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**Submission in response to a new Higher Education Strategy for NSW – public sector partnerships for public benefit – May 2024**

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The University of Technology Sydney (UTS) thanks the NSW Department of Education for the opportunity to provide input regarding a new Higher Education Strategy for NSW. Outlined below is our initial response to the questions posed in the consultation paper and we look forward to further engagement. Please do not hesitate to contact Danielle Woolley, Head of Government Affairs and External Engagement (danielle.woolley@uts.edu.au) should you wish to discuss this submission further.

- 1. What does higher education teaching and learning mean to students, and how is higher education changing? Please consider:**
  - a. Pathways, access, equity, including widening participation, appropriate recognition of prior learning and experience, and successful transitions**
  - b. Student experience while at university, including wellbeing, student-support, and work-integrated learning**
  - c. Graduate outcomes, workforce pathways, and reflections on lessons learned.**

Partnership and collaboration are core values at UTS. It is only through the cultivation of close working relationships between students, staff and other key stakeholders that we can achieve our common goal of being a leading public university of technology recognised for our global impact. We know that traditional models of university degrees will continue to provide the foundation for the acquisition of disciplinary and professional skills including skills associated with critical thinking, learning how to learn, and working in diverse teams. But we are already serving a cohort of learners who want (and need) to learn and work simultaneously and continue to learn over the course of their career.

The tertiary education sector of the future is therefore one that will foster a culture of lifelong learning where education providers partner closely with employers to ensure that their interests and needs are reflected in these new models of education. It is critical that NSW position itself through the right policy settings to obtain the knowledge, skills and understanding to create a thriving society for the people of NSW.

The Australian Universities Accord (AUA) Final Report recognised this changing landscape but also recognised that the key to achieving this uplift will be through setting ambitious tertiary participation targets to realise a more equitable and innovative higher education system in Australia. NSW has taken similar steps with the foundation of the NSW Government's *Plan for Public Education* to excellence and equity to enable every student to achieve their potential. The success of these policies in lifting student outcomes and aspirations, particularly for currently under-represented groups, will be key to achieving equity of participation in higher education and growing a culture of lifelong learning.

There are many great examples of **shared action** by the NSW Government and NSW universities to support the future direction of higher education in NSW. These include successful projects piloted under the Collaboration and Innovation Fund that should be considered for ongoing support from the NSW Government with the option of scaling to all potential partners in order to maximise opportunities.

For UTS the Wanago Program, aimed at addressing teacher shortages and improving STEM subject accessibility to populations traditionally unrepresented in STEM careers such as girls and students from low SES backgrounds, stands as a prime example worthy of ongoing support by the NSW Government. UTS has recently written to the Deputy Premier and Minister for Education and Early Learning seeking confirmation of funding beyond 2024 and are awaiting a response.

Other new models of education showing demonstrable success and worthy of support include:

- the Institutes of Applied Technology being a partnership between TAFE NSW, an industry partner and select universities. UTS is partnered with TAFE NSW, Macquarie University and Microsoft as foundation partners in the IAT Digital at Meadowbank and believes there is the potential for the IAT model to be extended to other sectors such as in the care economy.

- UTS's U@Uni Academy Program aimed at providing an alternate, non-ATAR pathway for high schools students into university by focussing on developing their general capabilities. Students are monitored and supported throughout the two-year program.
- UTS has been a significant partner with the NSW Government's Western Parkland City Authority, and its New Education and Training Model (NETM) program. NETM is a partnership funded by the NSW Government that aims to work together with industry, universities, and VET providers to help Western Sydney employers future-proof their businesses and help employees qualify for high-skilled jobs.

- 2. How can government and the sector work together on supporting high impact, public purpose-oriented research and development activity, geared towards local and state priorities? Please consider:**
- a. Types of research and development activity supported and needed by state agencies**
  - b. Collaborating on high impact outcomes and creating new sources of evidence**
  - c. Availability and transparency of research findings.**

NSW has world-leading research strengths in critical science and technology areas including advanced manufacturing, digital and communications technologies, quantum, robotics and autonomous systems, aerospace and defence, decarbonisation and energy transition, the circular economy and medical technologies (Source: *Shaping the future of NSW in science and technology – 20-Year R&D Roadmap*).

NSW universities are also highly ranked on a global scale and make substantial contributions to both research and the delivery of technology-skilled graduates. The presence of Federally supported research organisations in NSW also contributes significantly to NSW's R&D capability (e.g. the Commonwealth Scientific and Industrial Research Organisation, Australia's Nuclear Science and Technology Organisation and the Defence Science and Technology Group).

As mentioned in Q1, partnership and collaboration are core values at UTS. This is why UTS has chosen to be a collaborative partner in the James Martin Institute for Public Policy, an active participant in the Waratah Research Network led by the Office of Chief Scientist and Engineer, and a founding partner in both the Sydney Quantum Academy and the RNA Research and Pilot Manufacturing Facility.

Individually, in a sector-leading result, almost 80% of UTS research was assessed by the Australian Government as having a 'high' impact on community, well above the sector average of 43%. Our international citations data in key research areas of national interest, such as artificial intelligence, water technology and biomedical science, demonstrates that UTS is a global leader in these fields. Our research has developed into tangible state and industry partnerships such as the recently opened TPG-UTS Network Sensing Lab, UTS Vault, UTS Tech Lab and the Deep Green Biotech Hub.

The NSW Government and NSW universities can take **shared action** to leverage these strengths. In our recent submission to the NSW Innovation Blueprint consultation by Investment NSW, we recommended:

- Delivering a stable and coherent policy environment that builds on previous policy work in NSW.
- Leveraging NSW's competitive advantages and incentivising collaboration.
- Providing co-funding support to leverage funds from the Australian Government.
- Support for research infrastructure and innovation precincts (such as Tech Central).
- Support for education, training and upskilling particularly for startups and SMEs who would not originally have the time or resources to transform their businesses without such support.

UTS identified the central, coordinating role of the Office of the NSW Chief Scientist and Engineer as a key driver of success for many NSW Government R&D programs.

3. **How can government and the sector work together to support effective community and industry engagement, outreach, and uplift? Please consider:**
- Models and benchmarks of effective engagements, including case studies**
  - Where and what kinds of partnerships are needed (and where they are not)**
  - Representation, access, and experience, including community and the public in campus and online settings.**

As a public institution, UTS is committed to working with our community and industry to lift engagement, outreach, and uplift. At our core is our commitment to social justice, excellence in Indigenous education and research, and the role of technology in society. Innovation, creativity and technology infuse everything we do. Our mission was developed in consultation with our community and guides our major investments and activities.

The NSW Government and NSW universities can take **shared action** to sustain university missions by taking a systemic approach to improving the foundations of effective engagement. This could include a combination of financial incentives (for both community and industry to work with universities and vice versa), long-term bipartisan policy goals and place-based activities (e.g. precincts) as mechanisms to foster enduring partnerships.

A selection of case studies is provided below to illustrate UTS's effective engagement with industry and community.

- Jumbunna Institute for Indigenous Education and Research: Operating for over 30 years, Jumbunna aims to produce the highest quality research on Indigenous legal and policy issues and to develop highly skilled Indigenous graduates and researchers (<https://www.uts.edu.au/research/jumbunna-institute-indigenous-education-and-research>).
- National First Nations College: With the support of the NSW Government, philanthropists, and third-party investors, UTS is embarking on a ground-breaking proposal to build Australia's first truly comprehensive, Indigenous-led College. The College aims to remove the barriers, both real and perceived, that prevent Indigenous participation in higher education and the broader community. The purpose-built, world-class facility –will offer a comprehensive range of services above and beyond accommodation – will be defined by its methods of pride in Indigenous identity and culture, and its commitment to fostering academic excellence, leadership and service, and global citizenship (<https://www.uts.edu.au/partners-and-community/initiatives/national-first-nations-college>).
- Offering pathways to increase access to education, training and skills such as Wanago (mentioned above) and the U@Uni Academy Program (<https://www.uts.edu.au/partners-and-community/initiatives/social-justice-uts/centre-social-justice-inclusion/uuni-academy>). Piloted in 2020 with 322 low socio-economic status (SES) Year 10 students from 20 NSW public schools in south-western Sydney. 52% of the students identified as first in family, 1.4% as First Nations and 20.5% as students from refugee backgrounds. The program is unique as students do not need an ATAR to gain access to UTS, instead they participate in a two-year program that develops their general capabilities. Students commencing UTS through the U@Uni Academy pathway are monitored and supported through the First Year Success initiative in which they are offered case managed academic and wellbeing support where needed.
- Nurturing a vibrant start-up and SME ecosystem by providing expertise and facilities to our local community.
  - SME@UTS (<https://www.uts.edu.au/partners-and-community/initiatives/smeuts/smeuts>): UTS is a leader when it comes to SME engagement and we are currently delivering a Federally-funded program, SME@UTS, to help SMEs adopt productivity-lifting technologies. Since its launch in 2021, 180 SMEs have been engaged through workshops, masterclasses, and meetings.

- UTS Startups (<https://www.uts.edu.au/current-students/opportunities/uts-startups>): UTS Startups is deeply committed to supporting technology-enabled entrepreneurship and is proud of the fact that it is the largest community of startups in Australia. It currently supports 868 active startups, having added 264 new startups in 2023 meaning that it crossed its 1,000th that year. These startups collectively created 1,227 new paid jobs in 2023 alone. UTS Startups also offers a high school program to inspire the pursuit of technology-enabled entrepreneurship and is also the largest in Australia, reaching 91 schools and 8,204 students in 2023, and running an event at the ICC for a further 1,500 students.
- Offering physical infrastructure to connect industry, students and the university.
  - ProtoSpace (<https://www.uts.edu.au/about/faculty-engineering-and-information-technology/protospace>): Protospace includes Australia's largest collection of additive manufacturing technologies. It places NSW at the forefront of manufacturing innovation in the local region. Through industry and academic engagement we are transforming supply chains, introducing new business models and actively creating the next generation of manufacturing opportunities for Australia. The lab supports all aspects of the additive and advanced manufacturing process, from component design, manufacturing investigations and prototyping all the way through to final product research and development.
  - UTS Tech Lab (<https://techlab.uts.edu.au/>): UTS Tech Lab is a research facility in Botany, NSW that supports bespoke industry-led partnerships to drive innovation and growth (mainly engineering and IT, followed by business and design), particularly for startups, SMEs and large multinational organisations in collaboration with academic and technical teams as well as student talent. It combines research expertise, industry co-location and collaboration, and world-class facilities to make Tech Lab a unique environment in which to create commercially responsive solutions to a wide range of R&D challenges.
- Committing significant capital and operational investment into the Tech Central innovation precinct and state of the art equipment on our campus. This is in recognition that one of the identified deficiencies in Australian industry structure is the underpinning technology infrastructure. Examples include the UTS Vault (dedicated to collaborative research and innovation in cybersecurity, data protection, and defence technology) and Data Arena (a powerful immersive, data visualisation facility that helps researchers, business and government simplify complex information).

**4. How can institutional practice and governance build confidence and public-purpose capacity in robust public institutions? Please consider:**

- a. Trust and social license to operate, including perceptions of universities' decision making and accountability by staff, students, and the public**
- b. Best practice, and opportunities to build capacity within and between institutions**
- c. Cross-institutional partnerships and incentives to collaborate rather than compete.**

As a reminder, universities are already subject to a sophisticated and complex regulatory framework at both State and Federal levels covering governance, human resources, risk management, environmental sustainability, and financial management. Additionally, the key role of the independent Tertiary Education Quality and Standards Agency in monitoring the quality of education and research of higher education providers should not be overlooked.

In recent years, universities have responded to a broad range of new legislative requirements at the State and Federal levels including, but not limited to, academic freedom, modern slavery, foreign interference, gender equality and support for students. There has also been a significant increase in government requirements for reporting to external bodies about our compliance with legislative requirements, which is costly for higher education providers to implement. This increased regulatory burden diverts resources away from teaching, learning and research.

Two recent examples of where the NSW and Commonwealth Governments have introduced new or updated legislative frameworks and regulatory oversight bodies are described below:

- While UTS is primarily covered by NSW privacy legislation, (the *Privacy and Personal Information Protection Act 1998* and the *Health Records and Information Privacy Act 2004*), the Commonwealth *Privacy Act 1988* also applies in certain circumstances where an activity may be covered by Federal legislation or where the Federal act is imposed upon UTS under a contract. For example, the Federal act will apply to tax file numbers and student fee records, as well as some data breach reporting obligations.
- Universities are required to report to both levels of government on how we are identifying and mitigating the risks of modern slavery. Each year UTS is required to submit a Modern Slavery Statement to the Commonwealth Attorney General's Department and include similar information in our annual report to meet NSW Treasury annual reporting requirements.

One area where UTS welcomes the opportunity to actively collaborate with both the Australian and NSW Governments is in the prevention and response to the negative impacts caused by gender-based violence. We support the establishment of the National Student Ombudsman and are committed to taking all necessary steps to ensure compliance with the National Higher Education Code to Prevent and Respond to Gender-based Violence, currently under develop.

NSW universities do have strong cross-institutional partnerships, the RNA Bioscience Alliance is the most recent example that involves all NSW universities. There are a multitude of other multilateral partnerships that have varying levels of government involvement. For example:

- WSU, UNSW and UTS at Fairfield Connect;
- USYD and UTS at Tech Central; and
- MQ, USYD, UNSW and UTS at the Sydney Quantum Academy.

The purpose of highlighting these partnerships is to emphasise that universities can work collaboratively together within existing institutional constraints.

The consultation paper proposes that the new Higher Education Strategy will be implemented through partnership agreements between the NSW Government and universities that will be publicly accessible and outline areas of shared priority and commitment. It will be important to ensure these agreements compliment, rather than duplicate, reporting and accountability requirements imposed by the Australian Government. A suboptimal outcome would be the introduction of another level of reporting on top of existing reporting requirements, driving down productivity and introducing reporting costs (personnel, training and systems).

#### **Additional questions:**

- **Where should NSW Government focus effort and resources across the state and in the sector?**
  - The NSW Government should articulate its whole-of-government vision, expectations and commitments to the university sector.
  - The NSW Government should view the university sector as a trusted partner in the provision of education and research. While the majority of our funding comes from the Federal Government, the distribution of that funding impacts what universities can deliver to the people of NSW.
  - The NSW Government should work with the university sector on national policy reform that has State implications (Australian Universities Accord), particularly, the priority areas identified by the Minister for Skills, TAFE and Tertiary Education to his Federal counterparts.



- **What are barriers the NSW Government can work to remove, to unlock the full potential of the higher education sector for students, staff, industry and communities?**

- NSW Government and NSW universities: there should be regular opportunities for high level representatives to meet and discuss issues and initiatives. This will ensure a top-down dissemination of priorities and enhance relationship building.
- Federal and State relations: the State should be leveraging the strengths of its local universities to secure a larger share of Commonwealth funding in research and teaching. The AUA is an opportunity for the State to negotiate with Federal counterparts on proportional (i.e. per capita) distribution of resources.
- TAFE and university relations: The State should be facilitating partnerships and asset sharing particularly between TAFE and universities. The initial recommendations of the NSW VET Review are worth supporting.

- **What does NSW do well in higher education settings?**

When government chooses to invest in the higher education system, it lays the foundation for creating value in people, skills and institutions.

Examples of where NSW has done well include (and mentioned earlier):

- its continuing support for the Office of the Chief Scientist and Engineer (and the Waratah Research Network);
- the joint ventures exemplified by the James Martin Institute for Public Policy;
- the place-based approach to attracting investment and innovation to NSW (e.g. innovation precincts such as Tech Central);
- the institutions formed by the Institutes of Applied Technology, the Sydney Quantum Academy and the RNA Research and Pilot Manufacturing Facility; and
- undertaking regular policy reviews relevant to the higher education sector, including the NSW VET Review and the Innovation Blueprint, that attempt a whole-of-government approach to maximising NSW's strengths.

- **What could NSW do better in higher education settings?**

There is always room for improvement and we reiterate the points made above regarding a whole-of-government approach to policy making, leveraging NSW's R&D strengths and supporting new models of education that seek to improve access to education for a diverse range of target groups.

- **How will we know we are being effective?**

There are a variety of methods available to the Department of Education to measure effectiveness, (e.g. benchmarking, key performance indicators, impact assessment) and we would urge alignment with any Federally implemented attainment and participation targets to ensure consistency of approach and end-goal. Regardless of which method is used, there should be deep engagement with the higher education sector to ensure that whatever method is selected uses existing annual reporting mechanisms and data to minimise regulatory burdens on universities.

- **What's your big idea?**

Ultimately, a new Higher Education Strategy needs to have clear goals and a roadmap if it is to achieve the desired outcomes and drive sustainable collaborations and partnerships. An understanding of the policy environment and its direction, resource allocation, leadership and an executable implementation plan are all keys to the success of the next iteration. There are a great many strengths within NSW that the NSW Government can leverage if a coordinated, consultative approach is taken.