

Online submission

11 April 2023



Australian Academy of Science submission to the Australian Universities Accord Panel

The Australian Academy of Science (the Academy) welcomes the opportunity to provide advice to the Australian Universities Accord Panel

The Academy recommends that the panel looks for opportunities to be more ambitious than the incremental change implied in the discussion paper. Namely the Accord needs to:

- Value and defend expertise, knowledge and higher education and their role in transforming Australia to a country fit to prosper in the decades that remain in the 21st century
- Concentrate on fixing the ailing funding system for the research sector, and incoherent government policy around research – both fundamental and translation
- Articulate a joint value proposition for Australian public universities – the only institutions capable of collaborating at scale to address our grand challenges, provide the patient capital, invest in fundamental research and have international reach.

Every country needs experts.

Experts are central to how a country can develop and use knowledge that is critical to its own needs; to the way knowledge developed elsewhere can be adapted to local issues; to the way a country can play its role as an effective global citizen grappling with issues that affect us all.

Australia is no different. As the driest inhabited continent with the 91st least differentiated economy in the world and facing a fractious globe ever hungrier for talent, Australia needs to develop its experts on a scale not before imagined.

It is our experts who will take us to places we haven't been but need to get to.

It is they who will build a future that is inclusive but different – value adding, making things, minimising sovereign risk, consciously playing our part in leading the world to a better place.

The scaffold we need to build our expertise is the education system.

The Australian attitude to education lags by comparison with countries which have had to make their way through the skills and the talent of their community. Countries that do not have the natural endowments that have favoured Australia.

In this country, frequent incremental changes to the rules, regulations and growing bureaucracy prevail. Add the raft of Ministers, each wanting to do something but most not staying long, and the result is a hotchpotch of band-aids, one on top of the other, without trying to fix the sore the first band-

This submission will focus on just three topics:

1. Universities, expertise and grand challenges
2. Universities and discovery: surviving a broken model
3. The international dimension of university education and research.

Universities have an inherent capacity to find solutions to some of the biggest challenges our nation and the world face – finding solutions for problems everyday Australians need fixed or understood.

Groups of universities have shown their ability to join forces to collaborate on big issues, like climate change. The ARC Centre of Excellence for Climate Extremes exists to transform our understanding of events such as heatwaves, droughts, and storms. This consortium studies the processes within the climate system that cause climate extremes and contribute to improving the models to predict them.

Universities can also be key partners for tackling societal challenges. The partnership between the University of Melbourne and The Royal Melbourne Hospital in creating the Doherty Institute, a place where scientists and clinicians collaborate on projects with the goal of improving human health.

James Cook University is a major centre comprehensively studying coral reefs – Australian and overseas - with international collaborators.

Universities divert fee income to match research priorities, where they can, and to cover the decline in business and government contributions.

How is this a sensible, sustainable funding model? How is it building the strategic approach Australia needs even to keep pace with global change?

Add our failure to cover the full cost of research and the model is not just broken, it is destructive.

Factor in the 212 research funding programs across 13 Commonwealth Departments all tending their own patch; the fatite0 Tc 0 Tw [ap)-6.8 (h)4.9a3 (e)-1 (l?)-3 (o)-5.i8 (h)4.9-0.005 Tc 0.008 Tw [m)-9.56d[, a)-8 (a)-4.9 (5-6 (t)-9.1 (re)-6 1 (nd)-1

Australian researchers publish extensively with international collaborators: Always have, always should. It is not to say that researchers should not be unaware or unconcerned about 'foreign interference' – which should be comprehensively managed, not gratuitously targeted.

To discuss or clarify any aspect of this submission, please contact Mr Chris Anderson, Director Science Policy at Chris.Anderson@science.org.au.