



The voice of Australia's future scientific leaders

Engagement and Impact Assessment consultation paper

Submission by the Early- and Mid-Career Researcher Forum (EMCR Forum) of the Australian Academy of Science

The Early- and Mid-Career Researcher Forum (EMCR Forum) under the stewardship of the Australian Academy of Science, pride ourselves on being the voice of over 3,000 early- and mid-career researchers across Australia.

The EMCR Forum's mission is to champion improvement in the national research environment through advocacy. We focus on sustainable and transparent career structures, gender equity, stable funding policies, career development opportunities, and raising awareness of issues facing the future of science.

In preparation for this submission, we surveyed our members and provide comment on the consultation questions below.

Feedback Questions

Definitions and scope

1. What definition of 'engagement' should be used for the purpose of assessment?

The EMCR Forum believes the ATSE definition of engagement is the best definition for the purpose of assessment:

"The interaction between researchers and research organisations and their larger communities/industries for the mutually beneficial exchange of knowledge, understanding and resources in a context of partnership and reciprocity.¹"

2. What definition of 'impact' should be used for the purpose of assessment?

The EMCR Forum believes the ARC definition of impact is the best definition for the purpose of assessment:

"Research impact is the demonstrable contribution that research makes to the economy, society, culture, national security, public policy or services, health, the environment, or quality of life, beyond contributions to academia.²"

3. How should the scope of the assessment be defined?

Research essentially follows an input-output framework. The addition of impact will allow Universities to tell us what changed as a result of the research. The scope of the assessment should account for both the basic and applied research that exists within most disciplines. For example, for basic research impact will be an advancement in knowledge, for applied research it will be new policies, positive change for society etc. It should be clear that outputs are very

¹ ATSE research engagement for Australia report, page 7

² <u>ARC research impact principles and framework</u>

different from impact. Engagement should be assessed as who was involved, consulted, included and informed about the research and impact throughout the entire process.

Engagement can be more easily measured and should be assessed as broadly as possible using easily available metrics (e.g. number of reads, followers, attendees etc). These are immediate outcomes that can be easily and relatively objectively measured. Impact is a more a complex characteristic to measure as the report acknowledges.

- 4. Would a selective approach using case studies or exemplars to assess impact provide benefits and incentives to universities?
- 5. If case studies or exemplars are used, should they focus on the outcomes of research or the steps taken by the institution to facilitate the outcomes?

A methodology based primarily on steps taken by Universities to facilitate impact will be easier to implement and immediate data can be collected. The potential benefit of incentivizing impact will also increase the awareness and commitment to seeing outputs through to impact. The risk of truly assessing the quality of impact that may take time to occur is very high if short-term case reports are only used.

- 6. What data is available to universities that could contribute to the engagement and impact assessment?
 - *i.* Should the destination of Higher Degree Research students be included in the scope of the assessment?

No. After completion, HDR students have no requirement to provide information on their career, location or research meaning that data on destination of HDR students will be difficult for Universities to capture. It is also unclear how destination of HDR students directly relates to University associated engagement or impact.

ii. Should other types of students be included or excluded from the scope of assessment (e.g. professional Masters level programmes, undergraduate students)?

Professional Masters and undergraduate students should be included in the assessment if they are directly involved in University engagement or research-related impact. All industry, non-academic placements should be considered as this will incentivize Universities to develop these sorts of programs which are critical to the relevant training of researchers for careers in industry etc.

Key Issues

7. What are the key challenges for assessing engagement and impact and how can these be addressed?

The major issues are highlighted in the consultation document. The EMCR Forum recommends prioritised consideration of the following challenges:

- Inter-discipline and multidisciplinary comparisons: Making comparisons objectively across disciplines and with different sorts of outcomes will be a major challenge.
- *Time-lag to realisation:* The measuring of impact should take a long-term view. Some of the most important contributions from research are not apparent at the time the true value to society takes time to become apparent.

- Short-term impact bias: While acknowledging the value of identifying impactful research, some of our members did doubt whether the measurement of impact could be done accurately due to the long-term lag for many impacts to be realised, and that an attempt to do so may drive research towards a short-term focus that would undermine research that has important long-term contributions to society, and would waste significant resources.
- 8. Is it worthwhile to seek to attribute specific impacts to specific research and, if so, how should impact be attributed (especially in regard to a possible methodology that uses case studies or exemplars)?
- 9. To what level of granularity and classification (e.g. ANZSRC Fields of Research) should measures be aggregated?

The 2-digit FoR codes would allow for specific and aggregated measures whilst minimising problems of attribution in collaborative research.

10. What timeframes should be considered for the engagement activities under assessment?

Engagement can occur at any time and is not completely reliant on outputs. Therefore, a similar timeframe to previous ERA assessments of 3 years is adequate to capture engagement without increasing data collection burden on Universities.

11. What timeframes should be considered for the impact activities under assessment?

The suggested timeframe in the consultation document of 15 years is appropriate to cover the significant time-lag from discovery to impact for some disciplines.

12. How can the assessment balance the need to minimise reporting burden with robust requirements for data collection and verification?

Focus of assessment should be on engagement activities which are a more efficient method of collecting data that are easily verifiable. A minimal case-study approach as employed in the UK to supplement engagement activities and assess impact is advisable.

13. What approaches or measures can be used to manage the disciplinary differences in research engagement and impact?

Suggestions for measuring engagement and impact are listed in response to Questions 15 & 16. We recommend self-identification of low engagement/impact discipline by FoR code in the first instance. Followed by retrospective analysis of impact and engagement assessment results by FoR code to acknowledge disciplines that have been assessed to have limited engagement and impact.

14. What measures or approaches to evaluation used for the assessment can appropriately account for interdisciplinary and multidisciplinary engagement and impacts?

Allow impact and engagement to be attributed to two or more FOR codes to account for multidisciplinary research.

Types of engagement and impact indicators

The measurement of impact and engagement needs to be as broad and inclusive as possible, and should be discipline specific in order to not unfairly favour those disciplines that may

receive greater attention but still makes an important contribution to the health and wellbeing of Australian society and environment.

15. What types of engagement indicators should be used?

The EMCR Forum strongly recommends the inclusion of engagement indicators that will create internal rewards and incentives for EMCRs who dedicate greater amounts of time to those sorts of engagement activities that ultimately lead to broader societal benefits. Measures of public engagement should be relatively easy to capture – attendees, reads/views, followers, meetings. The following are important and easily collected measures of engagement and a surrogate for impact that should be used:

- Engagement was a viewed as a more practical, if imprecise surrogate measure of potential impact by our members. Some of the measures that they identified were:
- Number of interactions or partnerships with government, industry, clinical or community partners (e.g. workshops, school visits, community talks or media engagements, joint projects or funding applications, joint reports, industry consultations, internships or placements within industry)
- Community and school involvement
- Engagement with the public: interviews in the media, social media (e.g. followers, shares, online comments, views, reads, downloads) and other online media. There is a range of available online metrics such as Altmetrics.
- Events: number of events, number of attendees, feedback from attendees, reach beyond event.
- Measures should also employ or encourage qualitative measures of engagement where possible (e.g style, content, interpersonal skills, meaning to individuals).
- Measures of engagement should be discipline specific as some disciplines may receive less community attention, but still make important contributions to Australian society.

16. What types of impact indicators should be used?

The measuring of impact should take a long-term view. Some of the most important contributions from research were not apparent at the time – the true value to society took some time to become apparent.

Universities should report on policies and procedures used to ensure research impact is realised. We see this as a more reasonable approach than trying to measure impact itself which is flawed for the reasons described in the consultation document. It also creates incentives for Universities to put in place the processes, support and training for EMCRs that will lead them to develop the skills and experience necessary to become "impactful researchers", to develop stable careers both within and outside academia, and to also produce meaningful impact for Australian society. Case reports could be used to indicate the following has been achieved as a results of the Institutional policies/procedures:

- Reports or mentions of research in policy documents, media, discussion forums and community engagement
- Mentions in policy documents or clinical guidelines
- Patents, licences, technology transfer, company formation, employment, production or application of technology in industry, policy formation or in the clinic
- Measures of public awareness or changes in public knowledge or attitudes.
- Taking up leadership or representative roles within community, clinical and industry groups.