12. PG Career Pathways: applying Career Readiness to postgraduate researchers

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Introduction

PG Career Pathways is an innovative, self-guided and tailored careers tool for postgraduate researchers (PGRs), comprising a diagnostic survey and tailored self-help guides, created at the University of Huddersfield. The PG Career Pathways project was developed in response to feedback from PGRs regarding the availability of careers and employability support specifically aimed towards a PGR cohort. The project is an ongoing exploration of an intervention based around Career Readiness in a cohort of PGRs at The University of Huddersfield, alongside highlighting the benefits of an ecosystem approach to the development of tools targeted towards specific populations.

Justification

Although the current landscape in HE shows a reduction in the number of academic posts (Smith McGloin & Wynne, 2022), institutions are remaining focused on increasing recruitment targets for postgraduate researchers. However, institutions are facing a number of challenges in PGR recruitment. The increasing cost of living is affecting the ability for PGRs to begin or continue their studies (Munro, 2022). Uncertainties

around international visa pathways means that PGRs are looking to other countries such as Germany and Canada as an alternative to UK study (Westphal & Ilieva, 2022). Alongside this, legacies from the COVID-19 pandemic include reduction in ability to deliver development opportunities for PGRs, and few institutions are self-reporting high levels of involvement in delivering specific PGR careers support (Smith McGloin & Wynne, 2022, p. 48). Despite challenges, as institutions target increased PGR recruitment, a wide range of career advice must be developed for PGRs focusing not only on career paths within academia, but also on academic-adjacent and non-academic options.

Tailored options and individualised self-development opportunities are therefore necessary, especially as the likelihood of PGRs staying in academia after completing their doctorate differs between specialisms (Rasmussen & Andreasen, 2023). Traditionally, there has been a reduced focus on PGR career aspirations outside of academia (Taylor & Vaughan, 2015), with training essentially viewed as a means of preparing for an academic career (Galimberti, 2023). However, in this rapidly changing landscape, allowing PGRs to explore tailored opportunities provides numerous benefits to both HE institutions and researchers themselves.

The disparity between expectations of a further career within academia and the reality of opportunities within the academic job market is shown to influence mental health and wellbeing of PGRs. Despite this, PGR employment remains a relatively under researched area (Hancock, 2020).

Studies conducted with postgraduate taught students suggest limited engagement with careers services, in part due to pressure from other commitments amongst a limited study period (Waite et al., 2021). PGRs may feel pressure to have decided on a specific career path before engaging with careers services, which is a potential barrier for engagement. Careers services rarely have dedicated PGR practitioners, although increasing engagement of researchers with careers support is a high priority across institutions (AGCAS, 2020). Post-pandemic, and in the current economic climate affecting higher education institutions, it is imperative to ensure that PGRs do not lose out on careers provision and that institutions retain a focus on provision of careers support.

Development of innovative careers provision addressing these challenges is therefore paramount.

It is especially important that this provision is tailored to the needs of PGRs, encompassing development opportunities that can be engaged in throughout the PGR lifecycle. Additionally, direction to resources and opportunities both within and outside of academia, and the involvement of the supervisory team as a means of guidance and support are also important factors. It is important to recognise that supervisors are not expected to act as careers professionals, but instead be aware of signposting opportunities for development (Henderson, 2024). Recommendations from UK Research and Innovation's (UKRI) 2022 Research Supervision Report include increased training for supervisors on PGR job placements. The Economic and Social Research Council's (ESRC) review of the PhD in the Social Sciences (Tazzyman et al., 2021) recommends increased supervisor knowledge surrounding job destinations and career possibilities.

With uncertainty around career prospects amongst the top three concerns of PGRs (Cornell, 2020), a solution to the highly individualised requirements of PGRs is needed. Postgraduates favour "sustained, tailored career support", but also recognise the benefit of self-analysis of their own training needs (UKGCE, 2022, p. 10). An intervention that bridges the need for both guided and self-directed development material is therefore applicable. A self-directed, accessible career tool allows PGRs to identify areas for relevant development. Discussion between the PGR and their supervisory team is of high importance, both in fostering a supportive environment and identifying further opportunities. As HE institutions tighten budgets, the existence of self-directed careers provision provides a solution both for PGRs and careers professionals as a low-cost intervention with high potential for impact.

Background

The UK HE sector is currently facing increased financial pressure, with tuition fees capped against a background of rising inflationary costs. Pricewaterhouse Cooper's UK HE financial sustainability report (Kett et al., 2024) highlights the need for institutional flexibility and innovation

in driving changes in workflow and increasing cost effectiveness across their operations. Amongst this uncertainty, careers services must be aware of potential reduction in resources. Therefore, it is imperative that the HE careers sector looks to develop innovative tools that allow sustainable careers and employability guidance.

The lack of resources has significance, as a majority of HE careers services are asked to serve a PGR/Early Career Researcher (ECR) audience without dedicated resourcing. AGCAS (2018) reported that allocation for postdoctoral fellows comprised only 2.5% of careers service delivery, with almost half of surveyed careers services reporting 0% allocation of support for postdoctoral fellows. (AGCAS, 2020, p. 4). Whilst this research focuses on postdoctoral researchers, it reflects the general postgraduate provision within the sector. Similarly, general financial challenges and regulatory pressure to focus on home undergraduates exacerbate this issue. More specifically, work around identifying Career Readiness has also been Undergraduate-centric, a trend reproduced by regulatory pressure in the sector. Without dedicated funding, the diverse PGR community can easily fall below the radar, tailored PGR career advice is lacking, and this specific guidance is vital for those who are soon to enter the workforce after postgraduate study.

Focusing on how PGRs experience an innovative self-guided learning tool for careers advice is therefore a key point of cost-effective development for the HE careers sector. By creating autonomous resources this project has shown the ability to reduce the amount of hands-on, career specialist time necessary to provide a cohort of postgraduate researchers with personal guidance. McCash (2006) explains the importance of encouraging innovation, where students can become their own career researchers, advocating for students (including PGRs) to take an active role in their learning, as a critical and intellectual activity. By placing ownership with students, careers services are saving valuable time and money whilst building students' confidence, career readiness and intellectual responsibility; arguably cornerstone concepts of HE.

In a similar way, placing careers services in new online formats saves the service time and money. The use of technology approaches in HE careers services is supported by the 2021 issue of AGCAS journal 'Phoenix' which advocates for and discusses the benefits of new technologies:

"Online delivery has enabled creativity and innovation, sparked smarter ways of delivering interventions (...) increased the scale and reach of careers and employability in the curriculum, provided advances in services' operational efficiency, enhanced the student experience, improved stakeholder engagement locally, nationally and globally, and helped careers teams to feel better connected" (AGCAS, 2021. p. 1).

This is a compelling list of advantages for using new technologies in the HE careers provision. This also evidences the advantages of online services to interconnect an institution and foster a functioning ecosystem. Through combining the online learning environment with bespoke learning packages, the tool also supports students to increase their employability adaptability and creates space for personal development planning (Teychenne et al., 2019).

Development & Piloting

Following feedback collated by PGR representatives, an initial survey of PGRs indicated that there was a need to create equal access to tailored careers advice across the university specifically directed at PGRs. Feedback was collected from PGRs in all Schools, with participants, aged between 18 and 64, studying a variety of postgraduate courses. The questions covered four categories: affective, cognitive, behavioural and supervisory, to explore PGRs' confidence in finding relevant careers advice, ability to use appropriate tools and relate their career plans to their supervisors. Results indicated that scores on each category differed between Schools, suggesting an inequality of provision for PGRs.

PGRs were also asked for their thoughts and suggestions regarding current support, training and development provision at the university. Feedback highlighted that PGRs would benefit from advice regarding careers outside research, for example in industry. Additionally, students would value input from their supervisory team in relation to their career development, echoing the findings of the ESRC review (Tazzyman et al., 2021) recommending increased supervisor knowledge surrounding job destinations and career possibilities.

An ecosystem approach was imperative for collaborative development of the PG Career Pathways tool. Stakeholders included the university Graduate School, Careers and Employability, postgraduate researchers, academics and other members of professional services. With a basis born from PGR feedback, the PG Career Pathways tool was co-developed with the aforementioned ecosystem over a 17-month period. The initial concept of the tool was to use the Huddersfield Career Planning Model (2024, as cited in Gilworth & Stanbury, 2024) to underpin a diagnostic questionnaire. The Huddersfield Career Planning Model was elaborated from the existing Career Registration categorisations (Gilworth & Stanbury, 2024). The model includes five elements which span the planning cycle: explore, decide, prepare, apply, develop; reflection and resilience are also important elements which are relevant at every stage. These five stages encompass the vast range of career experiences PGRs come into postgraduate study with, some having come straight from education and others having had years of experience in the workforce.

Several questions were developed reflecting each of the individual elements of the Huddersfield Career Planning Model, and these questions evaluated by postgraduates for comprehension. Following feedback, a second diagnostic stage was added to ascertain whether students wanted to work in academia or continue into other roles including self-employment, academic-adjacent careers, or careers removed from academia. Alongside the diagnostic questionnaire, several self-help tools were developed to match each diagnostic category, based on the COM-B model of behavioural change, providing the student with a tailored selection of development tools based on their questionnaire answers. COM-B proposes a model of personal change dependent on three interrelated factors: capability, opportunity and motivation (Pilat & Krastev, 2023). The tools were then edited for clarity and referencing, and accessible pdfs were designed and formatted.

Once finalised, the PG Career Pathways tool was initially piloted in a small cohort of PGRs at the University, who were asked for their feedback regarding the accessibility, ease of use, style of questions, and usefulness and relevance of the individualised self-help tools.

In consultation with the Graduate School, the tool was embedded into the second-year assessment point. PGRs must complete a form to prove engagement with the PG Career Pathways tool which is embedded in their assessment documents. PGRs are required to discuss the

outcome of the diagnostic tool with their supervisor and indicate that the discussion has taken place. This engagement is then validated by the assessor. The full process surrounding PG Career Pathways was again piloted in a cohort of PGRs taking their second-year assessment, with a voluntary option available to complete the diagnostic tool and discuss the result with their supervisors. As of August 2024, PG Career Pathways became a mandatory part of the second assessment point for PGRs at the University of Huddersfield.

Integrating Careers Readiness

The current project builds on the widespread use of the Careers Registration Model (Gilworth & Thambar, 2013) as a successful method of careers readiness data collection. A pilot project completed in 2018, evaluating Careers Registration as a measure of career readiness learning gain (HEFCE, 2018), highlighted not only the importance of careers readiness in the evaluation of employability strategies and undergraduate engagement metrics, but additionally the importance of careers readiness data as a driver of HE strategy. Longer term, the implementation of large-scale data collection allows careers and employability services to develop targeted solutions for student cohorts (Cobb et al., 2019). The further development of the Careers Readiness Questionnaire (CRQ) at the University of Huddersfield has expanded elements of the original questionnaire whilst retaining clarity and relevance to a PGR cohort (Gilworth & Stanbury, 2024).

The value to institutions of a targeted approach to undergraduate career development needs has implications in graduate outcome and employability metrics – however, data is lacking on similar interventions for postgraduate (PGR) cohorts. The unique requirements of diverse PGR communities present HE institutions with a specific challenge – the provision of targeted training and development opportunities with relevance to a wide-ranging researcher population, of differing specialisms and levels of experience. As institutions focus on student engagement with careers and employability services, the Careers Readiness model ensures that a level of engagement with every student is created (Gilworth, 2023) – allowing students to identify their current

situation and from there, plan in training and development needs. This approach has obvious applicability to PGRs. Allowing PGRs to take control of their own development journey ensures that they experience a more individualised form of careers and employability support, matching their specific needs and creating a personal engagement with targeted development materials. Henceforth, the application of a careersreadiness based approach to PGR careers and employability explores the applicability of this model to the unique needs of diverse postgraduate populations.

Future Opportunities

Further evaluation of PG Career Pathways will allow for exploration of the student/supervisor nexus and how best to situate the supervisory relationship within a PGRs career journey, with potential relevance for ECRs and postdocs. Moreover, PG Career Pathways goes some way towards breaking down barriers for engagement with careers, where a lack of confidence has previously existed.

The PG Career Pathways Tool enables an institution to collect broad data sets which track efficiency of interventions across cohorts and can be implement at institution-specific assessment points. The need to further understand PGR career culture is highlighted by ever changing institutional trends. The PG Career Pathways Tool can be implemented at key points throughout the postgraduate journey to illustrate the impact of these changes. PGR outcome data can highlight routes into a variety of employment opportunities, both within and outside of academia, with links to evaluative data adding a depth of understanding as to why PGRs choose certain routes. Understanding job market relevance has potential to inform development of targeted policies for PGRs, postdocs and ECRs.

References

AGCAS. (2020). *Supporting Research Staff and Students*, July 2020. https://www.agcas.org.uk/Knowledge-Centre/SupportingResearchers

AGCAS. (2021). The Technology-Enhanced Careers Service. (n.d.). *Phoenix*, (163). <u>https://www.agcas.org.uk/Knowledge-Centre/0bf3c8dd-e7db-484c-a730-a7192deb341a</u>

Cobb, F., Gilworth, B., & Winter, D. (2019). *Careers Registration Practical Guide*. University of London.

Cornell, B. (2020). *PhD Life: The UK student experience*. HEPI Report 131. <u>https://www.hepi.ac.uk/wp-content/uploads/2020/06/</u> *PhD-Life The-UK-Student-Experience HEPI-Report-131.pdf*

Galimberti, A. (2023). PhD graduates' professional transitions and academic habitus. The role of tacit knowledge. *Studies in Higher Education*, 48(10), 1563-1575. <u>https://doi.org/10.1080/03075079.2023</u>.2252845

Gilworth, B. (2023). Starting points and journeys: Careers and employability in a data-rich environment. In T. Broadley, Y. Cai, M. Firth, E. Hunt & J. Neugebauer (Eds.), *The SAGE handbook of* graduate employability (pp. 452-473). <u>SAGE Publications Ltd. https://</u> doi.org/10.4135/9781529791082.n27

Gilworth, B., & Stanbury, D. (2024, June). Models making meaning: Visualising career readiness. *Prospects Luminate*. <u>https://luminate.prospects.ac.uk/models-make-meaning-visualising-career-readiness</u>

Gilworth, B. B., and Thambar, N. P. (2013, September 10-12). *Careers Registration: a Data Revolution*. [Conference presentation]. AGCAS Biennial Conference, Exeter. <u>http://www.agcas.org.uk/events/766-Biennial-Conference-2013-Exeter</u>

Higher Education Funding Council for England (2018). *Learning Gain in English Higher Education: progress report*. HEFCE. <u>https://dera.ioe.ac.uk/31344/1/HEFCE2018_03.pdf</u>

Henderson, J., & Waters, E. (2024, June 11). Supporting PGR Professional Development. *The Auditorium, University of Glasgow*. https://theauditorium.blog/2024/06/11/supporting-pgr-professionaldevelopment/

Kett, P., Ashford, D., Best, K., Armstrong, T., Owen, S., Kent, K., Moss, G., & MacKinnon, A. (2024). *UK Higher Education Financial Sustainability Report*. PricewaterhouseCoopers. <u>https://www.</u> <u>pwc.co.uk/government-public-sector/education/documents/higher-</u> <u>education-financial-sustainability-report.pdf</u>

McCash, P. (2006). We're all career researchers now: Breaking open career education and DOTS. *British Journal* of Guidance & Counselling, 34(4), 429-449. <u>https://doi.</u> org/10.1080/03069880600942558

Munro, E. (2022, September 26). The UK's broken PGR support system must be fixed. *Times Higher Education*. <u>https://www.</u> <u>timeshighereducation.com/blog/uks-</u>broken-pgr-support-system-mustbe-fixed

Pilat, D., & Krastev, S. (2023). *The COM-B Model of Behavior Change*. The Decision Lab. <u>The COM-B Model for Behavior Change</u> -<u>The Decision Lab</u>

Rasmussen, A., & Andreasen, K. E. (2023). To and from the university: employability discourses and narratives of PhD graduates from the social sciences and humanities in Denmark. *Studies in Higher Education*, 48(10), 1551-1562. <u>https://doi.org/10.1080/03075079.2023</u>.2253439

Smith McGloin, R., & Wynne, C. (2022). *Structures and strategy in doctoral education in the UK and Ireland*. UK Council for Graduate Education. <u>https://go.exlibris.link/knd0qzsD</u>

Taylor, J., & Vaughan, S. (2015). The same but different: researching and enhancing PGR employability and experience in Art & Design. *The Journal of Educational Innovation, Partnership and Change*, 1(2). https://doi.org/10.21100/jeipc.v1i2.198

Tazzyman, S., Moreton, R., Bowes, L., Wakeling, P., & Stutz, A. (2021). *Independent Review of the Doctorate in the Social Sciences*. Economic and Social Research Council. <u>https://www.ukri.org/wp-content/uploads/2024/03/ESRC-180324-Review-of-the-PhD-in-the-Social-Sciences-1.pdf</u>

Teychenne, M., Parker, K., Teychenne, D., Sahlqvist, S., Macfarlane, S., & Costigan, S. (2019). A pre-post evaluation of an online career planning module on university students' career adaptability. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 42–55. https://doi.org/10.21153/jtlge2019vol10no1art781

UK Council for Graduate Education. (2022). Supporting Excellent Supervisory Practice across UKRI Doctoral Training Investments. https://ukcge.ac.uk/assets/resources/UKRI-Research-Supervision-Report-UKCGE.pdf

Waite, H., Richardson, D., Chetwynd-Diggle, H., & Debreceni, S. (2021). *Tailoring Careers Provision for Postgraduate Taught Students*. Prospects Luminate. <u>https://luminate.prospects.ac.uk/tailoring-careers-provision-for-postgraduate-taught-students</u>

Westphal, J., & Ilieva, J. (2022). Global demand for UK postgraduate research degrees: Trends, challenges and opportunities. Universities UK International. https://www.universitiesuk.ac.uk/universitiesuk-international/insights-and-publications/uuki-publications/globaldemand-uk-postgraduate-research