

**Submission
No 30**

INQUIRY INTO FUTURE DEVELOPMENT OF THE NSW TERTIARY EDUCATION SECTOR

Organisation: University of Technology Sydney

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The Director
General Purpose Standing Committee No. 3
Parliament House
Macquarie Street
Sydney NSW 2000

Dear Director

UTS submission to the inquiry into the future development of the NSW tertiary education sector

Thank you for the opportunity to make a submission to the New South Wales Legislative Council Inquiry into the future development of the NSW tertiary education sector.

The UTS mission

UTS's mission is embodied in the *University of Technology Sydney Act 1989 (NSW)* which sets out our primary objective as the promotion, within the limits of the University's resources, of scholarship, research, free inquiry, the interaction of research and teaching, and academic excellence.

Reflecting its history, UTS's vision is to be a leading public university of technology recognised for our global impact. We aim to enhance individuals and their professional skills, while directly shaping and benefiting society and communities.

As a university of technology it is our role to ensure that our graduates shape the future professions and businesses that will be needed in Australia and overseas. Since our inception, an integral building block of our success has been our outward, global focus and ability to partner with industry. Our campus has no walls; it is deliberately designed to be porous and support connections, knowledge exchange and collaboration. This embodies our approach to engagement and permeates our teaching and research.

We focus on relevant and timely learning, equipping students with creative problem-solving and design-thinking skills. We encourage students to be adaptive, flexible and resilient throughout their lives. Our approach means our students will always be able to access informed critical thinking, the latest in research, learning and technology, and apply transdisciplinary thinking.

As part of our strategic plan, UTS reconfirmed and extended our commitment to lifelong learning. As a university we are fundamentally transforming our operating model to support learning and professional skills development for individuals throughout their whole career and lives.

The university's strategy to 2027 is focussed on five major elements:

- Personal learning experiences
- Working in partnership
- Leading innovation and entrepreneurship
- Delivering excellent research with impact
- A sustainable future

Through these initiatives UTS is focused on broader engagement with our students across their lifetimes, including in their workplaces; enhancing our digital presence and connections; developing our workforce for the future; extending industry and community partnerships and ensuring we remain an inclusive university; building our research excellence and impact; and continuing to build our international connections.

The location of UTS at the heart of Sydney's transport network means that our campus is accessible to students from all parts of Sydney. As such UTS has the most diverse student intake of any Sydney university. We draw increasingly large number of students from Western Sydney – the suburb from which we draw the highest number of students is Liverpool.

UTS does not see our role to serve a particular geographic community, but rather to provide an opportunity for students from all locations and backgrounds to engage with our successful approach, model of learning and the quality of education that we provide. This may include looking at ways to improve the accessibility of our offering, to ensure that we give students the choice and opportunity to study at UTS if they choose.

As an example, UTS runs a number of programs to engage students from low SES areas and Indigenous students, to raise aspiration to higher education and familiarise students with university activities. The participation rate of low SES students at UTS is 11.4% and their success rate is 90.7%.

UTS has a deep commitment to Indigenous education. Our successful Jumbunna Institute for Indigenous Education and Research has provided academic, social, cultural and emotional support to Indigenous students for more than thirty years. Jumbunna also works with Indigenous communities across Australia, using these partnerships to advocate for change and do research with strong social impact.

UTS has an increasing number of Indigenous students, rising from 199 undergraduate students in 2015 to 250 in 2020. We have one of the largest cohorts of Indigenous academics of any Australian university, and nationally significant cohorts of Indigenous professional staff and postgraduate research students with an 84.1% success rate.

UTS is also committed to expanding the provision of education in Western Sydney. Our commitment stems from the growing economic importance of this region but also because of the increasing number of students we cater to from Western Sydney. Our plan is to deliver education through new and innovative long-term partnerships with TAFE, local councils and industry. Our goals are to engage with and attract students from Western Sydney; engage with industry in Western Sydney around knowledge transfer, collaborative research, internships and clinical placements; and help provide employment pathways for Western Sydney-based UTS students into local businesses.

Tertiary education's economic development role

Universities make major direct and indirect contributions to the Australian economy. Deloitte Access Economics calculated that in 2018 Australian universities contributed \$41 billion to the Australian economy and supported more than 259,000 jobs. Government investment in

university teaching and scholarship is returned threefold through taxation revenue and research investment makes a fivefold return to GDP¹. Education is Australia's leading services export and significantly contributes to Australia's international relationship building through the personal experiences of international students in Australia.

University campuses have a positive economic impact in their geographic areas as well as a more extensive impact through the activities of their alumni over time and the impacts of their research nationally and internationally.

International students and the financial sustainability of UTS

International students studying at Australian universities provide a range of benefits to NSW and Australia:

- International students build a lasting relationship with NSW and Australia, and an appreciation of our people and culture.
- Economic benefits are generated by student spending in local businesses and the associated jobs and economic activity created.
- International students account for over 38 per cent of the total tourism spend in Australia and one in four will have family visit the country – another 300,000 visitors spending over \$1billion in Australia each year².
- The contribution that international post-graduate students make to high quality research and development in Australian universities, leading to new innovation, new technology and new business opportunities.
- Opportunities to address skills shortages and retain talented and capable people in Australia from the pool of graduated international students.
- Universities are able to reflect the global context that businesses operate in.

In the normal course of events, international students make an important economic contribution to NSW. Research undertaken by the Department of Education and Training shows that for every three international students in NSW, one Australian job is created. International students contribute approximately \$30 million per day to the NSW economy³.

Throughout 2020 UTS has worked very hard, with the cooperation of the Commonwealth Government, to teach students online, postpone subjects that require in person interactions, and provide student support in their home country where possible.

UTS has experienced a significant financial impact as a result of the inability of international students to travel to Australia in 2020. While our risk plans addressed a range of scenarios with the potential to negatively impact international student participation, the extent of the pandemic's impact cannot be completely mitigated.

By its nature, higher education is globally connected and will generally be affected by significant global events. The 2020 pandemic is close to the most extreme circumstance that could be envisaged for Australia's international education market. It is likely that all universities will need to take steps to manage a significant financial impact.

Like any major industry, Australian higher education must balance the risks and benefits of exporting. There is a financial benefit to Australian universities which, for non-profit entities, is redirected to improving the experience of all students, domestic and international;

¹ Universities Australia <https://www.universitiesaustralia.edu.au/wp-content/uploads/2020/04/200325-Deloitte-one-pager-FINAL.pdf>

² <https://broadenourhorizons.com.au/edu-tourism-and-the-impact-of-international-students/>

³ https://internationaleducation.gov.au/research/Research-Snapshots/Documents/RS_Job%20supported%202018.pdf

supporting our research; and extending our connections throughout the world. It should be acknowledged that this benefits not only the university sector but the Australian community generally. In managing the exposure risks for a major Australian export sector, universities must be able to be, and are, agile in our responses, maintaining quality and our national reputation. In this regard, the support of the Australian and NSW governments is critical.

The quality of university teaching and research at UTS

Through our role as a public university, we task ourselves with ensuring that our research outcomes benefit our communities and more broadly the economy, environment and society. UTS is driven by the need for impact – impact underpinned by excellence. For some years we have been assessed as Australia’s top-ranked⁴ university under 50 years old – a testament to our consistently high achievement.

In the Australian Government’s most recent assessment, Excellence in Research Australia, all of UTS’s broad fields of research were rated at or above world standard. Almost 80% of UTS’s assessed research areas were rated as having a “high” impact beyond academia (the highest proportion in the country) in the 2018 Engagement and Impact Assessment. In the 2020 CWTS Leiden Ranking, UTS ranked first in Australia and 54th in the world for the proportion of All Sciences publications in the top ten per cent of citations for their field⁵. For the last four years UTS has led Australia in terms of the number of quality publications per academic.

The quality of UTS’s innovation in learning and teaching was internationally recognised as the winner of the Hybrid Learning Award in the QS Reimagine Education Awards 2015. UTS won the award for its learning.futures initiative, a multi-year program aligning future-focused curriculum with informed technology use, combining the best of online and face-to-face experiences.

Rankings and awards are an indicator of the high quality of Australia’s higher education system. Recognition of the quality of our system draws national and international engagement and investment as well as making Australia a destination of choice for students.

UTS’s workforce

UTS’s academic workforce comprises ongoing (54%), fixed-term (25%) and casual staff (21%)⁶. Fixed-term staff contracts often coincide with the length of externally-funded research projects, whether that be industry or Government funded. Casual staff supplement the learning and teaching workforce where there are fluctuations in student numbers and are critical members of the academic community. They have career and development support analogous to ongoing or fixed term staff. At UTS in particular casual staff are deliberately drawn from industry to provide students with current experiences of industry (e.g. business, design, information technology, engineering) or have current industry registration to guide students through practical work experience (e.g. nursing and midwifery).

For example, in our law faculty, 70 percent of casual staff are practising lawyers (including in-house counsel, judicial officers, solicitors, barristers, government legal officers and community lawyers).

All casual and fixed-term staff work under the guidance of senior academic staff who have oversight of programs of work. As can be seen from UTS’s excellent quality results, fixed-term and casual staff contribute to UTS’s objectives and outcomes.

⁴ THE Young University Rankings 2015-2019; QS Top 50 Under 50 2016–2020

⁵ <https://www.leidenranking.com/>

⁶ Full time equivalent academic staff at 30 June 2020.

UTS's integration with industry and student outcomes

UTS prides itself on its vocational focus and strong relationships with industry. At UTS industry is embedded throughout our student offering – whether it be through internship opportunities, industry input into the design of our courses and the hundreds of industry professionals who teach our students. Indeed we believe this is a major point of difference when it comes to student choice – our students choose UTS because they know their chances of securing employment both during and after their degree is high.

86% of UTS undergraduate students graduate with an internship or internship like experience. UTS offers a range of Industry Doctorate Programs, Industry Researcher Development Programs and the opportunity for industry to sponsor a PhD student. This gives our students incredibly valuable experience and provides industry with insights into the frontiers of science, technology and social endeavours in areas that are of strategic importance to their business. Newly created programs such as 'intern with a startup' have been oversubscribed, our partnership offer with Inside Sherpa has seen 700 virtual internships completed in 2019, and our Internship and Graduate Fair has seen an increase of 31% in the numbers of employers participating.

UTS is ranked 69th in the world for graduate employability in the QS Graduate Employability Rankings 2020⁷ and the 2019 Longitudinal Graduate Outcomes Survey found that UTS's graduate employment rate was 92.1%, one of the highest in Australia⁸.

Through our Industry Advisory Boards, UTS embeds industry perspectives in all our activities from course development and graduate attributes through to envisioning the industries of the future. We actively engage companies and individuals in our learning, teaching and research.

Our Bachelor of Creative Intelligence and Innovation alone has 800 industry partners who provide real world problems for our students to work through, and provide their experience through guest lecturing and mentoring.

UTS has 26 significant partnerships with large listed Australian companies, Government departments and agencies, professional service firms, multinationals, cultural institutes and SMEs. We specifically have experience working with a number of technology divisions of large corporations whose mandate is to drive the innovation agenda across the firm and speed up the adoption of new technologies. These partnerships provide our students with valuable internships/work experience opportunities.

In 2019, for example, we formed a strategic partnership with Telstra to deliver an innovative enterprise learning offering: three eight-week microcredential courses to address an anticipated shortfall of 60,000 information and communication technology workers in Australia in coming years. Over 80 Telstra employees are taking part in the first cohort, studying online courses on data analysis, artificial intelligence and machine learning. These types of bespoke short courses represent a major pivot for UTS and demonstrate our commitment to transforming our offering to one that supports a lifetime of learning.

To further support our engagement with industry, UTS has committed significant capital and operational investment into R&D and state-of-the-art equipment on its campus, in recognition that one of the identified deficiencies in Australian industry structure is the underpinning technology infrastructure. Examples include UTS's ProtoSpace, Data Arena, Tech Lab and

⁷ QS Graduate Employability Ranking 2020 <https://www.topuniversities.com/university-rankings/employability-rankings/2020>

⁸ https://www.gilt.edu.au/docs/default-source/gos-reports/2019-gos-l/2019-gos-l-national-report.pdf?sfvrsn=63fdec3c_4

Biologics Innovation Facility. The scale of these facilities is such that it is impossible for SMEs to fund alone or even in partnership, but when provided by the university/government, they allow companies of all sizes to engage in innovation, physical prototyping, high-end data analysis and virtual manufacturing. UTS Tech Lab, for example, launched 2018, and is a 9000 sqm transdisciplinary facility designed to bring university and industry together to innovate. We have also invested in venture capital partnerships and welcome investors who bring funds, credibility, expertise and network to invest into our new ventures.

Campus life and student freedom of expression at UTS

Many of our students, particularly undergraduate students, tell us that the campus experience, including face-to-face teaching, is very important to them. UTS provides a high quality campus experience with a wide range of options to cater to students' interests, including sports and social groups, spaces to meet and study, and services to support wellbeing. We regularly seek and respond to student views on the campus experience including how safe students feel.

We encourage UTS students to participate in the University's governance with student positions on a range of advisory decision-making bodies, including the University Council.

Consistent with our mission, UTS students are encouraged to participate in public discourse. UTS undertook a major review of academic freedom and freedom of expression at UTS in 2012. Following the French review in 2019, UTS once again made a wide-ranging assessment of its position to ensure we are meeting our mission. UTS's Principles of Academic Freedom and Freedom of Speech are:

1. UTS upholds academic freedom and freedom of expression as fundamental values of the university, balanced with other key values including respect and adherence to scholarly standards.
2. In exercising academic freedom and freedom of expression at UTS, staff, students and others connected to or visiting the university must abide by the law and act respectfully, courteously and professionally.
3. UTS asserts its institutional autonomy through determining and resourcing the academic direction and activities of the university.

Foreign political interference

The UTS Strategic Plan recognises that as a university, we operate in a global environment. People, knowledge and resources can move across borders. As such, UTS actively embraces the opportunities the global market offers. As an Australian university seeking excellence in research it is imperative we do this, given the relatively small role Australia plays in the world innovation system.

We are committed to ensuring all our students are prepared for a global workplace. We are also committed to developing international partnerships with corporations and universities that include joint research projects and teaching appointments, innovative collaborative approaches to research training and supervision and internship opportunities. These are critical ways in which we bring knowledge from around the world into Australia.

UTS has robust policies and systems in place to manage our international relationships. These focus on clearly documenting key responsibilities and due diligence processes to support our people to continuously assess and manage risks around foreign interference.

UTS's approach to protecting itself from foreign political interference is guided by the *National Guidelines to Counter Foreign Interference in the Australian University Sector (the Guidelines)*.

The Guidelines were developed by the University Foreign Interference Taskforce and were released in 2019.

Some examples of our approach include:

- Our research risk/opportunities framework has been reviewed to ensure:
 - it appropriately captures risks/opportunities associated with engaging with international entities
 - our due diligence requirements increase proportionately with the level of risk of the engagement
 - any engagement with a high/critical risk rating is reviewed and assessed by the Deputy Vice-Chancellor Research, utilising where appropriate an advisory group comprised of members of the Senior Executive and the relevant Dean.

- Our Enterprise CRM was custom-designed to track and report UTS's relationships with industry with the objective to improve coordination, prevent duplication, enhance UTS's reputation and help identify high-value opportunities for collaboration. Every new partner undergoes due diligence, including a risk assessment developed in accordance with the UTS risk policy and risk procedures.

In addition, UTS has commenced a number of initiatives to further align our policies, governance structures and systems with the Guidelines. These include:

- Partnering with the Department of Home Affairs and ASIO to develop and deliver training that helps our staff identify and respond to foreign interference risks;
- Identifying and briefing key stakeholders on UTS's obligations under the Act;
- Rolling out awareness training for all staff;
- Arranging for Commonwealth and State agencies to deliver tailored briefing sessions by for high-risk areas, starting with our research teams;
- Developing a process to identify potential at risk research projects and candidature; and
- Mapping our policies, processes and partnerships to the Guidelines to identify where further improvements could be made.

The current levels of coordination and/or support provided to NSW universities by the NSW Government

COVID-19 collaboration

The role of a public university is to support society. This is at the heart of UTS's mission. This role becomes even more important when society is facing a major crisis. The 2020 pandemic has resulted in many universities quickly pivoting to support efforts to tackle this unprecedented event.

At UTS we have supported the NSW Government in two ways. The first is by lending our experts and facilities to help manage the crisis itself. For example, our researchers have worked on designing a device to test the COVID-19 viral load of asymptomatic patients; used their expertise in data science to develop an open access tool to help local governments in New South Wales model and quantify the social and economic impact based on COVID-19 spread and Federal and State government policies; and worked on finding new treatments to reduce the impact of COVID-19 on those most at risk from the potentially fatal disease.

The second way we are supporting the NSW Government is in helping to drive NSW's economic recovery. As one of NSW's largest export sectors, education is critical to the economy and requires local level coordination to manage and recover from the pandemic's impacts. We are supporting the NSW recovery in four ways: 1) programs aimed at job creation or expansion of businesses particularly SMEs; 2) programs aimed at upskilling, reskilling and new training to enable re-employment of individuals as well as enabling businesses to adapt to a post COVID environment; 3) research and innovation which drives improved competitiveness of NSW businesses or even the generation of whole new industries for NSW in the case of the Algae industry; and 4) research and innovation which alleviates societal challenges due to COVID or enables increased resilience of communities. In each of these areas, working closely with the NSW government is critical to success. In fact our engagement and level of coordination with the NSW Government has never been higher.

The NSW Government has also ensured that international students' wellbeing has been supported with an assistance package available to those whose accommodation and income has been affected and is actively working with universities and the Commonwealth to safely manage the return of international student to NSW.

University and TAFE education and training opportunities

The NSW Government is currently reviewing the NSW vocational education and training sector. At UTS, we are keen to work with the NSW Government, TAFE NSW and the VET sector on initiatives that provide better opportunities for students and prepare them for a future of lifelong learning and in a range of fields. This is an area we would welcome increased levels of coordination and support from the NSW Government.

The review is looking at how to better integrate secondary, vocational and tertiary learning opportunities, including consideration of micro-credentialing and university and VET training products.

UTS believes there is significant potential for more collaboration between TAFE NSW and the university sector in developing education offerings that respond to the growth in new jobs that require a different mix of skills than has traditionally been provided by either sector, and the interest from students for more flexible higher education options.

UTS's recent experience with online learning and alternative models of tertiary education service delivery

Since 2014, UTS has been developing and applying the UTS learning.futures initiative. learning.futures guided the major redevelopment of our physical campus, reimagining the learning spaces in new buildings. Our new physical spaces are technology-enabled collaborative spaces, group work pods, informal study hang-outs, and science Super Labs.

The new learning spaces were complemented by pedagogical changes, transforming the way our students learned and how our teaching staff facilitated that learning - learning that is collaborative, future-focused and student centred.

learning.futures continues to guide UTS's approach to teaching and learning, creating a campus where UTS students, staff and industry partners come together, in the physical and online worlds, to co-create learning experiences that ultimately prepare our students for the future of work.

Our experience with learning.futures allowed UTS to quickly move to a much higher level of online learning in teaching during the pandemic lockdown period. Student satisfaction levels

have been maintained at very close to previous levels. However, the fully on-line experience does not give students access to the more interactive elements of learning. futures and we receive consistent feedback, particularly from undergraduate students, that our approach of combining the physical campus and technology is their preferred learning approach.

Domestic postgraduate participation has been falling in Australian for some years possibly reflecting a mismatch in university offerings and the nature of work and education in the Australian economy. There is an opportunity to reconceive postgraduate education in Australia, focusing more on the requirements of lifelong learning through upskilling, reskilling and working directly with businesses to contextualise higher learning. This change has started but the full realisation of seamless, integrated postgraduate learning continues to develop.

Our commitment to transforming to a lifetime of learning is at the very heart of UTS 2027 – as a result we are developing learning and professional development opportunities for our students throughout their entire lives. Our personalised learning experience and approach for our students, alumni and industry partners ensures they can develop the skills they need, at a time and using a delivery mode that suits their needs.

This focus puts students at the heart of the learning experience, combining technology, curriculum, research-led teaching, industry experience and community relationships to develop graduates that are ready for the future of work.

The appropriateness of current NSW legislation regulating, overseeing and enabling tertiary education

The current legislation governing NSW universities provides a consistent governance framework for all NSW based public universities with oversight from the NSW Audit Office. Furthermore, within the bounds of the object and functions articulated within each act, each NSW university is able to further elaborate and articulate their strategic framework and purpose. NSW Audit has generally found NSW universities to be managed appropriately and have active compliance frameworks.

UTS has appreciated the approach of the current government in reducing red-tape and enabling university governance structures to make decisions that are appropriate for their specific context and strategy whilst complying with regulatory requirements.

Despite the underlying strength of the NSW governance framework for universities, and good and increasing coordination between NSW universities and NSW government, the NSW government provides very little direct funding or support to NSW universities. The structure of Australia's higher education funding framework results in university operations being more highly influenced by the Commonwealth's requirements. It is these arrangements that largely control universities' teaching and research revenues and drive the delivery of Commonwealth.

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