

REVIEW OF RESEARCH POLICY AND FUNDING ARRANGEMENTS FOR HIGHER EDUCATION ISSUES PAPER

September 2015

POLICY SUBMISSION

The Australian Academy of the Humanities (AAH) welcomes the opportunity to respond to the *Review of Research Policy and Funding Arrangements for Higher Education* Issues Paper (the Paper). As one of Australia's four Learned Academies, a key role of the AAH is to provide independent expert advice to government and policy makers, promoting the social significance of humanities scholarship and its vital importance in shaping effective public policy.

The following are the key messages relating to this submission, with specific responses to the consultation questions thereafter:

1 Key Messages

- 1. A significant shift in emphasis from a comprehensive, quality-based higher education and research system to one focused narrowly on commercial returns from research will inhibit the capacity of the education industry, which is Australia's second largest export industry, from realising its global potential. The Paper's strong emphasis on ways to increase industry-research engagement and, ultimately, the commercial returns from research are important objectives of a comprehensive university system; however they are only one part of the picture.
- 2. The most effective way to realise the commercialisation agenda is through targeted programmes and dedicated funding. A re-allocation of existing resources would risk the integrity of the current system, the strength of which lies in its diversity of focus and strong commitment to basic research, which serves the education and research industry well. Passing the quality threshold must remain the key principle in competitive grants programmes.
- 3. A strategic vision for the higher education, research and innovation system is urgently required. This would allow a focus on overall settings and capabilities (including research infrastructure) rather than tweaks to funding parameters and regulatory frameworks to achieve narrow outcomes. Such a vision must be formed around an agreed articulation of the role of universities in 21st century Australia; otherwise we risk constantly treating symptoms

(research block funding allocation, new evaluation methods, etc.) instead of addressing the root issues.

- 4. In developing a long-term strategy, Australia needs to understand the 'how' and 'why' and not simply the 'what' and 'who'. Any sound measurement system for value, engagement or impact of university research should start with *a priori* strategic questions about what the activity is intended to achieve. A recent report from the AAH on the value of international research collaboration concluded that the 'how to measure' question in Australian research performance is customarily reduced to *post-facto* counting of outputs. This applies equally to the question of research-industry engagement or to the higher education system writ large.
- 5. Translating high quality research into social and economic benefits will require Australia's researchers to collaborate effectively with a range of end-user groups. Researchers should be incentivised to engage with a broad range of end-users for mutual benefit, shifting focus from 'impact' to 'engagement.' In contrast to backward-glancing impact measures, a research engagement agenda would focuses on seeding future capabilities.
- 6. The AAH acknowledges that current incentives and performance measures fail to recognise the range of engagement activities taking place in our universities, including the social impact of community outreach and the outcomes of industry-linked research. It is not clear, however, that Australia needs an 'impact' assessment regime that runs on separate and parallel tracks to the Excellence in Research for Australia (ERA) initiative. The AAH opposes a metrics-only approach to performance measurements of the quality, engagement, and impact of research.
- 7. Incentives for researchers to collaborate with industry must be better coordinated with those designed to encourage industry to collaborate with researchers, either through direct incentives or indirect (via the tax system).
- 8. There is a leadership role for government in ensuring national research capabilities are maintained, while ensuring institutions have flexibility to allocate resources according to their own strategic priorities. The *Mapping the Humanities, Arts and Social Sciences in Australia* report found that in the humanities, arts and social sciences (HASS) disciplines, ad hoc planning and reliance on short-term project-based funding have diminished our national capacity in unpredictable ways with consequences for workforce planning and discipline succession and renewal.¹
- 9. While the current strategic focus on science, technology, engineering and mathematics (STEM) in national policy and planning processes is to be congratulated, in the absence of an integrated strategy for the entire research system, a one-dimensional effort inadvertently risks capacity and capability in the other half of the system. Australia's ability 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.
- 10. Programmes that encourage industry-researcher engagement, innovation, or international collaboration need to be open to researchers across the board, and to a wide range of private and public sector organisations, if the nation is to benefit from the full range of expertise vested in Australia's research community.
- 11. The Science and Research Priorities (SRPs) cannot be the sum total of focus, as the range of priorities for Australia's future prosperity extends beyond the SRPs into areas of social and

cultural transformation, such as tackling income and social inequality, domestic violence, and educating for the future.

2 Responses to Issues Paper

2.1 Overview of current policy and funding framework for university research

2.1.1. Commercialising returns from research/ and research-industry engagement.

From the outset, 'industry' should be inclusive of private, public and not-for-profit sectors and include the education industry itself, which is Australia's second largest export industry.

There is significant, though currently under-realised, potential in the HASS sector to contribute to the improved research-industry engagement objectives. As outlined in the AAH's recent report, *Mapping the Humanities, Arts and Social Sciences in Australia:*

- HASS researchers comprise 43% of the university-based research system, and HASS contributed 42% of the total number of units of evaluation in the Excellence for Research in Australia (ERA) initiative in 2012.
- In 2010, HASS research received 20% of industry income (HERDC category 3) and 22% of other non-competitive public sector income (HERDC category 2).
- In the ARC's competitive grant schemes, 22% of HASS funding for research is derived from Linkage Projects demonstrating increasing and important linkages with industry partners, with standout fields including Built Environment and Design, and Commerce, Management, Tourism and Services. The range of partner organisations involved in HASS ARC Linkage projects over the period 2005-13 included: State and Local Government 31.6%; Non-Profit Australian 21.8%, Private Company Australian 20.3%; and Commonwealth Government 9.2%.
- HASS researchers engage with industry in areas such as community engagement, social impact assessment, native title, design solutions, resource management and sustainability.²

More broadly HASS skills and expertise yield economic and social returns and are critical to business. In the context of Australia's trade/economic engagement in the Asia-Pacific region, the Business Council of Australia recognises that skills deficits in languages and cross-cultural skills training are holding us back: "Despite our growing presence in the region, our experience and understanding of the cultures, languages, behaviours and customs of emerging economies in Asia requires continual deepening."³ The humanities disciplines provide a foundation of broader understanding necessary for dealing confidently and appropriately with a wide range of different cultural and social values that will be crucial to workforce futures and services innovation and exports.

2.1.2. Impediments and barriers to engagement and commercialisation

The following are key structural barriers and disincentives to wider industry-research engagement:

Narrow conceptions of innovation are a key barrier to research/ industry engagement. As a recent ACOLA report found, "Innovation involves more than technical skills. It also needs people who understand systems, cultures and the way society uses and adopts new ideas".⁴ HASS knowledge and skills has application across the innovation lifecycle, and particularly in terms of business model innovation, leadership and diversifying Australia's skills base.

Calls for moving beyond a narrow technologically conceived notion of innovation have been very strongly heard in Europe through the social innovation literature. This work shows that even technologically impressive innovations often fail to find traction in the life of communities. Innovations which take into account the social context of change, and which are designed from the outset with people's cultural and social needs in mind, tend to be adopted more quickly, to impact more deeply on society, and to interact more efficiently with existing ways of doing things.

- Government programmes that encourage industry-researcher engagement should be open to researchers across the board and to a wide range of private and public sector organisations, if the nation is to benefit from the full range of expertise vested in Australia's research community.
- Definitions of core R&D activities currently exclude HASS research and act as a disincentive for industry to engage with a significant component of the Australian research sector. Removing the exclusion of HASS research is entirely in keeping with the stated aims of the R&D Tax Incentive to boost competitiveness and improve productivity across the Australian economy; and to encourage industry to conduct research and development activities that may not otherwise have been conducted.⁵
- An emphasis on 'supply' and not on 'demand' risks a one-sided approach. Rather than solely putting the onus on researchers to drive engagement, incentives for industry are equally important and require meaningful consultation with a full range of 'end users.'

2.1.3. Funding of indirect costs of research

There is a need throughout the system for better alignment, and the need is particularly pronounced in the funding of indirect costs. As a result of underfunding, cross-subsidisation of research is rife within universities, creating complex and inefficient financial and administrative arrangements. The AAH agrees with the 2011 *Higher Education Base Funding Review* that cross-subsidisation is reasonable in support of an institution's strategy and long-term goals but should not arise as a result of underfunding. There is some evidence of institutional disinvestment in HASS in response to cluster funding and shifts in student demand.⁶ There is a role for policy leadership here – we need systemic consideration and planning to ensure that Australia maintains its national knowledge base in areas of significance.

To date there has been reallocation of existing funding such as the re-direction of Sustainable Research Excellence Programme towards the National Collaborative Research Infrastructure Strategy. The AAH would question moves that ultimately deplete funding for research in order to sustain a separate but equally vital underpinning capability of Australia's research system.

2.2 Research block grants (RBG)

2.2.1. Getting the metrics and incentives right

The AAH recognises the need to incentivise both researchers and industry to encourage collaboration but acknowledges the risk that metrics focused on volume measures, such as research income, may force researchers to chase industry funds without regard to the quality of those engagements. Incentives are needed to encourage researchers to form sustainable partnerships with industry, and to collaborate with business and other partners relevant to the objective of achieving significant economic, environmental and social benefits.

The AAH is aware of some models proposed for developing a research income metric, such as the Australian Academy of Technological Sciences and Engineering (ATSE) Research

Engagement metrics exercise.⁷ While the AAH commends the shift in focus from impact to engagement, and is pleased that the final report emphasises the need to observe differences in disciplinary practice and compare like-with-like, the AAH recommends further development of the metric model to address the following reservations:

- a limited set of research funding data cannot deliver a meaningful picture about how research delivers economic, social and environmental benefits to the nation;
- a static research income proxy cannot of itself measure the extent, quality and value of collaboration;
- the signals that such a metric sends to chase industry funds risk tying research to short-term agendas;
- the model has yet to scope in-kind income and other measures of real importance to research engagements; and
- the proposed model may be misdirected toward a crude 'ranking' exercise.

The need for careful consideration of such metrics is borne out internationally. The recently released British report *Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management* examined the uses and limitations of research metrics and indicators. One of the report's recommendations notes: "Carefully selected indicators can complement decision-making, but a 'variable geometry' of expert judgement, quantitative indicators and qualitative measures that respect research diversity will be required."⁸

Any mechanism to encourage research collaboration with industry needs to be attuned to discipline specific practices. STEM and HASS disciplines, while committed to industry engagement, differ significantly in research output and industry engagement practices. Recognition of these differences will be essential to the establishment of workable metrics on engagement and knowledge transfer. We take this up in more detail below.

2.2.2. The Research Training Scheme

The Research Training Scheme needs to be reviewed, particularly as the arbitrary high/low cost funding differential marginalises research activity in designated low-cost fields, and the focus on completions and grant income in the formula risks rewarding quantity over quality.

The AAH has repeatedly called for a re-evaluation of the high-cost/low-cost funding model, most recently in our submission to the ACOLA Review of Research Training.⁹ It is our position that there is significant variation in the actual cost of delivery (supervision, resources, infrastructure etc.) and the current categorisation does not reflect the actual costs of the research training activities it is designed to fund. Structural biases, disincentives and inequities in the current system have led to the under-funding of humanities disciplines.

2.3 Competitive grants programmes

The AAH opposes any wholesale changes to the processes of competitive grant programmes to focus on commercial outcomes. Maintaining Australia's excellent reputation and output of outstanding research requires granting programmes to focus on identifying the best research projects. The fundamental importance of basic research to innovation has been noted repeatedly in both national and international reports. It underpins our research system providing the capability and capacity to respond to unforeseen challenges. A situation where the scales are tipped heavily towards short-term applied research at the expense of basic research would ultimately limit our system's responsiveness to change and threaten our long term economic

success. Passing the quality threshold must remain the key principle in competitive grants programmes.

2.4 Performance of the research system

2.4.1. International models for research-industry engagement

The UK's Arts and Humanities Research Council (AHRC) schemes in support of industryresearch engagement are a useful model to consider in the Australian context. They are specifically designed to facilitate exchange between industry and researchers across the 'ecosystem', including research training. They include:

- *Knowledge Exchange Partnerships (KTPs)*, "a three-way partnership between an academic, a business partner (including private sector companies, charities and public sector organisations) and a recent graduate or postgraduate who is employed to work on the specific project relevant to the business partner". The AHRC reports that KTPs have the capacity to deliver "significant increased profitability for business partners as a direct result of the partnership through improved quality and operations, increased sales and access to new markets", including social enterprises.¹⁰
- *Knowledge Exchange Hubs*, aim to build consortia to "connect excellent research in the arts and humanities with a range of creative and cultural organisations, large and small, across the UK, to accelerate growth and innovation, generate new and exciting knowledge exchange opportunities, foster entrepreneurial talent and contribute to the development of the UK's Creative Economy".¹¹
- *Follow-on Funding for Impact and Engagement* provides funds to support "innovative and creative engagements with new audiences and user communities which stimulate pathways to impact. Funds are awarded for knowledge exchange, public engagement, active dissemination and commercialisation activities that arise unforeseeably during the lifespan of or following an AHRC-funded project ... the scheme does not support supplementary funding for continuation of research activities ... [it] aims to encourage and facilitate a range of interactions and creative engagements between arts and humanities research and a variety of user communities including business and commercial, third sector and heritage sector, public policy, voluntary and community groups and the general public".¹²

2.4.2. Impact measurement

As noted earlier, the AAH is not in favour of an impact assessment exercise that runs on separate and parallel tracks to ERA. Nor is the AAH supportive of metrics-only approaches to research performance measurement. Better recognition of a range of engagement activities is required, as are mechanisms that incentivise engagement, such as cost-effective ways to encourage the dissemination of research, changing the way we communicate results and engage potential beneficiaries, as well as overcoming obstacles to the uptake of university-based research by communities or the public and private sectors.

The rigour of any 'impact' exercise, and the sector's faith in any new system, will be contingent on the adequacy of the data collected and assessment processes in place. Australia's focus on quality through ERA is a robust framework because of its matrix of discipline-specific indicators.

The AAH strongly encourages Australian policymakers to be guided by the Leiden Manifesto in this area.¹³ Developed by metrics experts, the Leiden Manifesto's key tenets include the need for a mix of qualitative and quantitative approaches; that data should be in service to human

judgment and analysis; research needs to be evaluated in respect to its mission; and that evaluative frameworks need to be attuned to discipline-specific practices.

The AAH advocates the following principles:

- the necessity of peer review/oversight committees to validate the use of metrics;
- the need to develop discipline-specific indicators;
- the need to adopt appropriate methods and standards for data collection;
- that a case-study approach is workable;
- panel assessment of both metrics and case studies is warranted; and
- any assessment regime must recognise that there are significant differences between HASS and STEM research and a one-size-fits-all model lacks the flexibility to adequately moderate for these differences.

2.4.3. International Rankings

On the issue of international rankings, the Paper rightly questions the veracity of international rankings exercises and implies a need for better leadership on this issue. Current rankings exercises are skewing the mission of universities and are not consistent with the long-term health of the system. The AAH would support a national conversation to discuss and develop alternative indicators of real substance to the future of Australia's higher education system.

2.5 Research training and employment

The AAH made a submission to the Research Training Review in early September. In terms of barriers to more flexible and innovative HDR delivery we would direct the Review to the concrete suggestions we made in that earlier submission.¹⁴ More broadly, it is the AAH's position that if Australia's research system is to build capability across the national workforce, including contributing to public sector innovation and playing a role in underwriting future industries, we will need to mobilise innovative potential across all disciplines.

The AAH would welcome the opportunity to be involved in further consultation, and would be pleased to elaborate on any of the observations contained in this submission.

Professor John Fitzgerald President

ENDNOTES

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³ Business Council of Australia (2013) Action Plan for Enduring Prosperity Australia, p.30, http://www.bca.com.au/Content/102254.aspx

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