

Submission to the Senate Education and Employment
Legislation Committee Inquiry

Higher Education Support Amendment (Job-Ready Graduates and Supporting Regional and Remote Students) Bill 2020

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Australian Academy of
Technology & Engineering

GPO Box 4055
Melbourne, 3001
VIC, Australia
T + 61 3 9864 0900
F + 61 3 9864 0930
E info@atse.org.au

HIGHER EDUCATION SUPPORT AMENDMENT (JOB-READY GRADUATES AND SUPPORTING REGIONAL AND REMOTE STUDENTS) BILL 2020

The Australian Academy of Technology and Engineering (ATSE)¹ commends the Australian Government's commitment to job readiness and industry relevance for students, research and universities. ATSE welcomes the proposed investments in training a science, technology, engineering and mathematics (STEM)-ready Australian workforce and connecting Australian industry with the tertiary research sector.

The Job-ready Graduates Higher Education Reform Package 2020 and the reforms proposed in the Bill represent significant changes to tertiary education in Australia. The proposed reforms have the potential to strongly impact current and future generations of students in Australia.

The proposed reforms may significantly disrupt the domestic student market, and while ATSE supports the objectives of the package we are seriously concerned about the potential for perverse outcomes which would be devastating to Australia's STEM workforce pipeline and future economy.

ATSE therefore recommends that the proposed reforms meet or adopt the following principles:

- The reforms must demonstrate a net benefit to current and future students.
- The reforms must present a clear and consistent set of signals to both students and higher education providers.
- The mechanisms must be supported by demonstrable evidence.
- Support for Aboriginal and Torres Strait Islander students should extend to these students from any part of Australia.
- Achieving gender balance in STEM degrees and bridging the gender divide in Australia's STEM qualified workforce must be a priority.

Background to the response

There is significant alignment between ATSE's objectives and activities, and those of the proposed reforms. ATSE is committed to enhancing technology and engineering career paths, supporting a strong, diverse, and appropriately skilled STEM workforce, and strengthening engagement with industry. We therefore welcome the Australian Government's proposed incentive for work-integrated learning such as internships, extending the Industry 4.0 advanced apprenticeship pilot and fostering closer university-industry research collaboration. ATSE's own Industry Mentoring Network in STEM (IMNIS) program has been successfully connecting motivated second-year PhD students with outstanding industry leaders from around Australia since 2015 – to the benefit of both groups.

ATSE also welcomes the intention of the reforms to build tertiary education capacity in regional, rural and remote areas, and increased support for Aboriginal and Torres Strait Islander people to attend university through additional Commonwealth Supported Places (CSPs) and additional funding for regional delivery. In the spirit of these reforms and the recent National Agreement on Closing the

¹ The Australian Academy of Technology and Engineering is a Learned Academy of independent, non-political experts helping Australians understand and use technology to solve complex problems. Bringing together Australia's leading thinkers in applied science, technology and engineering, ATSE provides impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity.

Gap we encourage the Government to consider extending the CSPs funding commitment to all Aboriginal and Torres Strait Islander students from any part of Australia.

ATSE further urges the Government and the tertiary education sector to continue working together towards achieving gender balance in STEM degrees and bridging the gender divide in Australia's STEM qualified workforce. Diversity is a key driver of innovation and has been consistently linked to improved organisational performance. Australia's STEM Workforce Report 2020 showed that these issues persist despite significant progress.² Continued government and academic support of important gender equity programs for STEM, including but not limited to Science in Australia Gender Equity (SAGE), Women in STEM and Entrepreneurship (WISE) and the principles of the Decadal Plan for Women in STEM is essential.³

ATSE has long advocated for incentives to encourage domestic students to choose fields of education that lead to jobs of national priority, such as those that require STEM skills. However, it is disappointing that no new Government investment will be made in the higher education sector to achieve this outcome, and concerning that analysis by the Innovative Research Universities (IRU) group shows that the reforms could lead to Aboriginal and Torres Strait Islander students and women paying more for higher education.⁴

The proposed reforms are aimed at influencing student choice of university courses by altering the cost to the student of selected study areas. The proposed changes are designed to cut costs to students by twenty per cent for applied science, IT and engineering degrees, which could encourage students to enrol in these degrees.

However, ATSE has not seen compelling evidence that student fee changes linked to income-contingent loans will change student subject selection behaviour. Australia's world-leading HECS-HELP deferred student loan system means that such price signals are weak. ATSE supports the HECS-HELP scheme and applauds the objective of encouraging students to enrol in courses that are of national benefit, but believes that any mechanism to encourage these enrolments should be interrogated and if necessary adjusted to ensure the desired outcome and prevent unintentional outcomes.

The discussion paper accompanying the Higher Education Reform Package 2020 states (p.22) that the new model is informed by national public benefit considerations of the changing nature of the Australian workforce, and that science, technology, engineering and mathematics (STEM)-related disciplines will be important to Australia's future economy. The paper advises we must ensure a pipeline of skilled workers in these priority fields, and work to prevent future skills shortages that will impact the Australian economy. ATSE wholeheartedly agrees with these sentiments.

However, analysis by Mark Warburton, Honorary Senior Fellow at the Centre for the Study of Higher Education at the University of Melbourne suggests that the funding model accompanying the proposed reforms may actually have the opposite effect.⁵

The changes to the fee structure are intended to increase the share of costs met by the Government for courses that produce higher public returns or which contribute to identified national priorities. Preliminary analysis indicates that universities may in fact receive less funding per STEM place under the proposed new funding model. Frank Larkins AM FAA FTSE, Professor Emeritus and former Deputy Vice Chancellor at the University of Melbourne, has modelled the base funding for universities based

² <https://www.chiefscientist.gov.au/news-and-media/2020-australias-stem-workforce-report>

³ <https://www.atse.org.au/programs-and-awards/our-commitment-to-diversity-and-inclusion>

⁴ <https://www.iru.edu.au/news/iru-calls-on-parliament-to-amend-and-pass-the-job-ready-graduates-legislation>

⁵ <https://melbourne-cshe.unimelb.edu.au/lh-martin-institute/fellow-voices/unravelling-the-tehan-vision-for-higher-education>

on domestic student enrolment data. Professor Larkins estimates that these changes will actually increase the cost to universities of providing science and engineering degrees by around 16-17% per student.⁶

This would create a financial disincentive against universities enrolling domestic students in STEM subjects, contrary to the objectives of the reforms. With a diminished incentive for universities to enrol students in these disciplines, it is unclear that universities would make new places available to educate the next generation of STEM graduates.

Professor Andrew Norton, a higher education policy specialist at the Australia National University, has released some analysis of the Job-ready Graduates Bill, including addressing a scenario in which the Bill is rejected. Professor Norton concluded that, in its current form, the Job-Ready Graduates package “will cause more problems than it will solve over the next few years. Muddling through with the current system, while encouraging the government to try again with a simpler, fairer and more coherent policy proposal, is the better option”.⁷

It is ATSE’s position that – pass or fail – the reforms must adequately address the serious issues raised and adhere to the principles outlined in this submission.

ATSE would welcome further discussions on this matter. Please contact ATSE CEO Kylie Walker at kylie.walker@atse.org.au.

⁶ <https://theconversation.com/the-government-is-making-job-ready-degrees-cheaper-for-students-but-cutting-funding-to-the-same-courses-141280>

⁷ <https://andrewnorton.net.au/2020/09/02/what-happens-if-the-job-ready-graduates-bill-is-rejected>