

ERA Consultation Contribution (4): ‘Intersectoral Boundary Spanning’ – Increasing Academic - Non-Academic Sectors Transfer Possibilities for PhDs

In this fourth contribution to the European Research Area (ERA) consultation, we address the issue of intersectoral transfer possibilities for PhDs between the academic and non-academic sectors. Here, ‘intersectoral boundary spanning’ constitutes an important strategy in the attempt to increase the research intensity of European economies. By facilitating mobility of junior researchers across sectors and fostering the development of transferable skills¹ of doctoral candidates, ties between academic and non-academic sectors (i.e. industry, business, government, NGO’s, charities or cultural institutions) will be strengthened. This not only enables an intensified knowledge transfer between the sectors and the creation of new opportunities, it also promotes future cooperation between the respective involved institutions. Furthermore, it boosts the reputation of doctorate holders in industry and other non-academic sectors and thereby advances career opportunities of doctoral candidates. All this in turn increases the attractiveness of institutions of higher education as employers.

Intersectoral boundary spanning remains, however, under-discussed in current debates concerning how to increase the overall European research intensity. For instance, although there are already some means of intersectoral boundary spanning such as doctoral training in cooperation with industry or training offers that aim at transferable skills (e.g., communication or project management), these actions are still rather isolated. Eurodoc believes that more efforts should be taken to develop comprehensive and joint strategies in this respect by academia, other sectors and political institutions. To contribute to this much needed debate, we point to two exemplary action fields which should be approached as means of intersectoral boundary spanning: (1) doctoral training outside of academic institutions and (2) transition from academia to the non-academic sector after the PhD.

(1) Beside models of **PhD training** which include employment at an institution of higher education or other forms of funding that allow a close involvement of PhD candidates in an academic institution (e.g., scholarship, inter-institutional cooperation with non-university research institutions), there is a significant group of people conducting research for their PhD while earning their living **outside of the core academic system**. In the *Eurodoc Survey I* [Ref 2] a considerable minority (in some countries up to approx. 20%) of the sample indicated that they are working in the non-academic sector². For PhD candidates who are not intimately involved in the core academic system (i.e. external PhD candidates), a major challenge is to **ensure the quality of their research**³. At the

¹ Definition according to the European Science Foundation [Ref 1, p. 47]: “Transferable skills are skills learned in one context (for example research) that are useful in another (for example future employment whether that is in research, business etc.). They enable subject- and research-related skills to be applied and developed effectively. Transferable skills may be acquired through training or through work experience.”

² That is the public and private non-academic research sector, public and private non-research sector and NGO’s.

³ Minimum requirements to enable successful external PhD trainings would be regular supervision, a basic involvement in the academic system (e.g., through workshops or summer schools) and realistic agreements

same time, these junior researchers naturally develop a broader network outside of academia and acquire experiences and skills that are of high relevance for both academia and non-academia. This brings them into a special position between the sectors, which qualifies them as **potential intersectoral boundary spanners**. Hence, to improve this model of doctoral training would not only ensure research quality and reduce dropout rates, but build up a group of people who could work as ‘mediators’ and ‘ambassadors’ between academia and non-academia in the future.

- (2) Career options **after obtaining a PhD** are not limited to academic research, but also include **transition to non-academic sectors**. A strategy of intersectoral boundary spanning fulfils both the political and market need as positions at institutions of higher education are limited, and a societal and market demand as qualified doctorate holders are of high value in the knowledge-based European economies. From the perspective of PhD candidates, it is considered an important option for their career path. When asked where they want to work after finishing the PhD, many of the respondents to the *Eurodoc Survey I* [Ref 2] indicated that they would like to work in public or private non-academic research sectors⁴. A lower but still considerable number of the respondents would also like to work in the public or private non-research sector or for a NGO. The **development of transferable skills** during the PhD training is one important factor to enhance employability of PhD candidates in the non-academic sectors. Furthermore, PhD candidates should be provided with opportunities and support to **develop networks with non-academia**, as networks play an essential role for fluent and successful transitions between the sectors. Further transfer activities that can be derived from such networks are the transition of technology, knowledge and ideas (e.g., business spin-offs) that serve both academia and non-academia.

To summarize, we recommend improving external PhD trainings, strengthening academic – non-academic networks and fostering the development of transferable skills as strategies of intersectoral boundary spanning. Academic and non-academic institutions as current and/or future employers, politics and PhD candidates equally share the responsibility to make these means successful boundary spanning activities.

This contribution was written in November 2011. Please contact either the career development (career-development@council.eurodoc.net) or the mobility (mobility@eurodoc.net) working group coordinator for any questions or further information.

References

- 1 Scholz, B., Vuorio, E., Matuschek, S., & Cameron, I. (2009). Research Careers in Europe: Landscape and Horizons. Retrieved 24.11.2011, from European Science Foundation www.esf.org/fileadmin/links/CEO/ResearchCareers_60p%20A4_13Jan.pdf
2 <http://www.eurodoc.net/news/2011/09/30/eurodoc-survey-i-report-available-for-download>

which take into consideration the special needs of external PhD candidates (e.g., in terms of time need). However, even these basic requirements are not yet guaranteed for every external PhD candidate.

⁴ Multiple responses were possible.