

10 May 2022

Committee Manager
Legislative Assembly, Economy and Infrastructure Committee
Parliament House, Spring Street
EAST MELBOURNE VIC 3002
Email: Uniskillsinvestment@parliament.vic.gov.au

Dear Chair and Committee Members

Federation University Australia – Submission to the inquiry into Victorian universities’ investment in skills

Federation University Australia (Federation) appreciates the opportunity to provide a submission to the inquiry into Victorian universities’ investment in skills. Our [Federation University Strategic Plan 2021-2025](#) is strongly aligned with the priorities of the Victorian Government in supporting the pipeline of skilled workers needed for government priorities to ensure a growing economy. Our submission outlines the role that Federation plays in driving the economic transformation of our regions.

As a dual-sector regional university, Federation provides pathways from entry level to PhD in the regions and peri-urban population growth areas that are industry relevant and that lead to jobs, especially in areas of skills shortages.

Federation is deeply embedded within our regional communities, contributing to human capital growth, job creation and sustainability, and building community resilience. We have Memorandums of Understanding (MoUs) with local authorities in each of our regions outlining our agreed economic development objectives. In addition to the education and training opportunities we provide, regional universities deliver an additional \$1.7b in their regional economies.¹

1. Future skills

Federation is committed to delivering education and training in areas of current and future skills demand, leading to high value employment. Through both our university and TAFE, we work closely with industry, government and community to ensure our curriculum, research, training and teaching align to the immediate and long-term strategic needs of the communities we serve. For example, last year, Federation launched an electrical engineering program in direct response to the needs of our energy sector industry partners.

¹ Nous Group and the Centre of Policy Studies, *Economic Impact of the Regional Universities Network (2020)*: www.nousgroup.com/wp-content/uploads/2020/09/RUN-Summary-Report-final-compressed.pdf

Federation is the number one university in Victoria for graduate employment and skills development², achieved due to our leadership in industry collaboration and award-winning programs offering paid internships (see the case study below).

Case study: IBM partnership

[Federation's flagship partnership with IBM](#) was established in 1995 to create a new generation of IT professionals. IBM is one of the largest regional services employers in Australia, employing 800 people, and providing unprecedented benefits to our students and community. The university works closely with IBM to maximise educational impact and deliver a guaranteed pipeline of aligned skills.

The [Bachelor of Information Technology \(Professional Practice\)](#) offers an 'earn as you learn' internship with IBM, where students are embedded in real projects with real teams, learning the critical soft skills of client interface and securing meaningful experience. This innovative degree is now one of the most prestigious IT degrees in Australia and is recognised as national best practice by the Australian Computer Society.

The IBM/Federation partnership has been expanded beyond university to work with local Year 7-12 students via the Australia-first [Pathways in Technology \(P-TECH\) program](#) with a focus on neurodiversity.

IBM was also the first tenant in the [Ballarat Technology Park](#), kick-starting a revolutionary partnership with wide-reaching benefit.

Building on our strengths in employability and strong industry partnerships, our long-term plans are to offer every student an embedded employment experience that supplements and complements their study as Australia's first 'co-operative university'. Co-operative education is a well-established model in North America and is based upon a co-operative arrangement between the university and employers to provide practical and academically relevant work experience for students for academic credit. Students benefit from the opportunity to work on real projects, delivering outcomes for industry, government and not-for-profit clients while enhancing employability, work skills and social capital. Industry and employer partners benefit from students engaging with the latest technology in workplaces to develop future skills through our learning technologies, including blockchain and secure cloud technology.

We have also recently launched our Campus Vision which outlines our intent to work in partnership with industry, government and community to develop University Towns through the establishment of mixed education and employment facilities across our regions, including in Ballarat and Gippsland. We plan to concentrate more of our activity into key population areas, bringing the classroom to the community, with a focus on areas where there is current and future demand for skilled workers.

To support this work, we have invested in the establishment of a New Business Accelerator to provide opportunities for rapid upskilling and reskilling through short courses and micro-

² Good Universities Guide 2022.

credentials. These focused and 'stackable' short educational offerings are designed to be scalable and aligned with specific industry-required current and future skills.

2. Working towards a clean economy

Federation is supporting our regions to move towards a clean economy through training, education and research. This is particularly critical for those regions in transition, such as the Latrobe Valley.

Federation TAFE has developed a state-of-the-art wind turbine training tower in Ballarat to help to meet the renewable energy sector's increasing demand for a skilled workforce (see the case study below).

We are working with our partners in Gippsland to upskill and reskill workers in the Latrobe Valley, supporting the transition of the current energy workforce into new sectors. Through our New Business Accelerator we will bring to market new short courses, professional development and microcredentials that industry needs to reskill workers for a just transition.

Workforce transitions and new industries is also a key focus of our research. Our Future Regions Research Centre brings together expert research and local knowledge to tackle challenges ranging from the transition from coal-fired power generation to sustainable renewable energies in the Latrobe Valley, to helping regional communities recover from bushfire and drought. Our Centre for New Energy Transition Research is focusing on advancing enabling technologies for the Net Zero Goal by 2050. The Centre will focus on hydrogen, electric vehicle applications and utilisation of renewable energy and battery storage systems including micro grid and community power hubs.

Case study – Asia Pacific Renewable Energy Training Centre

With the support of the Victorian Government and funding from industry, we have constructed Australia's first wind turbine training tower in Ballarat - the [Asia Pacific Renewable Energy Training Centre \(APRETC\)](#), where Australia will be able to train workers from around the country and across the region in a growing renewable energy industry.

With the opening of the wind turbine training tower, Federation TAFE is on track to start delivering Global Wind Organisation (GWO) Standard Basic Safety Training and Basic Refresher Training in the middle of the year. Federation expects to eventually train over 600 people a year, providing a pipeline of skilled workers for the fast-growing wind energy sector. By 2023, Federation will deliver the globally recognised post-trade turbine technician training course after signing an exclusive agreement with the BZEE Network in Germany.

3. Regional skills analysis in health, agriculture and community services

As outlined in Future Skills, above, Federation is dedicated to providing the pipeline of skilled workers required for our regions. Importantly, we know that around 70% of students who undertake higher education in the regions, go on to live and work in the regions – highlighting the critical role of a regional university like Federation in supporting a growing economy in regional Victoria. We are investing in the critical qualifications needed by the community, with growth supported by both improved post-secondary participation and increased learning in the workplace. Health, agriculture, and community services are a current and future focus.

Health continues to be our most successful education offering. Recovering from the pandemic and supporting an ageing population will increase the incidence of age-related health problems and demand for hospital, allied health, and aged care and caregiving services, leading to significant risk of shortages of skilled workers in these areas. We are responding to these challenges by launching new health programs in direct response to what government and our industry partners are telling us they need (see the case study below).

We have a \$4.5m new Allied Health and Activity Centre located at our campus in Churchill that now supports our three allied health programs including Occupational Therapy, Physiotherapy and Speech Pathology. These programs are in demand because local students recognise that during their degree, they will also get practical work placements and on-the-job experience. Importantly, students know that at the end of their degree they will have a career in an area of high demand in Gippsland. These programs are also critical in supporting the specialist skills needed by regional schools, to ameliorate the disadvantage of regional students with health needs.

Case study: Addressing skills shortages in health in Southeast Melbourne

Federation's Berwick campus worked with local and State Government to address the shortage of qualified Maternal Child and Family Health nurses in the City of Casey, Cardinia Shire and Greater Dandenong. This includes developing specialist knowledge for program content, industry co-design and delivery, as well as agreements to provide student placements and scholarships.

In community and human services, we offer a range of education and training options – from TAFE Certificates to PhD level – to train future workers to provide support and assistance to individuals, families and communities that are experiencing family violence, poverty, homelessness, mental health or living with disability.

In agriculture, our work on food and fibre in Gippsland will help the agriculture sector realise greater returns through innovation and greater efficiencies. Federation is working closely with Food and Fibre Gippsland to deliver the *What's Your Food or Fibre Challenge, Gippsland?* – the key purpose being to catalyse challenges to be transformed into opportunities for SME businesses in Gippsland. With funding provided by Regional Development Victoria, Federation experts are working to deliver seven projects in collaboration with Food and Fibre Gippsland, Food Agility, Food Innovation Australia Ltd, Committee for Gippsland and TAFE Gippsland to work with local producers solving business challenges, business model improvements, business training and innovation and analysis.

Our research is helping local farmers, including in the Wimmera, with innovative practices to increase farm productivity, profitability and protection of natural resources.

We are also undertaking further work to launch new hybrid degrees in high growth industry sectors like advanced manufacturing, renewables and agriculture for the 2023 academic year (see the case study below).

Case study: Bachelor of Sustainable Food Systems

In an Australian first, Federation launched a new [Bachelor of Sustainable Food Systems](#) – a hybrid TAFE and university degree designed with significant industry consultation to equip students with the skills to improve food production and tackle food sustainability issues in Australia and internationally. Students will examine key aspects of sustainable food systems from different points of view: scientific, economic, environmental and ethical, whilst gaining a worldly perspective through a wide selection of subjects from biology to product and process design.

How the Victorian Government can work with universities

Solving Victoria's skills shortages will require strong collaboration between government, universities and industry. Our recommendations focus on the regions, where the shortages are acute and will increasingly contribute to a sub-par economic performance.

Raising aspirations towards further education and training in the regions will be key to our success. The National Regional Rural and Remote Territory Education Strategy (2019) 'Naphthine Review'³ found there are fewer than half the number of young Australians with a university degree living in regional areas compared to those living in major cities. In the regions Federation serves, the Department of Education and Training *On Track Survey* results show that the percentage of school leavers progressing to further education and training in our regions remains below than the Victorian average. This will create a cumulative gap in the skills essential to grow Victoria's economy outside Melbourne.

The Victorian Government has already provided incentives for participation through Free TAFE, increased apprenticeships and a range of measures over several years. We recommend that targeting part of existing and any new initiatives to keep school leavers studying in regional areas at regional institutions when they leave secondary education is critical. As noted, 70% of students studying in the region remain in the region. Yet, we face significant challenges with youth outmigration, with many of those progressing to post-secondary study leaving the regions.

We recommend, in particular, targeted sponsorship of regional students through Victorian Government Departments located in the regions to learn while they study either from the beginning of their qualification or after one year. This will help fill a skilled pipeline requirement that Government has in the regional locations, model how other employers can sponsor students while they study and work, and encourage students to remain in the regions and study after their secondary education.

³ Regional Education Expert Advisory Group, *National Regional, Rural and Remote Tertiary Education Strategy: final report [Naphthine review]*, Department of Education, Canberra (2019), <https://www.dese.gov.au/access-and-participation/resources/national-regional-rural-and-remote-tertiary-education-strategy-final-report>.

We strongly recommend targeted incentives for international students to study and work in the regions, as only a combination of domestic and international workers will fill urgent and persistent skills needs.

To enhance industry-university collaboration, Government could fund a cross-institutional consultancy platform. It would connect industry with appropriately qualified students to work on real projects, benefiting both the students and employers. A cross-institutional approach would avoid a situation where individual brokers could engage in price gouging and would reduce unnecessary agency costs.

We recommend this or a similar platform to connect employers, particularly SMEs with institutional credentials and qualifications designed specifically for reskilling. Both vocational and higher education credentials and qualifications could be supported based on needs identified by the new National Skills Commission.

Thank you

Federation University Australia appreciates the opportunity to submit a response to the consultation paper, and we look forward to our ongoing and productive engagement.

If you require any further information or discussion, please do not hesitate to contact me at vc@federation.edu.au.

Yours sincerely



Professor Duncan Bentley

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