

Enhancing learning and employability of doctoral candidates in social sciences: results of a mixed methods study

Key words: employability, researcher development, doctoral candidates

Context: Past few decades have seen a period of constant transformation of doctoral education (Enders, 2004; Kehm, 2004; Baschung 2010). Park (2007) emphasises an increased tendency to formalisation of doctoral education through changes in the doctoral curriculum, approaches to supervision and the establishment of Graduate Schools. A part of this transformation is closely connected with the employability agenda and the work-related skills, knowledge and attitudes that doctoral candidates should develop during their studies. Numerous reports on a diversity of career destinations of doctorate holders have contributed to the changes in the perceptions of a PhD degree as the one leading just to academic careers (Purcell et al, 2005; the Royal Society, 2010). As a result, many Higher Education Institutions in the UK and all over the world invested in the programmes supporting development of well-rounded researchers possessing a wide range of skills, knowledge and attitudes that could meet the needs of the knowledge economy. The formal skills training programmes have become a predominant model for developing employability of doctoral candidates. Despite an increasing number of evaluation projects demonstrating the benefits of such training (Vitae 2010), many researchers (Creswell, 2007, Mowbray & Halse, 2010) have criticised this ‘deficit’ and limited approach to viewing learning process at PhD level calling for more in-depth research exploring development of researchers during candidature.

Aim: In the attempt to address this issue, this paper explores the views of social science doctoral candidates in Scottish Higher Education Institutions (HEIs) on the issues of employability and its development during PhD studies.

Conceptual framework: Activity Theory was adopted as a conceptual framework for this study, in order to explore the process of employability development during candidature. Activity Theory and the socio-cultural perspective on learning take their roots in the studies of the Soviet psychologist Lev Vygotsky (1978). The ideas of Vygotsky and his followers relate to the understanding of the interdependence which exists between individual process of cognition and the social context in which the cognition is taking place. Activity theory has been previously used to explore various aspects of doctoral education (Beauchamp et al,

2009; Hopwood, 2010). In this case, it was adopted in order to design a mixed-method study, and subsequently used as a lens for analysing its results. In accordance with the nature of the research problem and the adopted conceptual framework, the study is structured around three research questions:

1. How do doctoral candidates understand the notion of 'employability'?
2. What are the activities that contribute to the development of employability of doctoral candidates?
3. How does the environment influence the development of employability of social science doctoral researchers?

Method: As reported elsewhere, a mixed methods design is preferred in the studies adopting an Activity Theory approach (Nardi, 1996; Hopwood and Stocks, 2008). The study adopted a qualitative-quantitative sequential mixed methods design. The first part of the study involved semi-structured interviews with 9 doctoral candidates in various social science disciplines from three different types of higher education institutions in the UK (post-1992, Russell group, technical). The interviews have been transcribed and subsequently analysed using a thematic approach. The analysis of the qualitative data was followed by design of an online survey that was administered through Bristol Online Survey platform, and received the responses from 175 doctoral candidates in 10 Scottish HEIs. The analysis of quantitative data process was supported by SPSS 18.

Findings: This paper presents the results focused on three main areas: employability concept, process of developing employability and role of the environment.

Preliminary results show that there are diverse views of doctoral candidates on the concept of employability that reflects the general confusion around the meaning of this concept in the literature. The majority of doctoral candidates viewed it as the possession of the relevant attributes that would make them more likely to get an employment upon graduation. The results show that the attributes viewed important to develop by doctoral candidates and are primarily related to the academic careers (research skills, teaching skills, writing for publication). This links to the career aspirations of doctoral candidates since the majority of the participants of this study would like to pursue a career in academia.

Despite a significant focus on training and development programmes in HEIs, researchers report that they are developing their employability mainly through their practice (trial and

error) as well as through engagement in collaborations with colleagues. The participants emphasise the importance of research and research-related tasks such as grant application writing, teaching duties and presenting at conference. In addition to this, extra-curricular activities such as volunteering, engagement in journal editing and student societies were reported as having an impact on this process. In terms of support available to develop employability, while some participants are quite satisfied with it, others commented on the lack of tailored training for mature doctoral candidates and the need to develop stronger PhD communities and improve mentoring schemes.

Within the 'environment' element doctoral candidates report on a role of the community including supervisors, department colleagues, researcher developers and PhD peers in the process of developing employability and the ways the tasks are distributed among them. In addition, the results of the study shows a low level of awareness by doctoral candidates of the main policies and regulations related to employability and researcher development in the UK.

Conclusions: Drawing on the concepts of Activity Theory as an analytical lens, the study provides an insight into the process of developing employability as perceived by social science doctoral candidates. We argue that employability development is a complex process that requires consideration of multiple aspects such as the development of an effective workplace learning environment supporting this process. In addition, employability development during PhD studies should be viewed through the lens of initial motivations and career aspirations of doctoral candidates. Overall, the process of structuring this environment should account for the views of doctoral candidates themselves on this process.

References:

- Baschung, L. (2010), "Changes in the Management of Doctoral Education", *European Journal of Education*, Vol. 45, No. 1, pp.138-152
- Beauchamp, C., Jazvac-Martek, M. & McAlpine, L. (2009), "Studying doctoral education: using Activity Theory to shape methodological tools", *Innovations in Education and Teaching International*, Vol. 46, No. 3 pp. 265-277
- Craswell, G. (2007), "Deconstructing the skills training debate in doctoral education", *Higher Education Research & Development*, Vol.26, No.4, pp. 377-391
- Enders, J. (2004), "Research training and careers in transition: a European perspective on many faces of the PhD", *Studies in Continuing Education*, Vol. 26, No.3, pp. 419-429
- Hopwood, N. (2010), "Doctoral experience and learning from a sociocultural perspective", *Studies in Higher Education*, Vol.35, No.7, pp. 829-843

Hopwood, N., Stocks, C. (2008), "Teaching development for doctoral students: what can we learn from activity theory?" *International Journal for Academic Development*, Vol. 13, No. 3, pp. 187–198

Kehm, B. M. (2006), "Doctoral Education in Europe and North America: A Comparative Analysis" In: Teichler, Ulrich (Hg.): *The Formative Years of Scholars*. London: Portland Press (Wenner-Gren International Series, 83), pp. 67-78.

Mowbray, S., Halse, C. (2010), "The purpose of the PhD: theorising the skills acquired by students", *Higher Education Research & Development*, Vol.29, No.6, pp. 653-664

Nardi, B.A. (1996), *Context and consciousness: activity theory and human-computer interaction*, Michigan: MIT Press

Park, C. (2007), *Redefining the doctorate*, Discussion paper: Higher Education Academy

Purcell, K., Elias, P., Durbin, S., Davis, R., Warren, S. (2005), *The employment of social science PhDs in academic and non-academic jobs: research skills and postgraduate training*

The Royal Society (2010), *The Scientific Century: securing our future prosperity*. Retrieved: 10 October 2010 <http://royalsociety.org/the-scientific-century>

Vitae (2010), *The impact of researcher training and development: two years on*. Retrieved: 1 October 2010

http://www.vitae.ac.uk/CMS/files/upload/IEG_Development%20Report2010_soft%20copy.pdf

Vygotsky, L. S (1978) *Mind in society: the development of higher psychological processes*, Cambridge, MA: Harvard University Press