



AAH Policy

INQUIRY INTO FUNDING AUSTRALIA'S RESEARCH JUNE 2018

The Australian Academy of the Humanities (AAH) welcomes the opportunity to provide a submission to the House of Representatives Standing Committee on Education, Employment and Training's Inquiry into Australia's Research Funding.

The Terms of Reference for the Inquiry are broad and range over the coherence of Australia's research investment programs and processes, the effectiveness of the dual funding system, and opportunities to maximise the impact of funding. We have noted the subsequent advice from the Inquiry Committee that the principal focus is on '*administration* of Australia's research funding'. Our submission touches on principles for investment and overall system settings before addressing administration of research funding.

Principles for a world-class research base

The Government has an important role to play in ensuring that both strategic and merit-based programs are transparent, accountable and designed to:

- deliver sustainable and ethical investment
- build future capacity in our research workforce
- maintain research quality and integrity, and
- realise long-term social, economic, cultural and environmental benefits to the nation.

In order to deliver on what Innovation and Science Australia has called a 'well supported and impactful world-class research base', a whole-of-system approach to higher education, research and infrastructure planning and investment is needed.

An integrated strategy for research

Fundamental 'basic' research across the spectrum of research fields – the humanities, arts and social sciences (HASS) and science, technology, engineering and mathematics (STEM) – gives the research and innovation system its core capacity. It provides the platform for multidisciplinary approaches to problem-based research, and ultimately enables Australia to identify emerging opportunities in its global engagements and also to prepare for and respond to unforeseen societal challenges.

Yet the strategic focus for research is currently skewed primarily to the science, technology, engineering and maths (STEM) side of the system – with little attention to capacity, health or potential of the humanities, arts and social sciences sector.

HUMANITIES, ARTS AND SOCIAL SCIENCES SECTOR SNAPSHOT

- **42% OF THE RESEARCH WORKFORCE IN AUSTRALIA**
- **RECEIVES 16% OF THE NATION'S RESEARCH INCOME**
- **RECEIVES 28% OF HIGHER EDUCATION R&D INVESTMENT**
- **PRODUCES 34% OF THE NATION'S RESEARCH OUTPUTS**
- **TEACHES 65% AUSTRALIA'S STUDENTS WITH 52% OF THE STAFF**
- **60% OF TERTIARY-EDUCATED AUSTRALIANS HAVE A HASS DEGREE**

Turner, G., and Brass, K. (2014) Mapping the Humanities, Arts and Social Sciences in Australia.

Despite its size and contribution to the national research system, the lack of strategic focus on the HASS side of the system has led to ad hoc planning and a reliance on short-term, project-based research funding as well as the exclusion from schemes that incentivise end-user engagement (cf. the R&D Tax Incentive Scheme). This has diminished our national capacity in unpredictable ways with consequences across the disciplines.

Without an integrated research strategy for HASS and STEM, Australia is not getting the most out of its research system.

Australia's ability to produce research to meet societal challenges and build an innovative workforce is directly linked to the comparative strengths of its HASS and STEM sectors in their own right and in collaboration with each other.

Importance of structural diversity

The Academy strongly supports a balance between strategic and merit-based investment across the system. A recent study in the UK has found that structural diversity in the system is important for risk mitigation and achieving a sustainable research base ([The Value of Structural Diversity](#)). The report found that the UK's 'capacity to support excellence and respond to opportunity' arises from a diversity of research fields; diversity and flexibility in research support mechanisms (allowing both long and short term responses and 'strategic and responsive awards'); and a diversity of research organisations, 'where mission-led units complement large and small universities with regional as well as international engagement'.

A ‘one size fits all’ funding model does not meet the differential needs of research across the humanities and science sectors, and is not delivering as well as it could on tests of efficiency, effectiveness and impact.

There are efficiencies to be gained by taking a more flexible approach to the manner in which the various research grants programs allocate their funding. The system is weighted towards ‘high cost’ modes of research, and there is a strong case for allowing flexibility in funding thresholds to cater for different funding requirements across disciplines.

These are not differences between HASS and STEM but a case of ‘high cost’ and ‘low cost’ research. In the humanities, a discipline like archaeology will have equipment, fieldwork and laboratory expenses akin to many of the sciences. In the STEM fields, research costs in mathematics would be more akin to those in philosophy.

Current programs that incentivise all fields take the more expensive option, which by extension then skews university priorities and research funding support mechanisms. This constrains rather than encourages innovation. Nor does it serve the national interest.

In the HASS fields, we have seen the dominance of project rather than program funding; the latter would provide capacity for excellent work in these fields to take a longer term approach. This might require tailoring more appropriate and often much less expensive options, for these fields of research within specific schemes, such as the Centres of Excellence program. Once more, a one-size-fit all approach may be raising costs unnecessarily while still not serving the needs of the full range of disciplines across the system.

Improving application and assessment processes

Both of Australia’s research councils – the National Health and Medical Research Council (NHMRC) alongside the Australian Research Council (ARC) – have an immensely important role to play in maintaining Australia’s excellent reputation. It is therefore unclear why the NHMRC as the largest funder of health and medical research does not form part of this Inquiry’s remit.

The Academy notes that the Australian Research Council, which provides the bulk of funding to support Australia’s humanities research sector, has a process of regular review and adjustment to improve the application and assessment processes. Efficiencies in the system have been achieved, for example, through the EOI process for the flagship Centres of Excellence program and the introduction of a rolling application process for the Linkage scheme.

There are improvements to make to application and assessment processes at various points in the process, including at the university level.

For universities, the incentives are heavily geared to the generation of research income and therefore effectively work to multiply the number of grant applications. This has several knock-on effects: success rates have declined significantly as a result; and at the individual researcher level, there is undue pressure to submit applications annually.

The Academy is aware that many institutions factor the number of grant applications submitted (and success rates) into performance reviews and metrics. Grant applications processes at the university level can therefore focus on the *quantity* of applications rather than on developing excellence. The Academy believes there is capacity for universities to take on greater

responsibility for the quality of the applications. One solution would be to develop an EOI process at university level.

The volume of applications has also put pressure on our research assessment system, which has been further compounded by the introduction in 2018 of the ARC's Engagement and Impact assessment exercise as an additional process to ERA. The pool of available assessors within a relatively small research system is not inexhaustible. This is a critical issue for the fields of research where peer review, as opposed to citation analysis, is used to measure quality. These include the HASS disciplines, as well as a number of STEM fields such as pure mathematics. There are concerns that this resource is now being stretched beyond capacity and this is a risk to both the quality and credibility of the system. This pressure is further exacerbated by the casualisation of the workforce in the HASS fields – a growing cohort of the workforce that cannot be utilised for these assessment schemes.

There is work to do on removing barriers and disincentives in the system. Gender disparities are in evidence across both the ARC's and NHMRC's schemes. The [ARC's 'gender snapshot'](#) for projects commencing in 2017 shows disparities in terms of participation and success rates for both STEM and HASS fields. It is encouraging that both the ARC and NHMRC are alert to these issues and are seeking ways to address them – including making data more open for review by disciplinary communities and universities.

Building capabilities for the future

Research funding bodies also have a central role to play in building research capability for the future and we would urge attention to underpinning infrastructure, skills and training.

Big data and digital developments are impacting all industries and sectors, including transforming the way researchers across the disciplines undertake research. In order to make new discoveries that will transform our understanding of our cultures, identities, heritage and history, researchers require access to dispersed collections of qualitative and quantitative data and advanced tools to enable data-intensive research and analysis.

Requirements by the ARC for data management plans have incentivised research practice, but universities must provide institutional level support and researcher training to enable researchers to comply with these requirements.

Here again, a one-size-fit all approach to funding this work will not serve the national research enterprise. While the ARC's LIEF and Linkage schemes provide important opportunities for project based work, the innovative and experimental research of many researchers working at the forefront of digital innovation require a different level of support and new schemes to encourage this ground-breaking work. Flexibility and scaled funding opportunities are also needed here.