Australian Academy of the Humanities

Submission to *Inquiry into Innovation and Creativity: Workforce for the New Economy*, March 2016

The Australian Academy of the Humanities welcomes the opportunity to provide a submission to the *Inquiry into Innovation and Creativity: Workforce for the New Economy*.

The Academy is one of Australia's four Learned Academies, established to advance knowledge and the pursuit of excellence in the humanities for the benefit of the nation. A key role of the Academy 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 humanities together with the arts and social sciences (the HASS sector) form a sizeable part of the higher education and research system. HASS teaches 65% of Australia's university students with 52% of academic staff.[1] HASS produced 69% of student completions in 2014.

Given the scale of their contributions, the HASS disciplines have a strong interest in the effective utilisation of Australia's education, research and innovation capacity, touching on several points of the Committee's terms of reference. In particular, the Academy is concerned to secure recognition of the role of critical and creative thinking skills in preparing students to meet the needs of the new economy; and of the need for language learning and inter-cultural education in meeting the demands of the rapidly-growing services sector.

Current policy settings are not making the most of the HASS sector. In this brief submission we focus on four key areas which we believe represent untapped opportunities for building innovative capabilities to deliver employment for graduates and long-term economic and social benefits for Australia.

1. Recognise the role of the humanities and arts in fostering and building creativity.

The National Innovation and Science Agenda (NISA) has put the spotlight on innovation. We are yet to have a national conversation about the power of creativity. Creativity and innovation are not interchangeable: creativity is the ideas borne out of knowledge and experimentation, and innovation is the application of creativity to build new products, services, policies, or technologies. Creativity is the precursor to innovation.

Of relevance to this Inquiry is the role of our higher education sector in producing creative thinkers and creating the conditions for the generation of new ideas and practices. Our

universities have a vital public responsibility across all fields of education and research to generate and disseminate knowledge.

The humanities and creative arts disciplines in this country make a major contribution to the national interest by developing creative and cultural knowledge of Australia and cultural literacy of other societies and cultures. This knowledge base and creativity underpin the cultural and creative industries, and are especially valuable in the complex environments we face today.

International innovation literature places increasing emphasis on the importance of diverse knowledge and skillsets. Social and cultural studies may lead to innovation in their own right and frequently contribute to successful innovation outcomes in conjunction with scientific, technological and engineering inputs. International innovation leaders, such as Korea, have radically transformed their approach to the teaching of science, technology, engineering and mathematics (STEM). The 2013 Creative Economy Plan for Korea sets out an agenda for job creation and growth, which is explicitly designed around the "the convergence of science and technology with industry, the fusion of culture and industry, and the blossoming of creativity in the very borders that were once permeated by barriers".[2] Korea's agenda for STEAM (i.e. STEM plus Arts) integrates STEM education with the cultivating of artistic and creative talent to gain a competitive advantage internationally.[3]

Australian universities are beginning to adapt best practices in international innovation research and education. The Engineering Leadership Programme at Monash University, which recognises that engineering leaders of the future need to augment their technical STEM skills with other knowledge systems, highlights the curriculum shift under way in Australia. The Monash programme embraces topics ranging from globalisation and change management to people skills and ethics, and includes an industry experience component.

The Academy would suggest that the Korean approach does not go far enough. Australia could lead the way in developing cross-disciplinary curricula to bring the entire HASS sector in to frame. In many respects it will be through collaboration between its HASS and STEM sectors that Australia will realise its broader innovation agenda: harnessing innovative potential across the research and education systems, and building workforces that encourage dynamic interaction of technical and non-technical skills.

2. Mobilise innovative potential across all disciplines.

If Australia's tertiary education and 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. Professor Duncan Ivison FAHA, Deputy Vice Chancellor (Research) at the University of Sydney, reports that the business leaders he speaks to "are looking for well-rounded graduates – the kind of people who can keep learning, deal with change and contingency, understand context and communicate effectively".[4]

A key finding of a report on the role of science, research and technology in lifting Australia's productivity, published by the Australian Council of Learned Academies (ACOLA) is that "Innovation involves more than technical skills. It also needs people who understand systems, cultures and the way society uses and adopts new ideas".[5] This is HASS creativity. If the STEM disciplines contribute numeracy and technological proficiency, it is the humanities

disciplines – together with arts and social sciences – that deliver Australia's creativity, literacy and communications skills, and knowledge of social systems, governance structures, community habits, beliefs and behaviours.

Further work underway as part of the *Capabilities for Australian Enterprise Innovation* project (another ACOLA project due to report in July 2016) is now focussed on the way in which high-performing Australian businesses seek to recruit and develop a broad range of technical and non-technical capabilities to drive innovation and productivity.[6] The findings of these reports have a direct bearing on the terms of reference for this review.

3. Humanities education and training provides skills and capabilities in communication, creativity and cultural literacy that will be critical to Australia's future comparative advantage in the Asia region.

In a global age, innovation will be underpinned by language proficiency and inter-cultural competence. These humanities knowledge sets and skills must be recognised as core competencies in the innovation system. They also demand the close policy attention that other skills and knowledge deficits have attracted in recent years.

To take one example, Asia-related education and research and the services sector. Australia's services sector contributes almost three quarters of GDP and employs 87 per cent of Australia's workforce in fields as varied as health, banking, transport, telecommunications, property, tourism and education. Services are also foundational to Australia's export economy: our services exports to Asia in 2013 totalled $69 billion, second only to exports from the mining sector at $89 billion. However, services exports to Asia and Australian income from Asian investments are underperforming relative to our traditional trading partners.[7]

The performance gap between Australia's service exports to Asia and elsewhere could be partly attributed to historically low demand in key Asian trading partners, but this is no longer the case. The key obstacle to growth is the underdevelopment of Asia-capabilities in Australia's workforce.[8] According to a recent PWC/Asialink/ANZ report: "by 2030, services can become Australia's number one export to Asia in terms of total value added, in the process supporting a million Australian jobs. This can be achieved by closing just half of the gap between our level of services engagement with our Asian regional neighbours and our traditional Western trading partners".[9]

Recent research by the Export Council of Australia suggests that one of the biggest challenges for Australian exporters in the region is navigating the complexities of Asian business cultures.[10] Similarly, the business-led National Taskforce for an Asia-Capable Australia found a strong link between the 'Asia-capability' of a business' executive and board, for example by having senior staff members who understand Asia's cultures, histories and languages, and their commercial success in the region.[11] As Australia's trade with Asia begins to shift more and more towards the services sector, Australian businesses will be required to engage in much greater levels of face-to-face interaction with their Asian business counterparts than they would in the traded goods sector.[12]

We would also direct the Committee's attention to two projects undertaken by ACOLA, which have a direct bearing on ways in which Australia stands to gain from recognising and harnessing the skills, knowledge and networks of its Asian diasporas. The *Smart Engagement*

with Asia report (2015) shows that recent patterns of migration and mobility are having a game-changing effect on the nature and intensity of Australia's relations with countries in the region. Australia's research, scientific and cultural relations are increasingly led by skilled migrants from India, China and other neighbouring counties who are building pathways for innovation and growth.[13] The *Business Diasporas in Australia* project (due to report in May 2016) is taking this work further in examining the significant role played by Australia's Chinese and Indian business diasporas in trade, investment and skills and knowledge transfer.[14]

This work points to the need for a policy shift, which requires government, business, and our national research and education sectors to work together to ensure that Australia develops an Asia-capable workforce. The HASS disciplines will be central to this effort.

4. Industry-university partnerships should be based on the principle of reciprocity.

Renewed efforts directed at increasing industry-university collaboration are to be commended. But an exclusive focus on a commercialisation agenda risks damaging the system's ability to deliver wider economic, social and environmental benefits. Our university sector should be encouraged to collaborate more effectively with a range of end-user groups, including the private sector, not-for profit organisations, community groups, and public sector entities. A narrow focus on private business will limit Australia's capacity to reap the full benefits of the publicly funded system.

The relationship between universities on the one hand, and industry, public sector organisations and other employers on the other needs to be based on a principle of reciprocity and mutual benefit. A one-sided effort (from the university sector alone) will not produce the outcomes needed for the nation. Getting a better sense of what both sides want is imperative. Quantitative studies, such as the Graduate Destinations Survey, have a place but given limitations means that better metrics need to be developed alongside a much more nuanced, dynamic and qualitative approach.

From a humanities standpoint research translation can offer significant economic and social benefits that don't fall under the heading of commercialisation. Professional and financial services, health, education and tourism services are all areas of growth for Australia, with great potential for industry players to build education and research partnerships with universities to pilot and test innovative partnerships to find cost-effective solutions for critical issues in ageing, disability, health, unemployment, and related services.

The Academy would be very pleased to elaborate on any of the observations contained in this brief submission. Please direct your initial queries to the Academy's Executive Director, Dr Christina Parolin via email to christina.parolin@humanities.org.au or phone on (02) 6125 9860.

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President

[1] Turner, G. and Brass, K. (2014) *Mapping the Humanities, Arts and Social Sciences in Australia*. Australian Academy of the Humanities, Canberra. http://www.humanities.org.au/Portals/0/documents/Policy/Research/MappingProject/txt/Mapping_HASS_Aust_FinalReport_All_Oct2014.pdf

[2] Park Geun-hye (2015), 'Opening a New Era of Hope (The 18th Presidential Inaugural Address), Korea, February 25, 2013, http://english1.president.go.kr/activity/speeches.php?srh%5Bboard_no%5D=24&srh%5Bpage%5D=6&srh%5Bview_mode%5D=detail&srh%5Bseq%5D=2617&srh%5Bdetail_no%5D=1

[3] Ang, I., Tambiah, Y., and Mar, P. (2015) *Smart Engagement with Asia: Leveraging Language, Research and Cu*lture, Australian Council of Learned Academies, p. 77. http://www.acola.org.au/PDF/SAF03/SAF03%20SMART%20ENGAGEMENT%20WITH%20ASIA%20-%20FINAL%20lo%20res.pdf

[4] Ivison, D. (2015), 'Five Things to Think About When Choosing a University Course', *The Conversation*, 23 August 2015, https://theconversation.com/five-things-to-think-about-when-choosing-a-university-course-45584

[5] Bell, J., Frater, B., Butterfield, L., Cunningham, S., Dodgson, M., Fox, K., Spurling, T. and Webster, E. (2014), *The Role of Science, Research and Technology in Lifting Australia's Productivity*, Australian Council of Learned Academies, http://www.acola.org.au/PDF/SAF04Reports/SAF04%20Role%20of%20SRT%20in%20lifting%20Aus%20Productivity%20FINAL%20REPORT.pdf

[6] See ACOLA's 'Capabilities for Australian Enterprise Innovation' project, http://www.acola.org.au/index.php/projects/securing-australia-s-future/saf10

[7] Fitzgerald, J. (2015) 'Our Future at Work'. Presentation to the Royal Society of NSW and Four Academies Forum 'The Future of Work, 15 September 2015, Government House Sydney. http://www.royalsoc.org.au/meetings_and_events/rsnsw_forum_2015.htm

[8] ibid.

[9] PWC/Asialink/ANZ (2015) *Australia's Jobs Future: The Rise of Asia and the Services Opportunity*, http://asialink.unimelb.edu.au/asialink_business/research_initiatives?a=1401688

[10] See for example, Export Council of Australia (2014) *Australia's International Business Survey 2014 Report*, Export Council of Australia/University of Sydney, p. 54, http://www.export.org.au/pdf/research/aibs-2014/AIBS-2014-FULL-Report-FINAL-20140730-web.pdf

[11] See for example Asialink Business (2015) *Engaging Asia: Challenges for Australian Businesses in Asia*, https://asialinkbusiness.com.au/research-resources/report-challenges-australian-businesses

[12] Fitzgerald (2015) op. cit.

[13] Ang, Tambiah and Mar (2015) op. cit.

[14] See http://www.acola.org.au/index.php/projects/securing-australia-s-future/saf11