The Importance of End-user Engagement

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The Current Landscape

- The Department of Education, Skills and Employment (DESE) has introduced a number of new reporting requirements for all Higher Education Providers (HEPs) to improve monitoring of the research training system (HEIMS).
- Research end-user engagement is now included in the required data that all universities must collect and report.
- These changes are in response to the ACOLA Review of Australia's Research Training System and Implementation Plan.
- Support the new Research Block Grant funding arrangements for universities

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Five components of End-user engagement:

- Research internships with a research end-user
- Joint supervision by a research end-user
- Jointly funded or fully funded by a research end-user
- Formal training on industry engagement
- Other commercialisation and engagement activities.

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What is a 'research end-user'?

- A research end-user is defined as an individual, community or organisation outside of academia that will directly use or benefit from the output, outcome or results of the research. This may include businesses, governments, non-governmental organisations (NGOs), communities and community organisations. Research end-users are not:
  - Other HEPs (universities)
  - Organisations that are affiliates, controlled entities or subsidiaries (such as Research Institutes) of a HEP
  - Equivalents (international or domestic) of the above exclusions.

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Doctoral Graduate Destinations

- Employment statistics indicate over 93% of doctorate holders in Australia and elsewhere are employed (Graduate Careers Australia, 2016; OECD, 2017)
- According to Australian 2011 census data approximately 25% of all doctorate holders work in the tertiary education sector (ACOLA review 2016).
- However, this means that approximately 75% work in non-academic roles.
- While many HDR candidates aspire to an academic career, the reality is that non-academic employment is most likely.

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Discussion Questions

- What are the benefits to students who participate in end-user engagement?
- What can/should Graduate Research Schools/Offices do to prepare and support students for end-user engagement?
- What are the biggest challenges?
- What are the benefits for the university?
- What are the benefits for End-users

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Benefits for Graduate Research Candidates and Universities

- Develop capabilities as producers of knowledge or creative solutions while developing transferable and professional skills
- Exposure to workplace cultures and establishing professional networks.
- Work collaboratively with an industry partner to co-create a new product or develop a creative solution to a problem.
- Universities develop a better understanding of industry expectations, priorities and cultures leading to deeper collaborative partnerships with industry.

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Benefits for End-users

- Technical and research skills in a discipline area to independently and systematically provide creative solutions to challenging questions and to innovate.
- End-users benefits from knowledge transfer from the university to the end-user.
- End-user supports development of high-quality graduate researchers who may realise opportunities for careers outside academia
- Mutually beneficial relationships between companies/organisations and universities are established.

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Establishing Expectations and Protections for all parties

- Industry collaboration involving graduate research candidates varies around project scope, timing and length of interaction. This requires a clear understanding of the types of Industry-University engagement (using RTP categories as a guide) that graduate research candidates can undertake and the roles of academic and industry based advisors.
- The primary purpose of the interaction of the graduate research candidate with industry should be educational although collateral advantages to industry can occur. It is not sufficient that an educational purpose is a by-product of the industry interaction.
- Projects developed by Industry and Universities involving graduate research candidates should include an agreement relating to insurance and public liability as well as University confirmation of a candidate's fitness to participate in the project and each party should sign a formalised agreement.
- Intellectual property agreements arising from Industry-University collaboration should be negotiated at an early stage and may consider a range of IP models, information sharing and packaging of IP, and can make use of available resources such as *The Australian Toolkit for Collaboration.*

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Mentoring and Assessment

- Graduate research candidates are supported in their industry collaboration through induction, which should involve company procedures, the standards and behaviours of the company, assignment of an industry advisor (supervisor) or mentor and agreement on project aims and objectives.
- Universities should work with Industry to co-design assessment tasks, measuring outcomes and evaluating the performance and development of the HDR candidate against the expected attributes of a research student. These attributes include disciplinary knowledge, technical and intellectual capabilities, personal qualities, professional conduct and knowledge transfer capabilities.

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ACGR Resources

- https://www.acgr.edu.au/good-practice/best-practice/

ACGR GUIDELINES

- Good Practice Framework for Research Training
- Gap Analysis Tool for Good Practice Framework
- ACGR Conflict of Interest in Examination Guidelines
- ACGR Guidelines for Quality Graduate Research Supervision
- Australian Industry Group and ACGR Principles-for Industry Engagement
- Good Practice Guides for Enhancing Industry University Engagement
- ACGR Guidelines for Aboriginal and Torres Strait Islander Research Education
- ACGR Guidelines for Skill Development
- ACGR Guidelines for Tracking Graduate Research Candidates
- ACGR-HEIMS-HDR-End-User-Reporting-Requirements-Good-Practice-Guidelines
- ACGR Good Practice Guidelines for Mental Health and Wellbeing

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