



DocEnhance

Press release

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What's after a PhD?

Results from the DocEnhance career-tracking survey

The EU-funded DocEnhance project releases a report issued from its survey on doctorate holders' employment situation, skills match, and their perceived value of the doctorate.

Are doctorates satisfied with their doctorate programme? How easily do doctorate holders find employment after graduation – inside and outside academia?

The DocEnhance project is issuing a report on its career-tracking survey of recent PhD graduates from nine universities across Europe. Within the project, the results are intended to inform the transferable skills curriculum under development, but also to support higher education institutions in leading their own career-tracking survey.

With more PhD students graduating every year and an increasing attractivity in careers outside academia, European universities and funding bodies are intent on evaluating and monitoring the outcome of doctorate holders on the labour market.

The findings from the DocEnhance career-tracking survey provide an overview of the careers pursued by PhD graduates after their studies, and the structure of doctoral training, including transferable skills. The report also underlines PhD holders' motivations for undertaking a doctorate programme, and their satisfaction with their training and subsequent careers.

The report finally introduces recommendations to institutions in charge of doctoral training, namely on the inclusion of transferable skills.

[Full report available as open access on Zenodo](#)



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MAIN FINDINGS

DOCTORATE HOLDERS ARE MOSTLY SATISFIED WITH THEIR DOCTORATE PROGRAMMES

If making the decision again, more than six in ten of the PhD graduates surveyed would do the same doctoral training programme at the same institution. Fewer than one in ten would decide not to do any doctoral training programme. Doctorate holders reported good levels of satisfaction with most aspects of their doctorate programmes, although satisfaction with the support offered by programmes for pursuing academic and non-academic careers could be improved.

DOCTORATE HOLDERS QUICKLY FIND EMPLOYMENT AFTER GRADUATION, BOTH IN AND OUTSIDE THE ACADEMIA,

TEMPORARY CONTRACTS PERSIST AS A COMMON (AND UNWELCOME) SITUATION

A large proportion of respondents had found a job by the time they graduated from their doctorate programme and most others found a job within three months of graduation. Unemployment was very low and lower than the average across the whole European Union workforce (3% compared to 7%).

The academic sector (universities and research organisations) remains the largest sector of employment for doctorate graduates, where most doctorate holders are employed as postdoctoral researchers, assistant or junior professors or research fellows. Slightly over half of the doctorate holders are working outside the academia in a variety of sectors as analysts, specialists, engineers, medical positions, and teachers.

Temporary contracts were relatively common, with one quarter of employed respondents in temporary employment. This is more than double the rate of the European Union workforce, although it is lower than the rates reported by several other similar surveys. The prevalence of temporary employment was driven by the large proportion of respondents employed in universities and research organisations, where temporary contracts were much more common than in other sectors (such as the private, government and healthcare sectors).

OVER TWO THIRDS OF EMPLOYED DOCTORATE HOLDERS WERE ENGAGED IN RESEARCH, MORE WOULD LIKE TO BE

Over two thirds of doctorate holders are engaged in research in their current jobs. Of those working in non-academic sectors only 31% were engaged in research. PhD graduates from agricultural sciences or natural sciences were most likely to be engaged in research while those who had studied humanities, or engineering and technology were least likely to be engaged in research. Those engaged in research in, and outside academia appear more satisfied overall with the various aspects of their job (e.g., autonomy and responsibility, prestige of the organisation, skills development,





intellectual challenge associated with the job, etc.) than those not engaged in research activities. When asked what motivated them to pursue a non-research job, doctorate holders' responses clearly indicate that for many it was a "second best" choice.

NEARLY HALF OF DOCTORATE HOLDERS WORK IN JOBS THAT DO NOT REQUIRE A PHD

While doctorate holders largely work in jobs at least partially related to their doctorate, almost half of all respondents said that the minimum educational requirement for the position they were currently employed in was a Master's degree or lower. The requirement for a PhD was markedly higher for those engaged in research for their work, where it was required for a majority of respondents, compared to those that were not, where it was required by a small minority. Correspondingly, 'overeducation' was most prevalent outside of the university and research institution sectors, although it was not as extreme in the private sector as it was in the non-higher education, government and non-governmental sectors. However, while not required, PhD may be a "desired" degree and that doctorate holders have more interesting or demanding jobs and perform better in their jobs than those with lower qualifications would do. Evidence for this includes the high employment and short gaps between graduation and employment for doctorate holders as well as the significant proportion over two thirds of respondents agreeing that their doctorate had enabled them to progress towards their desired career.

MOST DOCTORAL PROGRAMMES OFFER TRANSFERABLE SKILLS TRAINING, ALTHOUGH THESE TEND TO FOCUS ON ACADEMIC SKILLS

Approximately half of respondents to our survey said that their doctorate had mainly been achieved through individually supervised research with the rest undertaking structured training programmes, and three quarters were offered transferable skills training during their doctorate. For 24% of respondents, there were no training transferable skills offered at their university.

The skills training PhD holders received focused mostly on research and other academic skills. Overall, personal competencies such as critical-analytical thinking and problem-solving were rated highest among the most important competences acquired at doctorate completion and needed in the current job. Outside this group of skills/competences, doctorate holders rated their subject knowledge and methodology among the strongest skills at doctorate completion, and effective communication, team working and project management as most needed ones in the current job. Entrepreneurship and Intellectual Property related skills were by far least acquired and least needed out of all the skills listed.

THE SKILLS OF DOCTORATE HOLDERS UPON GRADUATION MATCH THE SKILLS NEEDED FOR EMPLOYMENT

Comparing the self-reported skills acquired by doctorate holders during their doctorate programme with those required for their current jobs revealed a reasonably strong match. As would be





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expected, the average skills (mis)-match between graduation and employment was smallest for those working in universities or research performing organisations. No single skill was associated with a great (mis)-match across all employment sectors. Instead, different skills gaps were prominent for different sectors. The variety in skills needs across different sectors suggests that universities seeking to improve transferable skills training should aim to target a broader set of skills. Currently, most skills training taken up by doctorate holders were focused on academic skills (methodology, research valorisation, research ethics and integrity, teaching/mentoring/supervision, etc.). However, it was only those working in universities and research organisations that reported needing greater competence in these areas than had already been delivered by their doctorate programme. The skills (mis)-matches reported in the non-academic sectors consisted of doctorate graduates having greater research and broader academic skills than required for their job.

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