researchers to be active stakeholders in their own development and better integrated into the research environment

³⁷ www.heacademy.ac.uk/ourwork/research/surveys/pres and

www.vitae.ac.uk/CMS/files/upload/Vitaeconference2009-A1-PRES.pdf slides 15, 16

³⁸ Schemes from Cardiff University and Queen Mary University (London) are referencing in 'Enterprise at work: exploring intrapreneurship in researcher development'

http://vitae.ac.uk/CMS/files/1.Intra%20Report_Final_33.pdf

³⁹ www.vitae.ac.uk/innovate

⁴⁰ www.vitae.ac.uk/CMS/files/upload/Vitae_Innovate_Sept09.pdf

⁴¹ <http://www.survey.bris.ac.uk/support/category/news/starss>