

18 January 2018

Ms Jennifer Westacott
Chief Executive Officer
Business Council of Australia

Email: futureproof@nousgroup.com.au

Dear Ms Westacott

Swinburne's submission to BCAs 'Futureproof' discussion paper

Swinburne University of Technology is pleased to submit a response to the Business Council of Australia's *Futureproof: Protecting Australians Through Education and Skills* discussion paper.

Swinburne commends and shares the BCA's aspiration for a society with greater equality of opportunity in education and employment. As a dual-sector university we concur that an effective tertiary education sector and the promotion of lifelong learning is critical to achieving this goal. However, Swinburne believes business must make meaningful contributions in order to help achieve this goal beyond what has been committed to by the BCA in its paper.

The Future of Work

Australia faces unique and rapid changes over the coming decades that will transform both the nature and composition of the labour market. Automation has affected human employment throughout history. However, lasting and widespread unemployment has not yet occurred as a result of this disruption, as new industries have largely mitigated worker displacement.

Swinburne supports the McKinsey Global Institute's (MGI) assessment that few occupations are at risk of full automation and yet nearly every occupation faces the possibility of at least partial automation.¹ Swinburne further agrees with the MGI that policy action is needed today to ensure that the opportunities automation presents can be captured while drawbacks are avoided.²

¹ *A Future That Works: Automation, Employment and Productivity, McKinsey Global Institute, 2017*

² *Ibid*

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As noted in Swinburne's submission to the Senate Education and Employment Committee's inquiry into the Future of Work and Workers, the OECD analyses the extensive literature on work creation and fears of mass unemployment but states, "historical evidence is positive regarding the overall economic and labour market effects of technological change".³ However, as the Productivity Commission notes, one of the direct government policy interventions required, to support successful transition, is continuous improvement in skilling and upskilling the workforce.⁴ This includes policy settings to ensure:

- an efficient, high-quality and flexible education and training system supplying the skills needed;
- effective awareness of and demand for C21st skills and reskilling;
- broadening participation in the workforce;
- ease of upskilling and changing jobs; and
- an appropriate regulatory balance for workplace relations, occupational health and safety and workers compensation.⁵

A significant danger for the Australian economy is to try to slow down innovation and automation for fear of job losses, rather than using regulation and incentives to manage a fast and effective transition for the economy. Failure to remain a front-runner risks Australia losing competitive advantage and with it a greater proportion of jobs. The Office of the Chief Scientist in 2014 reported that an estimated 65% of Australia's economic growth per capita can be attributed to improved use of capital, technology and labour innovation.

Vision for the future and universal tertiary education sector

Swinburne broadly supports the BCAs vision for the future of educational outcomes. The changing landscape of education, which focusses on employment outcomes; digital disruption; and an ongoing shift towards a service based economy; requires new thinking to prepare students for the jobs of the future. Swinburne was created as a technical college in 1908, and technology continues to be a core driver for our university.

Preparing our students for the future is a key element of Swinburne's *Future Ready Learners* strategy. Creating a scalable platform for Work Integrated Learning and Learning in the Workplace to deliver a mix of authentic simulations and on-the-job experiences in every Swinburne qualification is critical. Our developing platform provides for a lifelong learning journey which partners with the industries and sectors we serve in order to ensure our graduates receive a real world, practice based curriculum across multiple qualifications that can be unbundled and rebundled to suit the needs of learner and delivered where they need

³ *The Next Product Revolution*

⁴ *Ibid*

⁵ *Ibid*

to learn. It provides a virtual portfolio that allows continuous validated upskilling across multiple careers.

The Swinburne University of Technology Bachelor of Engineering Practice (Hons) is industry co-created and delivered. It is an example of how universities can embed employability into qualifications where it is not yet a requirement from industry for all graduates. The degree is:

- 100% Practice based;
- uses just-in-time learning and embeds additional credentials to equip students with additional skills and capabilities that are industry validated, as part of their qualification; and
- uses portfolio based assessment reflecting industry requirements for a balanced portfolio of knowledge, skills and attributes across discipline boundaries.

Learning with a diverse cohort of peers, supported by academic and industry mentors in a professional learning environment equips graduates for industry. The curriculum delivers the core knowledge requirements to meet engineering accreditation, but it also embeds skills required by industry to deliver social impact, use and adapt to emerging technologies, to engage in research and development, and entrepreneurship.

It is designed for scalability and the critical differentiator that makes it feasible for SMEs to participate is the authentic experiences that provide genuine value to the firms participating. This reflects the approach taken in health and education, where student placements contribute positively to the operations of hospitals, clinics and schools. For the approach to succeed it has to be a collaborative undertaking that delivers genuine return on investment. The latter must be demonstrable for firms to commit and make that investment.

In another example, Swinburne University of Technology has a partnership with Siemens and AIG to deliver a Swinburne Higher Education Diploma in Applied Technologies using an Advanced Apprenticeship based on the German model. To allow students to learn what they need to apply in the workplace, Siemens has incorporated \$135m worth of its advanced manufacturing technologies in Swinburne's Factory of the Future, simulating the most advanced working environments.

Swinburne strongly believes in the importance of tertiary education moving from static school leaver education to comprehensive education and training in collaboration with industry. Universal access to tertiary education is and has been supported by Swinburne.

However, Swinburne warns of the consequences of replicating the recent introduction of fully contestable VET funding in Victoria. Rapid deregulation with inadequate market control mechanisms, particularly around quality, allowed a large influx of private vocational education providers. The Government suffered significant unbudgeted expenditure and existing public providers had to self-fund (and therefore ceased to offer in the face of

unregulated competition) courses with community service obligation to the detriment of the State of Victoria. Similarly, at Federal level the sudden introduction and inadequate administration of the VET-FEE Help loan scheme incentivised predatory behaviours that left students shackled with debt and with worthless qualifications. The goal of policy settings should be to provide access to students while at the same time requiring responsible behaviour from any providers receiving public funding. While any government loan scheme will always accept a certain degree of unrecoverable debt, overly generous loan caps and poor alignment between public expenditure and government skills imperatives contributed to a system where VET graduates were 50 per cent less likely to repay their government loans than their higher education counterparts.⁶

A better connected tertiary education system makes eminent sense, and at Swinburne our pathway programs between our vocational and higher education offerings produce some of our best student outcomes. The VET-Student Loans scheme introduced in 2017 contains strict caps on the size of Commonwealth loan that can be accessed for each course. Students are permitted to enrol in courses where the fee exceeds the maximum accessible loan, but must pay the difference upfront. While this has seemingly achieved the important goal of arresting the out of control growth created by VET-FEE Help, the new system will prove too rigid and inflexible to be viable in the long term. Eventual consolidation of loan caps across higher education and VET sectors seems inevitable, and recent announcements concerning proposed lifetime caps across the different schemes, while an imperfect and perhaps lateral step towards this future, nevertheless acknowledges the interconnectedness of tertiary education.⁷ Dual-sector universities have a critical role to play in informing future policies to better connect VET and HE sectors, as our lived experience is ensuring that our two arms function in a seamless, collaborative fashion.

Higher education attainment is fundamental to high rates of productivity and numerous reports in Australia demonstrate both public and private benefit of higher education.⁸ However, while investment should occur in tertiary education to develop skills, it is vital that the investment and targeting provides the skills required.⁹ Particularly as work changes, it is important in developing and embedding employability skills to develop stronger collaboration between employers and higher education institutions in the employment journey.¹⁰

⁶ HELP for the future: fairer repayment of student debt, Grattan Institute, 2016

⁷ Mid-Year Economic and Fiscal Outlook 2017-18, Australian Government, 2017

⁸ Deloitte Access Economics, The importance of universities to Australia's prosperity 2015

⁹ OECD, *Good Practice in Adapting to Changing Skill Needs*, 27.

¹⁰ Ibid

Business contribution and market information

Swinburne believes that, save for some excellent current practices, employers in general will need to do more to integrate learning experiences designed with tertiary providers to provide work placements at apprenticeship and higher education levels in the workplace. Business needs to view this as an investment rather than a cost. Until businesses more broadly see the value in a significant upfront investment in order to yield a job-ready, highly employable graduate for their organisation, fully embedded employability across the sector will be elusive.

This is not just an Australian phenomenon. Based on its research, the UK Higher Education Academy views it as essential for the future of work in the UK economy to embed employability into higher education. This intentional approach requires that “employability should be embedded into all learning and teaching policies, processes and practices – particularly in the curriculum – and considered throughout the student lifecycle, from the very start of a student programme through to completion of their studies”.¹¹

While universities such as Swinburne are in the process of doing this, it is at an early stage across the Australian university sector. A Universities Australia survey of Work Integrated Learning Experiences in early 2018 will demonstrate a high level of engagement by universities in providing authentic learning experiences for students. However, the aspiration to scale internships and placements for every student, given the unwillingness of employers to invest in meaningful experiences at scale requires a different approach. The impediments for employers, where almost 90% of the Australian economy comprises small and medium sized enterprises, lie in the time, cost and capability required in providing such opportunities.

In some sectors, there is a history of such experiences, for example, the health, allied health and education professions. In most sectors, internships are reducing as automation reduces the opportunities for students to learn in the workplace by doing jobs that are routine but develop an understanding of the basic operations of the business. Burning Glass and Seek data show an increase in demand for graduates with 2-3 years’ work experience. The BCA must recognise that addressing underlying structural issues, and working with education experts to develop training packages is essential.

¹¹ Higher Education Academy, *Embedding employability in higher education*, <http://www.heacademy.ac.uk/transform>

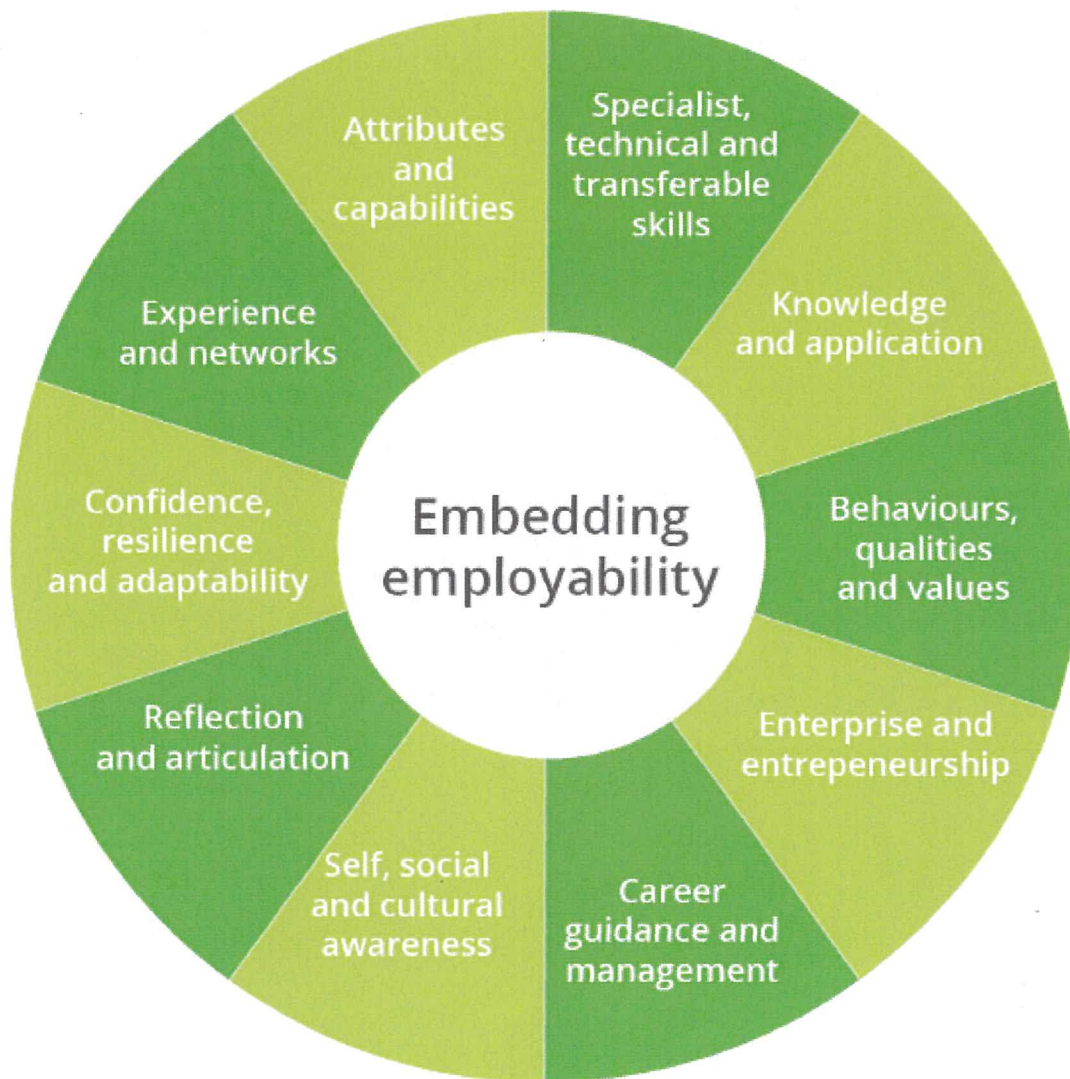


Figure 1: Higher Education Academy, Framework for Embedding employability in higher education

Further, perhaps the most interesting measure within the Federal Government's recently announced Skilling Australians Fund is the requirement for employers who nominate foreign workers under the Temporary Skills Shortage visa subclass (formerly 457) to make a contribution to the Fund from March 2018 to support training Australians.

The intent of this measure could perhaps be further or indeed better achieved via a more general training levy imposed on employers. While the Training Guarantee Scheme was

discontinued in Australia in 1996, it offers a useful guide (both positive and negative elements) to the design of an optimal scheme to achieve the intended policy outcomes.¹² Many OECD nations employ such levies, often giving employers a simple “train or pay” option. Further, as a general principle, Swinburne is supportive of policies which encourage training consortia to pool resources, as is the case in Germany and Korea, with business associations playing an important role contributing support toward and co-managing the apprenticeship system.

While Swinburne strongly agrees that advice and guidance is crucial for students, the new Transparency in Admissions standards which all universities now adhere to largely achieves this goal, and standardised terminology has addressed historical confusion and inconsistent practices across providers.

Demand-driven funding

The most significant policy development since the release of the BCAs discussion paper in October was the Federal Government’s announcement on December 18 2017 that the demand-driven funding system for domestic undergraduate enrolments would be effectively ended, with universities unable to receive Commonwealth funds beyond their 2017 allocations.

This decision to abolish this successful system overnight without consultation is having significant ramifications at Swinburne already, as we are now unable to meet the 8.9% growth in first preference applications for Swinburne courses we have received, the only significant growth in Victoria.

The demand-driven system has allowed public universities to rapidly adjust course offerings to meet workforce needs, creating a far more responsive sector. Now that control of places has been ceded back to Canberra, rigid caps will incentivise universities to only grow enrolments in high volume courses which are still viable when only the student contribution to course fees is retained by the provider. Further, given that universities are precluded from offering full-fee places under the Higher Education Support Act, a large amount of unmet demand will likely be soaked up by non-university higher education providers (NUHEPs), for which students will still be able to access a fully deferred FEE-HELP loan and for which the Government will still assume the risk. Although on the face of it not a problem, there will be no incentive for NUHEPs to invest in the high cost infrastructure required for the courses that are necessary for economic growth, as long as there is sufficient demand in low infrastructure courses, for which fees can be charged in a market with imperfect information.

¹² Evaluated by the Department of Employment, Education, Training and Youth Affairs. Evaluation and Monitoring Branch, <http://www.voced.edu.au/content/ngv%3A18958>.

While much has been made of attrition as a contributing factor to this decision, the unavoidable fact is that undergraduate places have been capped purely to achieve a savings target which the Government's stalled legislation would have secured through other means. Regrettably it is the smaller, younger universities who are still growing and are offering the most innovative and attractive courses who will be most impacted by this decision; rather than the elites for whom domestic undergraduate offerings are but a fraction of their delivery, and which are focused on theoretical research rather than graduate outcomes and applied, high-impact research.

Recommendations

Swinburne commends and supports the recommendations of the OECD for policies designed to meet future skill needs for workers.¹³ In particular, it identifies the following as particularly important as a higher education contribution in the current policy context:

- Expand opportunities to participate in adult learning
- Link education and training to labour market needs
- Recognise informal and non-formal learning
- Strengthen incentives for employers to invest in training to meet skill needs, with minimal administrative burden. Swinburne advocates its model for unbundling qualifications across the AQF levels and the ability to rebundle in a way that meets both employer needs and student circumstances.
- Ensure the model for vocational education is sustainable and caters to future skills needs with the flexibility and adaptability required by a rapidly changing employment market. For example, Swinburne's Advanced Apprenticeship model based on the German systems (adopted with some variation in the UK) currently cannot fit within any funding model and yet it has been identified by both Government and Industry partners as the future for Australian apprenticeships.
- Foster strong employer collaboration with higher education to ensure alignment of skill needs and future-proofing of workforce preparation and lifelong learning.
- Facilitate labour mobility, including the inflow of migrants with skills in high demand. In Australia, international education is our third highest export and we are training large numbers of potential migrants with the skills that allow easy integration into Australian society and Australian workplaces after graduation. In combination with the previous recommendations ensuring employability of graduates, there is no better pool of potential workers to enhance Australia's pool of talent.
- Stimulate demand for higher-level skills. In this context, significant investment in knowledge hubs based around universities and facilitating existing internationally

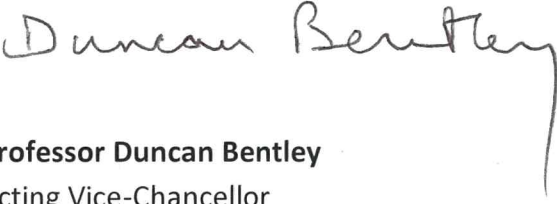
¹³ OECD, *Good Practice in Adapting to Changing Skill Needs*, 8 and 76ff.

recognised and emerging industry sectors will ensure Australia's long-term competitive advantage.

- Ensure all relevant stakeholders are involved in the production of information on skill needs.
- Engage in regular monitoring and evaluation.

Thank you for taking the time to consider Swinburne's submission. We look forward to participating in the coming roundtable process organised by Nous Group.

Yours sincerely

A handwritten signature in black ink that reads "Duncan Bentley". The signature is written in a cursive style with a long, thin vertical line extending downwards from the end of the name.

Professor Duncan Bentley

Acting Vice-Chancellor

Swinburne University of Technology