



NITRO-Oceania

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**Submission to the Australian
Universities Accord Interim
Report**

31 August 2023

Executive Summary

There is much of value in the Australian Universities Accord Interim Report, but the lack of attention to inter- and trans- disciplinary education and research is a major missed opportunity.

Identified proven expertise in tackling multiple and often simultaneously occurring “wicked” problems, including the multiple manifestations of climate change, growing political instability, refugee crises, competition for increasingly scarce natural resources, and aging populations, is essential for graduates, regardless of whether they find employment in the public service, industry or civil society organisations.

The expertise required for working across disciplines, with affected communities and with decision makers must be developed and fostered through on-going research to determine which concepts and methods are most effective in which circumstances, providing the foundation for solid education programs.

We strongly recommend that the Australian Universities Accord Final Report addresses educational substance as well as form and that it specifically draws attention to education and research addressing the substantive expertise required for interdisciplinary and transdisciplinary problem solving.

Submission

NITRO-Oceania, the Network of Leaders of Interdisciplinary and Transdisciplinary Research Organisations in the Oceania region, is the peak body for interdisciplinary and transdisciplinary research and education in Australia and the wider region (<https://nitro-oceania.net>). Fifty-two of our more than 70 members are in leadership positions in 18 Australian research and education organisations.

This submission was prepared by Gabriele Bammer, Ken Taylor, Beth Fulton and Iain Gordon on behalf of the Executive and membership of NITRO-Oceania. It responds to the invitation by the Panel to submit written responses to the Interim Report.

We are disappointed that the report did not recognise or touch on inter- and trans-disciplinary education and research.

Most importantly higher education students will join a workforce that must be able to tackle multiple and often simultaneously occurring “wicked” problems, including the multiple

manifestations of climate change, growing political instability, refugee crises, competition for increasingly scarce natural resources, aging populations and more. Regardless of whether graduates join the public service, industry or civil society organisations they need to be ready to contribute to preventing crises where possible, and managing them, where not. Learning relevant skills is even more important in light of the “Review’s vision of educating many more students from all walks of life.”

While students who want to pursue disciplinary training are well-accommodated in higher education currently, those who seek skills that will allow them to work across disciplines, with affected communities and with decision makers to address pressing societal and environmental problems are not catered for. Furthermore, disappointingly, the interim report does not acknowledge or address this urgent need.

The transdisciplinary problem solving skills that students require build on and go beyond skills recognised in the Accord Discussion paper, i.e. *“high quality, generic skills including communication, collaboration, problem-solving, critical thinking and digital literacy... .”*

In particular, they involve being able to:

- work effectively in teams with diverse expertise
- come at challenges with an open mind, avoiding narrow framings and paying attention to potential biases
- engage, respectfully listen to, and incorporate the concerns of stakeholders affected by problems under consideration (it is critically important to build those relationships in the context of problem framing, particularly when working with indigenous peoples)
- become, or develop the capacity to support, effective decision makers, which involves honing skills in: critical thinking, overcoming cognitive biases, preparing for and managing adverse unintended consequences, avoiding disastrous tipping points, and understanding and working within the complexity of change processes
- appreciate and work with the opportunities and constraints provided by political, historical, economic, cultural and other aspects of context
- understand and work with the systemic nature of problems and solutions, especially the importance of connections and interdependencies. It also requires effectively managing imperfection, in that problems can never be fully understood and solutions will only ever be partial and temporary.

The Accord interim report recognises that: *“Over the next decade, if Australian higher education is to play its role of ‘powering progress,’ it must find ways of:*

- *increasing the creation and use of knowledge to solve complex problems in every sector and every part of Australia ...*
- *developing partnership across communities, to strengthen a culture of respect for truth and evidence, and to foster inclusion, trust and democratic culture.”*

The expertise required is not intuitive. It needs to be developed by solid on-going research that investigates which concepts and methods are most effective for inter- and trans-disciplinary work in which circumstances. There is already a solid core to build on, but there is considerable room for further development and refinement.

By-and-large students are not taught these research-based skills or provided with opportunities to hone them through experience and feedback. We strongly recommend that the Australian Universities Accord Final Report addresses educational substance as well as form and that it specifically draws attention to education and research addressing the substantive expertise required for interdisciplinary and transdisciplinary problem solving.