Bridging the skills-gap between academia and the world outside

In Belgium, like in most OECD countries, there has been a sharp increase in the number of doctoral holders in the last two decades, forcing more and more of them to look for careers outside academia. While interest in the outcomes of holding a doctoral degree in the non-academic labour market and in industry, in particular, has grown, little research is available on the professional careers of doctoral holders. How do doctoral holders experience the transition from academia to the non-academic labour market? Can doctoral holders convince employers outside academia of their skills, evoking the question whether the skills of doctoral holders acquired during the PhD fit the needs of other sectors, and, if it were the case, what skills do they lack upon graduating?

The Careers of Doctorate Holders Survey (CDH) in Belgium allows us to investigate Ph.D. graduates’ involvement with a wide range of skills in their current job as well as the perceived value of their Ph.D. degree for acquiring these skills. Preliminary analyses based on the Belgian CDH data 2010 show that the perceived discrepancy between skills acquired during the Ph.D. and those required in their current job is quite substantial. Respondents reported to have acquired far less in interrelational skills, managerial skills, and stress and time management skills during their Ph.D. training than what their current job requires. However, the degree of discrepancy varied according to field of study, sector of employment, type of job, and number of years since obtaining the Ph.D. degree.

Despite the substantial investment in skills training, it is still unclear which skills are necessary for all doctoral holders aspiring to get a job either in or outside academia, and which skills are particularly necessary in sectors outside academia.

The purpose of this study is threefold: (1) To address measurement issues regarding acquired and required skills and the use of appropriate tools (self-perceived skills vs. actual skills assessment). (2) To develop competence profiles for different types of jobs, including the competences and skills desired by employers from a wide range of sectors. This would enable doctoral holders to find out which skills and competences are expected for the jobs they pursue and which skills they have to acquire or improve according to the job type and sector of employment. The last objective (3) is to assess and discuss with stakeholders the responsibilities of universities regarding the training of non-academic skills of doctoral students. Which skills need to be taught here, and which ones can be learned on the job in the context of lifelong learning?

In order to get a broader picture of the skills training of doctoral holders, further research could investigate whether cross-national differences exist across OECD-countries regarding the doctorate holders’ self-perception of skills acquired during the Ph.D. training and those required for the current job, based on the skills questions included in the Belgian CDH survey. In addition, it would be valuable to assess whether the skills mismatch and perceived value of the Ph.D degree on the non-academic labour market vary widely according to field of knowledge and sector of employment across different countries; and to find out whether the efforts spent in providing skills training during the Ph.D track differs at country level.
This would not only allow countries at a national level to redesign the doctoral programme in order to facilitate the transition from Ph.D. level to further careers – within academia or in other sectors of employment – but it would also be helpful for stimulating a broader and more international debate about skills training during the Ph.D research period given the international mobility and ‘brain circulation’ of doctoral students and doctoral holders. This study is intended to contribute to the development of policy-oriented recommendations.

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