





Professor Mary O'Kane AC Chair, Australian Universities Accord Panel c/- Commonwealth Department of Education By online submission

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Dear Professor O'Kane

Australian Universities Accord: Discussion Paper released 22 February 2023

Submission by IAT-D Foundation Partners – UTS, Macquarie University and Microsoft

The Institute of Applied Technology–Digital (IAT-D) at Meadowbank in NSW is a leading example of a model that brings industry, universities and TAFE together to co-develop and co-deliver relevant, high quality, industry focused training in an approach that is flexible and meets the needs of students. Although still in its early days, the IAT-D is showing promising signs that it is addressing key skills challenges faced by employers and attracting students through innovative course design.

As Foundation Partners in developing the IAT-D model, the University of Technology Sydney (UTS) and Macquarie University have co-developed this approach, along with Microsoft and TAFE NSW. Both universities are strong supporters of a vibrant vocational education and training (VET) sector as a part of a strong education sector. We believe that there is strong potential for deeply collaborative and constructive partnerships between VET, universities and industry to respond to the emerging growth in jobs that require a different mix of skills than has been previously provided by either the VET or the higher education sectors.

The aim of the IAT-D is to take the best of each type of training, giving learners a rigorous yet practical and industry-relevant education in digital technologies such as big data, cyber security, software development, cloud computing, and artificial intelligence. Employers are wanting graduates in these areas, and that demand is only expected to increase.

The Universities Accord *Discussion Paper* has recognised the challenges involved in better connecting higher education and industry, and in forging greater collaboration between the VET and higher education sectors. If we are to successfully navigate the future skills needs for the Australian economy, finding models that can address both of these challenges is critical.

This submission is intended to elaborate on the features of the IAT-D model, explaining some of the challenges faced and identifying some of the policy and funding changes required to support the future growth and expansion of the IAT-D approach. That approach to the field of digital technology could be adopted all over Australia, but we have no doubt that the model could equally be applied to other industries and sectors.

This submission is also intended to provide additional focus on the specifics of the IAT-D model and should be read in addition to the submissions of UTS and Macquarie University.

Background

Institutes of Applied Technology were originally recommended by Professor Peter Shergold and David Gonski in their 2020 review of the NSW vocational education and training (VET) sector, *In the Same Sentence: Bringing higher and vocational education together*. The report's findings were clear – the future of education must involve a more seamless, connected approach that puts the learner at the centre of the system.

As well as the IAT-Digital at Meadowbank, a second IAT focused on construction is currently being developed by TAFE NSW, Western Sydney University, and CPB Contractors at Kingswood.

IATs are a distinctive, and wholly new, form of tertiary education, blending VET and higher education with a focus on preparing students with industry-based employability skills to meet emerging workforce needs. IATs are not 'Super TAFEs', or 'dual-sector' institutions. Nor do IATs replace university-based programs that already deliver foundational or bridging courses to higher education students.

Importantly, IAT-D content is fully co-designed and co-created with industry from the outset, incorporating industry skills needs, industry certifications and industry feedback at every stage. As the founding industry partner, Microsoft has taken the initial lead on this approach. Salesforce, SAP and SAS have now come on board as industry partners, with further industry partners expected to join.

The goal is to integrate curriculum with progressive pathways, through which students will be able to stack meaningful qualifications that are valued and recognised by industry. Students will have access to stackable microskills and microcredentials, which are recognised by education partners and by industry. Although developed independently, the IAT-D model is closely aligned to the National Microcredentials framework.

The IAT-D deliberately embeds and integrates practical and theoretical components of tertiary education throughout its curriculum by bringing academia and industry together. It seeks to address shortcomings in the tertiary system, such as responsiveness to changing industry and student skills and training needs through flexible models that are designed to support lifelong learning, and particularly the upskilling, reskilling and professional development needs of people already in the workforce. It is the goal of the IAT-D to be able to reflect major developments within the tech industry within six months, which is currently not possible within existing VET models and settings.

The NSW Government has strongly supported the development of the IAT-D model, funding the development of a distinctive educational building at Meadowbank with modern fit for purpose facilities including a Cyber Range Training Centre which in its scale and complexity is unique in Australia. The NSW Government has also provided funding to ensure that course costs were attractive and affordable for students. This course subsidy has been critical, as IAT-D courses do not otherwise attract Commonwealth Supported Place (CSP) funding, or VET funding under current higher education and VET funding models.

Current Progress

The Productivity Commission recently highlighted the IAT model in its report on *Advancing Prosperity* as an innovative approach to addressing skills and productivity needs:

"Other State and Territory governments should monitor and follow the example set by the New South Wales Government's Institutes of Applied Technology, and support local models of vocationally oriented tertiary education that deliver qualifications combining VET and higher education content together with industry expertise."

This is supported by the early evidence of success from the IAT-D which has offered microskills since November 2022, and commenced offering microcredentials in February 2023. As of 5 April 2023, the student cohort includes:

- 11,968 enrolments, with 5,100 students currently undertaking the five microskills offered so far; and
- 594 enrolments in microcredentials across the four focus areas of data analytics, cyber security, cloud computing and AI. (More courses are being developed.)

Student demographic information also suggests that the IAT-DI is attracting a different type of learner than standard university or TAFE offerings, with 60% of students between 30 and 49 years of age, and 71% full time employed. Encouragingly, given the predominance of men working in the IT sector, enrolments from women are high. For example, data analytics courses offered at the IAT-D have an even split between male and female students with overall student enrolments showing 41% female participation.

Next Steps and Reform Options

All parties at the IAT-D recognise that the model and the institution is in its pilot phase. To ensure that it succeeds, the partners are committed to spending the next three years delivering and expanding the program, evaluating what works and what doesn't, with ongoing State Government support.

However, to ensure the success of the program, and if it is to be extended outside New South Wales, the States and Commonwealth will need to work together to create a more sustainable and consistent funding and regulatory model across Australia's VET and higher education systems. Changes to current funding settings need to better incentivise collaboration, co-design and innovation across industry and providers, and provide students with a smoother transition across different loan and fee settings.

Options for better Commonwealth support for IAT-type models include:

- <u>A Commonwealth co-contribution</u>: this would involve targeted funding through a grant scheme-style co-contribution for development and delivery of innovative course offerings / curriculum, with a focus on microcredentials, to meet industry needs. A co-contribution for the IAT-D will enable development and delivery of additional microcredentials, covering VET content, higher education content, or content from both. This would support the viability of innovative offerings and be an effective way to test and pilot agile course offerings.
- <u>Dedicated Commonwealth Supported Places</u>: new CSPs could be made available to the IAT-D, and similar models in other States and Territories, during the next Commonwealth Grant Scheme funding period. This will incentivise the participation of university providers and make HECS-HELP support available for IAT-D students.
- <u>Clarity and flexibility on regulatory requirements:</u> Support is required from ASQA and TEQSA to facilitate the testing of flexible regulatory requirements under the IAT-D. The IAT-D is seeking to make use of a stackable qualification mode, where students can progressively work from microcredentials up to attainment of full qualifications. As a continuation of this, the IAT-Dalso seeks to enable progression from VET Diplomas and Advanced Diplomas to Bachelor awards. The IAT-D needs certainty regarding the recognition of qualifications awarded under this model. It would also benefit, given its focus on work-integrated learning, from greater inclusion of industry professionals in classrooms and teaching. A more flexible approach to teaching requirements in VET and higher education would support this.

This paper has been prepared in collaboration with Macquarie University and Microsoft Australia, If you would like further information on this submission, please contact Matt Crocker, Strategic Advisor, UTS on matt.crocker@uts.edu.au or