

Growing industry internships for research PhD students through the Research Training Program, Implementation Paper, July 2021

The University's responses to the Department of Education, Skills and Employment's online focus questions - submitted 6 August 2021

Provider/Organisation name

The University of Sydney

- 1. Within the eligibility criteria of an industry internship commencing within 18 months of a student's enrolment in a research PhD and consisting of three-months (a minimum of 60 full-time equivalent (FTE) days of engagement), what do you believe is the optimal structure of an internship? For example, one intensive block, a number of days per week on a regular basis, other part-time approaches. Provide supporting detail.**

We strongly urge DESE to reconsider the proposal that to be eligible for the Research Training Program (RTP) funding lift, the internships must start within 18 months of each doctoral student's enrolment. If the policy intent is to help achieve the best outcomes for industry, research students (in terms of employability skills) and the collaborative research projects, then both the timing and structure of the internships need to be as flexible as possible.

As a possible solution regarding timing, we strongly support the Australian Council of Graduate Research's (ACGR) recommendation that the commencement requirement is adjusted to require the internships to be formally *established* within 18 months of a student's effective full-time candidature.

As to structure, the focus should also be on maximising the learning outcomes for the student while achieving the best possible fit and outcomes for industry partners. This will be achieved by ensuring the scheme accommodates a wide variety of internship models including single block, periodic, and undertaken with a single or multiple industry partners to achieve the desired learning and project outcomes. Moreover, the experience of many workplaces has shown during the COVID-19 lockdowns, that in many industries a person does not need to be physically present at a workplace to contribute productively to its activities, or to develop their employability skills.

- 2. When will your university collect the changed HDR end-user engagement data, including days of engagement with a research end-user, and how do you propose to do so?**

We will make this assessment when full details of the changed reporting requirements are confirmed. Once the details are available, we will review our current approach to collecting and reporting the HDR end-user engagement data to identify the most efficient and cost-effective response, capable of delivering a comprehensive reporting solution while minimising the administrative burden on our students, their supervisors and our industry partners.

- 3. What level of change is required at your university to set up systems and procedures to report the revised data collection to the Department commencing in 2022?**

- Nil
- Minor
- Major
- Unsure

4. What type of support materials could be developed to best ensure the collection of accurate and comprehensive data by universities? For example, good practice guidance for administrators and students, frequently asked questions, annual information sessions, other?

Universities, their research students and industry partners need clear, accurate and unambiguous definitions that can be reliably interpreted, communicated and applied by all providers consistently.

For consistency and to avoid confusion, the definitions of 'industry' and 'research end-user' used in the National Priorities and Industry Linkage Fund (NPILF) and for the purposes of TCSI reporting should be brought into alignment. Here we note that internships with an independent medical research institute (MRI) or affiliated hospital would meet the NPILF definition for a placement but would not be considered an internship under the RTP definition. We do not understand why internships with MRIs or independent affiliated industry organisations are explicitly excluded from the 'Research End-User' definition, especially for students where the organisation is an end-user of the student's research, or where the student is undertaking research in close collaboration with, or on behalf of, a commercial or other not-for-profit industry partner that satisfies the internship definition. At its extreme, a PhD student based full-time in an MRI or hospital laboratory or clinical research facility, whose salary or PhD scholarship is paid for by a commercial industry partner and who is working exclusively on a research project for that partner, could be excluded under the definitions as proposed.

Noting DESE's intention that reporting of the new data requirements will be required by 31 January 2022, the sooner the details of the requirement can be confirmed the better.

We anticipate that these new reporting requirements will necessitate significant modifications to our processes and supporting IT systems. Implementation in time to comprehensively capture data for reporting by January 2022 will be challenging, with the current prolonged COVID-19 crisis lockdown in Sydney only placing further pressure on our capacity to implement such changes across the institution.

5. In relation to these supporting materials, what are the top three aspects of the new data collection that would need to be addressed?

As stressed in our previous responses, the guidance material needs to be based on clear and unambiguous definitions that provide maximum flexibility around the commencement, type and structure of eligible internships.

For example, the proposed new TCSI definition of 'Days of engagement with a research end-user' leaves the question of the hours in a 'full-time equivalent day' open to interpretation. If this is a term based on a five-day, 38-hour week, this should be specified in the definition. The current and proposed definitions for 'Research end-user' and 'Research Internship' are also problematic and likely to lead to unintended, even perverse outcomes, once linked directly to funding outcomes, for reasons we outline in our response to question 8.

6. What additional data on HDR end-user engagement, if any, should the Department collect to inform future Government or sector policy development? Provide reasons.

In line with Recommendation 5 of the Australian Council of Learned Academies (ACOLA) review of Australia's research training system (<https://acola.org/research-training-system-review-saf13/>) accepted by the Government (<https://www.dese.gov.au/review-australias-research-training-system/resources/acola-government-response>), we would welcome a discussion with the Government about establishing a national data collection to provide richer data about the career and other outcomes achieved by graduates of Australian higher degree by research programs.

The data about course satisfaction and career outcomes available through the Quality Indicators for Learning and Teaching (QILT) are limited in their utility. They do not, for example, provide insights about the long-term career paths of Australian higher degree by research graduates of different disciplines or institutions, nor of the contributions they and their research have made to different industry sectors.

The HDR end-user engagement data universities have been reporting to DESE since 2018 are all input measures of university/industry engagement in relation to research training. While this type of quantitative data can give a high-level indication of the amount of such engagement and trends, they cannot give a sense of the quality or impacts of the underlying activities. A different approach, involving the longitudinal collection of qualitative survey data from students and industry partners, along with case studies focused on outcomes achieved for students and industry, would provide much richer information on which to base future policy decisions. For example, alongside implementing this specific funding change designed to incentivise a particular type of internship, DESE could be working with the sector and industry to establish a robust framework to support the evaluation of the effectiveness of this intervention in terms of achieving its stated policy goals.

7. Are there any critical issues regarding implementation of the proposed changes that you would like to raise?

In addition to our feedback already provided about the proposed commencement timeframes for eligible internships, their structure, the need for clear definitions and consideration of working with the sector and industry to collect qualitative outcome-focused data, we raise the following issues for consideration by DESE.

Types of eligible internships

The proposed definitions for '*Research internship*' and '*Research end-user*' would rule out any PhD students undertaking an internship with an industry partner that does not 'directly use or directly benefit from the output, outcome or results of the research'. We agree with the ACGR that the primary purpose of HDR industry engagement is educational – to increase the student's employability through the development of research and transferable skills. Internships completed with any industry partners that achieve these outcomes should be accommodated, whether or not they directly involve research that is being conducted as part of the student's PhD.

Rewarding additionality

Many students already work on industry-sponsored PhD projects that would satisfy the 60 FTE day internship requirement. It is likely that they, with their universities, will respond to this measure simply by packaging up internships that would have occurred anyway as part of the PhD. As a result, some providers will receive a RTP funding boost regardless of whether they have done anything to increase their numbers of PhD students undertaking industry internships. If a purpose of the policy change is to boost levels of university/industry engagement in relation to HDR training, as currently proposed it is not optimally designed to reward those universities that substantially grow their numbers of internships. This could be addressed by establishing an 'industry internship baseline' for each provider and calculating the RTP internship weighting based on their relative performance in growing their numbers of eligible industry-internships.

Incentives for industry

The proposed measures seek to create financial incentives for universities to pursue more industry internships for their students. However, industry also has a critical role to play and is likely to respond positively to incentives that reward them for collaborating with universities in relation to HDR training. We appreciate that reform of the tax system sits beyond DESE's responsibilities. Nevertheless, we remain of the view that providing tax incentives for Australian businesses that invest in research and research training collaboration with universities and other publicly funded research organisations would have a significant positive impact. As the Review of the R&D Tax Incentive found in 2016, many competitor countries across the OECD have established such incentives as integral parts of their frameworks for supporting business/university collaboration.

Avoiding payments for internships at all costs

This issue is not raised specifically in DESE's implementation proposal but is another potentially negative outcome of these policy changes about which we are wary. We are concerned that directly linking RTP funding to industry internships risks creating an expectation in some industry sectors that universities should pay them in return for hosting PhD students. Alternatively, universities facing difficulty securing internships may decide to offer funding incentives for industry to take on their students. We have experienced the extremely negative consequences of such developments in relation to clinical placements in coursework programs and believe this needs to be avoided at all costs for HDR internships.