

Higher Education Reimagined

Advance the world of education through technology, connectivity and innovation







Building the Future-Facing University

Higher education and education departments in Australia are under pressure from several directions to improve educational experiences. Underpinning all these issues is the consideration of ever-advancing technology, which simultaneously poses challenges and opportunities. Institutions need to adapt fast to evolving needs and technological advances in ways that can create more complete educational experiences built around students while empowering university faculty and administrative staff.

Enhance student experience and **expectations** – Students' expectations of universities are shifting. While criteria such as quality and prestige remain important, students increasingly seek personalised learning experiences, financial support and an opportunity to be heard.



Enable staff to work with efficiency and more productively – Educators report concerns about stress, overwork and a lack of adequate support, impacting morale, teaching quality and efficacy. Being able to attract, retain and enable teachers means re-engaging them with insight, processes and tools that take the load off their work and free them to plan, teach and deliver more efficiently and effectively.



Respond to organisational and cost pressures – Drops in admissions have been exacerbated by government caps for international students and wider issues of education underfunding. Long-term plans to diversify funding sources, streamline operations and introduce workforce efficiencies are essential for financial stability.

With these challenges in mind, it's logical that universities have turned to digital strategies to tackle their issues and improve the experience they can provide for their students, staff and stakeholders.





Key higher education sector developments



430,000 fewer international students in 2025 compared to 2023¹



51.3% of Australian universities say addressing operational efficiencies is of very high significance²

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36% of Australian occupations are in national shortage, owing to a skills gap and limited influx of new generations of talent³



43.6% of Australian universities say delivering a holistic student experience is of very high significance⁴

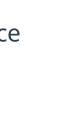


Between 2012 and 2021, the ratio of students to academic staff has grown from **20.4 to 23.2**⁵

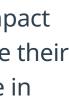


81% of all faculty staff expect AI to impact higher education, but just 16% believe their institution is prepared for this change in the next 2 years⁶

- 1 https://www.consultancy.com.au/news/10069/set-to-face-funding-issues-australian-universities-are-in-need-of-new-strategies
- 2 https://www.caudit.edu.au/resources/caudit-2024-top-10/#:~:text=CAUDIT%202024%20Top%20Ten&text=Every%20Top%20Ten%20report%20aims,Secure%20Access 3 https://www.jobsandskills.gov.au/sites/default/files/2023-11/JSA%20annual%20report%20-%20summary.pdf
- 4 https://www.caudit.edu.au/resources/caudit-2024-top-10/#:~:text=CAUDIT%202024%20Top%20Ten&text=Every%20Top%20Ten%20report%20aims,Secure%20Access 5 https://www.education.gov.au/australian-universities-accord/resources/final-report
- 6 https://www2.deloitte.com/us/en/insights/industry/public-sector/latest-trends-in-higher-education.html







Students at the centre

Hybrid and remote learning have continued long beyond the pandemic and today students seek a greater sense of belonging and connection. Some may have never even set foot on campus and for those who do, campus safety and wellbeing have grown as a concern. For example, just 71% of female students report that they feel safe on campus, compared to 90% of male students.⁷

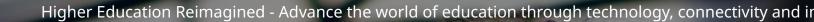
Improve outcomes for students

To stay competitive, universities need to refocus education on a holistic student experience, connecting it at every point to deliver intelligent and highly personalised engagements. With 34% of students saying that the ability to select course modules according to their needs and interests is 'extremely important',⁸ this reinforces the expectation that universities can understand and cater to their unique circumstances. This could include, for instance, the need for part-time work to finance their studies. In addition, they expect universities to listen to them and adjust the learning experience based on their feedback.

Address needs for now and the future

Against a backdrop of high living costs and increasing fees, students have also become more debt-averse and this is influencing their choice of course and institution. In 2023, there were 10.3% fewer applications to the University Admission Centre compared to 2015.⁹ To respond to the declining demand for higher education places – and develop students who can address the real needs of the labour market – it's more important than ever to deliver enhanced student experiences and meet their expectations.

⁹ https://cdn.csu.edu.au/__data/assets/pdf_file/0006/4286679/Tertiary-Sector-Trends-February-2024.pdf





⁷ https://futurecampus.com.au/2023/11/08/how-can-campus-design-help-women-feel-safer/

⁸ https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/noindex/ey-2023-report-is-your-university-s-transformationcentered-on-tech-or-people.pdf



Delivering student-centred technologies

Universities must embrace emerging technologies to improve how and where they communicate with and support students, starting even before they enrol.



Simplify enrolment: AI-powered admissions services streamline applications and can augment marketing to target prospective students



Enhance safety and wellbeing:

Including connected campus communications, AI-powered curriculum and support services, facilitating hybrid learning and 5G-enabled CCTV



Accelerate learning enablement:

With high-speed and reliable connectivity to resources and learning materials and AI/ML learning platforms for personalised educational content







Stay ahead of the curve

The Australian Universities Accord reported in 2024 that 70.6% of Australians think universities are 'doing a good job', down from 78.9% in 2008¹⁰. This drop in perception highlights the need for educational organisations to deliver smooth and successful experiences for staff and students alike.

A streamlined and efficient future of

education – Equipping educators with the tools to improve themselves and their quality of teaching, seamless connectivity across campus (and beyond) and streamlined operations are crucial to achieving improved learning outcomes and student experiences. These connectivity issues also impact students, with 42% experiencing issues with Wi-Fi connectivity and 26% having problems with university networks.¹¹ It is no surprise that the 2024 CAUDIT Top Ten Report¹² states that adopting an optimised ICT infrastructure and developing a robust digital strategy rank among the top four priorities for Australia's higher education sector.

The digital architectures to empower

educators – This will require universities to transform their operations through cloud, with adaptive, secure networks and AIsupported monitoring and issue resolution. Similarly, educational administration and teaching staff need to be equipped with digital, data-driven and AI-powered insight, collaboration tools and processes. Not only to help develop their own skills but so they can work, teach and research more effectively. Moreover, by automating their routine work, this will enable staff to reallocate time for more creative, specialised and personal tasks that positively impact the institution. Higher Education Reimagined - Advance the world of education through technology, connectivity and innovation



¹⁰ https://www.education.gov.au/australian-universities-accord/resources/final-report

¹¹ https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/noindex/ey-2023-report-is-your-university-s-transformation-centeredon-tech-or-people.pdf

¹² https://www.caudit.edu.au/resources/caudit-2024-top-10/#:~:text=CAUDIT%202024%20Top%20Ten&text=Every%20Top%20 Ten%20report%20aims,Secure%20Access



Enabling the streamlined and efficient future of education

Future-facing universities need to deliver connected and seamless experiences, built on new foundations for a dynamic and agile approach to education. At the same time, enable pressurised staff to do more with less to elevate student engagement, increase success and drive efficiency.



Modernise your infrastructures: Hybrid and flexible cloud to support complex data and workload requirements with scalable and continuously available networks



Automate routine activities: To assist pressured staff and automate administrative and organisational tasks, resource planning, scheduling and communications



Advance collaboration: With advanced communication and contact systems so teachers and admin staff can be reached more easily and to facilitate





Embrace the smart campus of the future

With the number of students and staff that today's universities manage comes a vast amount of data. However, using this wealth of information to their advantage presents many obstacles to overcome, from siloed and poorquality data to security and privacy issues. Developing complete data and data governance strategies, with secure implementations that work across the whole university and administrative infrastructure, is a foundational first step for the smart campus of the future.



Measure student pathways and system

outcomes – Dynamic future universities need to place data at the heart of every action, interaction and decision. By efficiently analysing and utilising insights, augmented by AI-driven processes, data can underpin choices made in administration, strategy and to shape learning journeys and improve outcomes. Data makes students more than a number and can enable intelligent tools that support and empower learning progress trackers, identify the need for interventions with at-risk students, and facilitate personal learning coaches.

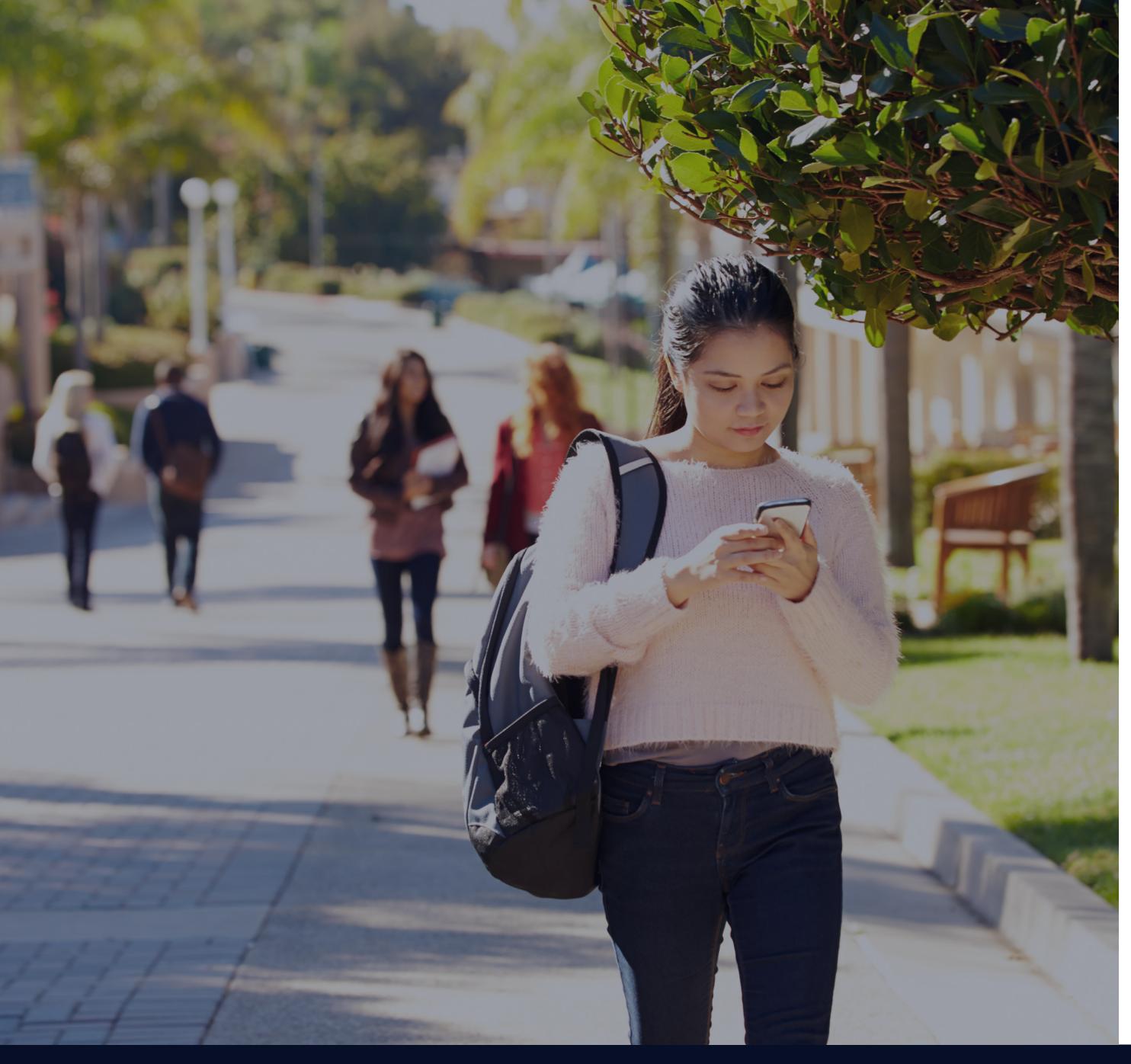


Improve availability, but enhance **security** – Universities have a duty of care to protect sensitive information about staff and students. The CAUDIT Top Ten 2024 ranked a secure digital environment as the number one priority for Australia's higher education sector, with 75% of those surveyed ranking it as being of very high significance to them.¹³ This means institutions must ensure they have robust data governance and cybersecurity structures in place, such as zero trust networks, to combat any threat to their digital wellbeing.

¹³ https://www.caudit.edu.au/resources/caudit-2024-top-10/#:~:text=CAUDIT%202024%20Top%20Ten&text=Every%20Top%20Ten%20 report%20aims,Secure%20Access







Informing decision making and boosting student outcomes

Future-facing universities need to constantly learn from their own education ecosystem to re-imagine education for growth, competitiveness and relevant innovation. This will be realised through flexible, AI-supported technology and data.



Utilise data analytics: Create personalised insight and advice, integrated educational journeys, connected teaching platforms and informed educational strategies that support students, teachers and administrators



Leverage GenAI: For content creation, document analysis and automated advisory



Use analytics to your advantage: To make more informed and timely decisions, see patterns in learning and adapt courses or programs





The Dynamic Future University is agile and empowered by technology

Australia's Higher Education sector is at a pivotal turning point. Transformative technologies are empowering educators to create enhanced and engaging educational experiences that can be highly tailored to the needs of everyone they teach at every stage of their academic journey. For students, technology is helping create innovative, supportive and personalised learning environments that can guide them on their unique pathway to further education or the world of work.

In this dynamic and constantly changing educational world, a Future-Facing University is one that is safer, more connected, more adaptive, more collaborative, more insight-enabled and crucially, both staff-focused and student-centred.

NTT DATA can be your future-facing partner to reimagine a flexible, personalised and data-driven approach to successful education.





Key takeaways for Education Leaders:



Pay close attention to your students and their needs to offer flexible and personalised learning experiences that attract and keep students engaged



Embrace new technologies as part of your digital strategy to enable teaching staff to deliver high-quality and flexible learning



Put data, analytics and AI-enhanced insight at the heart of every understanding, decision, action and learning journey



Set up a robust digital strategy to safeguard your staff and students

Find out more about how NTT DATA can support your institution now:

Find out more









