

Submission to the ARC review of the ERA and EI assessment frameworks

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Recognising the contribution of research students

We are submitting this response to the ARC's review of the Excellence in Research for Australia (ERA) and Engagement and Impact (EI) assessment frameworks to recommend that the ARC record the contributions of research students (PhD and Masters by Research).

Comprehensive linked meta-data on research student contributions would improve the usefulness of this data in informing decisions, shaping policy and conducting research related to the contributes made by research students to research impact and engagement in Australia. Unfortunately, the ERA and EI exercises do not currently identify or recognise the contributions of research students to research impact and engagement.

The ABS estimate that in Australia PhD students contribute more than half (56% in 2018) of the human resources dedicated to higher education research and development.¹ This is a significant proportion, and it raises the question of, to what extent, research students contribute to impact and engagement in Australia? Conservatively we estimate that some 30% of ERA publications are co-authored by research students.

Research on research (also known as the science of science, meta-research or meta-science) is not new but has recently come to be recognised as a discipline, which focuses on the study of research itself and its practices.

A better understanding of research can help improve performance, communication, validity, quality, evaluation, reward, recognition and outcomes of research.^{2,3} Research on research has a lot to offer the ERA and EI exercises and conversely these exercises have a role to play in helping address the discipline's pressing challenges such as the measurement of impact and its adverse effects.⁴

The recently established Research on Research Institute (of which the ARC is a member) has identified that a better understanding of the PHD as a key priority. Despite playing a central role in research and development, and economic policy, evidence and data about PhD students and graduates is severely limited.⁵

¹<https://www.abs.gov.au/statistics/industry/technology-and-innovation/research-and-experimental-development-higher-education-organisations-australia/latest-release>

² <https://doi.org/10.1371/journal.pbio.2005468>

³ <https://doi.org/10.1126/science.aao0185>

⁴ <https://doi.org/10.1007/s10734-016-9995-x>

⁵ <https://doi.org/10.6084/m9.figshare.9917813.v1>

In Australia national data on research students is only collected by the The Department of Education, Skills and Employment (DESE) as a subset of national higher education student data collection, and to a limited extent by the Australian Bureau of Statistics (ABS).⁶ While DESE has recently begun to include information on end-user engagement by research students in the Higher Education Research Data Collection (HERDC), there is no data collected which identifies the research impact and engagement contribution of research students by either DESE or the ABS.

Recommendation 1: To enable research on research student contributions to research impact and engagement the ARC should provide greater access to ERA and EI data including comprehensive linked metadata through the ARC data portal which identifies the contributions of research students.

Recommendation 2: To meet its aims as a transparency initiative the ARC should make its findings available in a way that is useful for interested stakeholders, including through publishing accessible .pdf reports and making quantitative data available in a tabular format.

⁶ <https://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/5900.0.00.003>