Science & Technology AUSTRALIA

SCIENCE & TECHNOLOGY AUSTRALIA POLICY SUBMISSION

1 JULY 2024

EDUCATION SERVICES FOR OVERSEAS STUDENTS AMENDMENT (QUALITY AND INTEGRITY) BILL 2024

Science & Technology Australia thanks the Senate Standing Committee on Education and Employment for the opportunity to respond to this inquiry.

Science & Technology Australia is the peak body for the nation's science and technology sectors, representing 138 member organisations and more than 225,000 scientists and technologists. We connect science and technology with governments, business and the community to advance science's role in solving some of humanity's greatest challenges.

While we note community desire for more a more strategically managed approach to migration, Science & Technology Australia urges the Committee to consider the broad range of valuable contributions international students make, not just to our university and research sectors, but also small business, tourism and the broader economy. International students studying STEM courses also have the potential to bolster Australia's STEM workforce in the decades to come. It is imperative to ensure this bill works to maintain Australia's reputation as a high-quality international education and research destination, support sustainable growth in the sector, and secure Australia's STEM future.

Australia's STEM workforce and research is critical to our nation's prosperity

Science & Technology Australia reiterates the arguments presented in its response to the Department of Education's Draft International Education and Skills Strategic Framework. Australia's future prosperity and ability to deliver critical, nation-changing initiatives such as the Future Made in Australia depend on building and nurturing a strong STEM-skilled workforce. A STEM-skilled workforce relies on a strong pipeline of STEM-trained graduates and researchers. Extreme caution is needed to ensure that imposing limits on international student enrolments in STEM courses does not have the unintended consequence of stymieing Australia's ability to build our STEM-skilled workforce.

According to university enrolment data from 2022, international students comprise nearly a quarter (22%) of students studying at a Bachelor level across STEM and IT fields. IT and engineering in particular have strong international student representation:

- IT – 47.8%
- engineering – 26.6%
- health – 13.7%
- natural and physical sciences – 17.2%
- agriculture, environmental & related studies – 9.2%

Critical gaps in Australia's STEM workforce could potentially be filled with a combination of sensible and considered combination of migration policy and international education settings, including crafting strategic visa pathways for international graduates who wish to stay in Australia to fill critical gaps in Australia's STEM workforce. As such, placing limits on enrolments on critical STEM courses is not sensible, and will potentially adversely impact Australia's ability to build a resilient STEM future.

Similarly, STEM research will be the bedrock of future innovation and economic opportunities in Australia. In 2022, **nearly half** (49.7%) of PhD completions in STEM fields were international students, with the proportions of international students across the various STEM fields as follows:

- IT – 66.8%
- engineering – 66.3%
- health – 29.9%
- natural and physical sciences – 47.0%
- agriculture, environmental & related studies – 54.8%

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It's clear that international students make a huge contribution to Australia's research effort. This is particularly true in IT and engineering, where two-thirds of PhD completions were international students. Research in these fields is essential to underpin Australia's capacity to remain globally relevant across the economy. Limiting the number of international students permitted to enrol in STEM research degrees would be detrimental to Australia's research capacity – and our future economic wellbeing.

Given international students' crucial contributions in essential STEM disciplines that will underpin Australia's future prosperity – both in terms of our future workforce and Australia's research capabilities – **no limits should be placed on international student enrolments in STEM courses** at undergraduate or postgraduate levels.

Science & Technology Australia recommendation:

1. The bill should be amended to **exclude postgraduate by research courses** from any managed growth limits on enrolments.
2. The bill should be amended to **exclude Bachelor STEM courses and postgraduate STEM courses** from any managed growth limits on enrolments.

University research funding

Our second important consideration for the Committee in considering the Bill is the degree to which Australia's university research effort is supported through international student fee income.

According to 2022 ABS data on higher education expenditure on research (HERD), the dominant funding source for university research was 'general university funds' – accounting for 56% of total expenditure. Government support – competitive grants and other grants schemes and support from state and territory governments – accounted for only 40% of expenditure. General university funds are largely derived from international student fees. As such, limiting international student enrolments has the potential to be detrimental not only to Australia's STEM-skilled workforce, but to our entire university research effort.

The Australian Universities Accord recommended a Strategic Examination of the R&D system, which was announced as part of the 2024–25 Federal Budget. This Examination must consider how best to support Australian research, including the critical discovery work done in our universities, and how this can be sustainably and securely funded. Until this is complete, any decisions that may ultimately cut off a critical university research funding source must be deferred.

Science & Technology Australia recommendation:

3. Any managed growth limits on international student enrolments **must not commence until** the Government has responded to the Strategic Examination of Australia's R&D system and **ensured sustainability and security for Australian university research.**

Please do not hesitate to contact Science & Technology Australia if we can help with further information or advice to Committee.

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