



SUBMISSION

Senate Select Committee

Inquiry into the Future of Work and Workers

30 January 2018

On 30 January 2018, The Australian Council of Learned Academies (ACOLA) provided a submission to the Senate Select Committee on the Future of Work and Workers.

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AUSTRALIAN COUNCIL OF LEARNED ACADEMIES

ACOLA is the forum whereby Australia's Learned Academies and our Associate members come together to contribute expert advice to inform national policy; and to develop innovative solutions to complex global problems and emerging national needs.

30 January 2018

Mr Stephen Palethorpe
Secretary
Senate Select Committee on the Future of Work and Workers
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Stephen

Re: Inquiry into the Future of Work and Workers

The Australian Council of Learned Academies (ACOLA) welcomes the opportunity to provide input to the Senate Inquiry into the Future of Work and Workers.

ACOLA combines the strengths of Australia's four Learned Academies – Australian Academy of the Humanities, Australian Academy of Science, Academy of the Social Sciences in Australia, and Australian Academy of Technology and Engineering – to undertake interdisciplinary research and analysis on issues of key importance to Australia.

ACOLA has produced several reports that examine various issues related innovative and skilled workforces that may be of assistance to the committee in their deliberations.

1. **Australia's comparative advantage** explores how to build and secure Australia's future through comparative advantage by creating and taking advantage of Australia's strengths and ensuring flexibility and resilience in the pursuit of this ambition. A national roadmap is presented for future decisions and the conditions that can underpin achieving Australia's best.
2. **STEM: Country comparisons** reviews international science, technology, engineering and mathematics (STEM) education initiatives. It identifies key strategies of successful STEM countries that could be usefully applied to the formation and maintenance of a STEM skilled workforce and proposes options for increasing Australia's productivity and competitiveness.
3. **The role of science, research and technology in lifting Australian productivity** examines ways to enhance innovation, creativity and productivity in the Australian workforce and business practices that will drive Australia's prosperity.
4. **Technology and Australia's future: New technologies and their role in our security, cultural, democratic, social and economic systems**, examines the risks and opportunities of a broad range of new and emerging technologies and evaluates their transformative implications for Australia's society, democracy, environment, security and trade.
5. **Translating research for economic and social benefit – country comparisons** analyses international best practice approaches to encouraging and facilitating research translating, commercialisation and collaboration.
6. **Skills and capabilities for Australian enterprise innovation** provides insight into the business practices of innovation leaders and to the expectations on workers in the decades ahead.

Technology is constantly changing the nature of our work and an innovative workforce requires a strong education system that fosters academic skills across all disciplines. Australia will need to train a future

workforce to be equipped with skills to work with, and maintain, complex equipment and new technology in many sectors. As technologies advance, old jobs will disappear, and new ones will arise. Australia's workforce will therefore need to thrive with tomorrow's technologies and be adaptable.

Australia faces short-falls in skilled workers due to an ageing population and the aforementioned advancements in technology. Maintaining a skilled, productive and innovative workforce that can keep pace with technological advancements will be essential for our continued growth and prosperity.

This is an area of particular and ongoing interest to ACOLA which is initiating several new interdisciplinary studies to examine the impact that technological advances such as the internet of things, machine learning, and artificial intelligence will have on society and the future of work and workers in Australia.

If you have any questions about the work of ACOLA, please don't hesitate to contact ACOLA's General Manager, Dr Angus Henderson, on (03) 9864 0923 or by email angus@acola.org.au.

Yours Sincerely,



Dr Angus Henderson
General Manager

Further reading:

1. **Australia's comparative advantage**
<https://acola.org.au/wp/project-1/>
2. **STEM: Country comparisons**
<https://acola.org.au/wp/project-2/>
3. **The role of science, research and technology in lifting Australian productivity**
<https://acola.org.au/wp/project-4/>
4. **Technology and Australia's future**
<https://acola.org.au/wp/project-5/>
5. **Translating research for economic and social benefit – country comparisons**
<https://acola.org.au/wp/saf09/>
6. **Skills and capabilities for Australian enterprise innovation**
<https://acola.org.au/wp/saf10/>