



Foreword

TechnologyOne's Global Mobility
Program takes a page from the
book of our university colleagues
and is inspired by the study tours
which are common within academia.
The program is designed to foster
knowledge sharing between leaders
of tertiary institutions and so
enable them to better serve their
constituencies. It is also designed to
deliver for administrative leaders a
sense of the 'cohort experience' that
their institutions aspire to deliver to
their students.

TechnologyOne was founded 32 years ago on an idea; that by working directly with customers, rather than through third parties, the company would be in a better position to understand its customers and help them achieve their goals.

But we recognise the idea has limits. The relationship between teacher and student goes back to well before Aristotle and Plato, and study after study has shown better outcomes when learning is guided by an experienced peer, teacher, coach or mentor.

So it should come as no surprise that within academic circles, the practice of study tours is well-developed and plays a crucial role in knowledge exchange between groups of researchers separated by distance.

Within the professional ranks of university administrations however, it is less so. This is what the TechnologyOne Global Mobility Program is designed to address.

Around the world, higher education is reaching a tipping point. Technology, or more specifically the use of technology, is transforming whole industries and universities, colleges and other tertiary institutions are having greater opportunities - and more challenges - than ever before.

We have no doubt that to meet those challenges and more importantly, grasp the opportunities, higher education institutions will need to look outside their own four walls and take examples from their peers elsewhere - not to mention their fellow travellers in the corporate world.

Earlier this year TechnologyOne surveyed more than 2,000 higher education students in Australia and the United Kingdom and we heard, among other things, that there is a significant gap between their expectations of technology from their institutions and their experience of it.

30 per cent of Australian students and 64 per cent of those in the UK described their digital interaction with their place of study as 'functional but uninspiring'. This is despite the best efforts of those institutions who have invested millions in technology infrastructure over the years.

This serves to remind us of two points. First, generally speaking, university students are some of the earliest adopters of technology in society, so it should not be surprising there is a gap between their expectations of technology and its delivery.

Second, if we consider students as customers, tertiary institutions arguably have more in common with large consumer businesses than they do other enterprises of similar size, so it is to be expected that the technology goalposts shift more rapidly.

With that mind, the inaugural TechnologyOne Global Mobility
Program in November 2019 focused on the student experience.
Representatives from University of Lincoln, University of Dundee,
London School of Economics and Political Science, and University
of Hertfordshire travelled to Australia to talk directly with their peers
about what's happening in technology and tertiary education.

The study tour included visits to Curtin University, La Trobe University, Macquarie University, Queensland University of Technology, Swinburne University of Technology, TAFE Queensland, Victoria University, Western Sydney University and the University of Melbourne.

We're proud to have hosted the first Global Mobility Program study tour in Australia to examine the way higher education providers are driving digital transformation on their campuses and beyond. TechnologyOne appreciates the cooperation of all involved, especially our delegation from the United Kingdom who took two weeks out of their busy schedules to join us.

We trust this report provides a useful aide-memoire of lessons learned.

Peter Nikoletatos

Global Industry Director - Education, TechnologyOne & Adjunct Professor, La Trobe University

Institutions visited -



















Participating institutions









Summary of themes from the tour —



Student experience



Change management



Digital transformation



Future tech

Student — experience

It is no surprise this emerged as a common theme. After all, the key purpose for the study tour was to provide a broad picture of how higher education institutions in two different geographies are using technology to enhance the student experience.

All of the institutions shared a common goal of delivering better, more consistent and more effective support to students and using technologies like mobile phones and Software as a Service (SaaS) platforms were paramount to deliver it. There was also much in common among the problems across each of the institutions, for example, the existence of multiple, poorly-integrated channels to service students. This results in confusion on the students' part and a lack of awareness of the existing support services available to them. What was surprising, perhaps, was the variety in the approaches being used.

In the case of Queensland University of Technology (QUT), the organisation created a fully-branded experience, called HiQ, which exists as a 'one-stop-shop' for student needs both online and in physical service centres located on-campus.

At TAFE Queensland, the implementation of the student assistance program was delivered with the detail and thoroughness of a major consumer brand launch, with focus groups, journey maps and an emphasis on the latest thinking in behavioral psychology.

That's perhaps not surprising when you consider that, in focusing on student experience, tertiary institutions are no doubt taking a page from the book of consumer marketers. And while it's unlikely that most students will be consciously engaging with the various elements that make up the data centre of a typical university, when it comes to student management, technology is emerging from the back-office to have a direct impact on their experience at university. They are likely to judge it by the same criteria as other consumer technology in their lives.

Queensland University of Technology (QUT)

QUT examined what it called "The Service Problem" and its solution, HiQ, which leverages TechnologyOne's Student Management platform. HiQ lives on student's phones, tablets and laptops and also in the physical world and aims to provide a single point of contact on each campus.

HiQ helps students resolve questions related to services from faculty, administration, IT and library and their study generally. It offers four tiers of support, based on the complexity of the task; from self-support and peer concierges, through to dedicated HiQ advisers and departmental specialists. QUT says the results have been impressive, with more than 370,000 enquiries to-date.

La Trobe University

La Trobe University introduced "Ask La Trobe", a consolidated student service and enquiry function, in 2015. Before this, student services had been inconsistent; standards varied between campuses, with no metrics and outcomes were reliant on individual staff. By 2017, the institution found the need to expand the remit to include connections with academic staff. Using the existing CRM, virtual hold telephony and TechnologyOne's Student Management platform the service has increased its depth and breadth.

After systems implementation and enhancements in business process and functional accountabilities, La Trobe delivered measurable improvements in admissions consistency and time to offer, centralised timetabling which is more effective and efficient and an improved graduation experience. Student satisfaction, based on Net Promoter Score (NPS) data, has consistently improved from 2015 to 2019.

University of Melbourne

The University of Melbourne explored its Flexible Academic Programming (FlexAP), which began as a project in mid-2015, as part of the University's 'Strategy 2030.' The overarching aims of the project are to examine how the University can enhance the quality of teaching, learning and assessment, and the broader student experience; provide more flexible study options and choice for different segments of the student body; and make more efficient use of the University's infrastructure and resources. The University identified eight key work streams - from curriculum structure and timetabling, to harnessing virtual infrastructure which provided recommendations for addressing the University's main challenges, namely to provide students with more flexible, high quality educational opportunities that are consistent with the University's core educational values and mission.



QUT

Across the board, the Australian institutions who presented as part of the study tour demonstrated that what's happening here is more than just an IT project.

Digital transformation is taking place in just about every industry and its presence is being felt across virtually every function in organisations. Almost twenty years since the term SaaS was first used and a decade after it became commonplace in enterprise computing, it's easy to assume that all organisations are running the majority of their operations 'in the cloud'. But the reality is a little less neat and tidy.

A report by IT analysts firm ADAPT in late 2019 found that just under half (46 per cent) of Australian IT workloads are cloud-based today. But the pace of change is accelerating. The same report predicted that by 2021 the number will have jumped to 60 per cent. Across the globe, the UK is leading the way in cloud adoption, with a 2019 report from Flexera finding that 79 per cent of enterprise workloads are in the cloud. Yet when it comes to the higher education sector, research by Jisc identified that only 36 per cent of institutions have adopted the cloud.

Universities and colleges, like all large organisations, have large and complex information technology infrastructures. Unlike start-ups, they do not have the luxury of being 'born on the Web'. Rather, they are moving workloads to the cloud in stages.

In several cases for the Australian universities which presented it has been the student management system which has triggered an accelerated move to the cloud. In most of these, the change had flow-on effects within their organisations as others system needed to be adapted. Several of the institutions on the tour had either already adopted a SaaS-based financial system, or were in the process of doing so in parallel with the introduction of a new student management system.

The drivers for this change are as varied as the number of institutions making them. In some cases, the catalyst was regulatory change, in others a desire to improve efficiency and better use resources by reducing manual processes. For the majority, the goal was to improve the experience for students.



Curtin University

Curtin University

Curtin's adoption of a SaaS student management platform was, in part, informed by its participation in the development of new reporting requirements for universities from the Australian government known as TCSI (Transforming the Collection of Student Information). These new requirements led to the parallel adoption of both Student Management and Financial SaaS offerings. The University has also successfully used the platform to implement new digital credentialing, student progression agreements, student fee disbursements between student management and financials, and new syllabus projects.

Western Sydney University

Western Sydney University has launched two of its three new digitally infused vertical campuses, which offer technology-rich teaching and research spaces, deliver enhanced student learning experiences and provide links to businesses.

These centres further build on the university's consistent strategy of adopting technology to facilitate the best services. In 2019, the university rolled out several new initiatives, including one of the world's largest provision of free digital textbooks or e-textbooks for commencing university students. It has also launched the 21C Project, which seeks to future-proof the curriculum in response to workplace disruption and social change by equipping students with the skills and knowledge needed for new and evolving careers.



Change — management

It's clear these are not solely IT projects. While many of the challenges uncovered are technical (for example, TAFE Queensland cited data migration as one of the biggest parts of the project), undoubtedly the most complex element is the human one.

Whether in day-to-day operations, such as using 'nudge tech' to remind students where to attend a class or the due date for an assignment, or in project management, like the introduction of TAFE Queensland's new student management system, tertiary instructions are adopting best practices from the field of behavioral science and looking at technology platforms as a means to an end.

For many years, economists (and probably many project managers) tended to view people as 'rational animals' and assumed that, given the right amount of information, they would make logical, fact-based decisions. But modern developments in the field of behavioural economics paint a different picture.

In the TAFE Queensland project, for example, making stakeholders aware of the coming change was only the first of seven steps in the journey toward making the new ways of doing things become 'business as usual' and included clear goals for both the pre-launch and post-launch phases. The focus was not simply on informing people of the change but helping them to move psychologically from awareness and understanding to acceptance and commitment faster than might have occurred organically. The project team at TAFE Queensland invested heavily in change management upfront and mapped out a communication program more than a year long, with detailed metrics to measure business readiness at each stage. The institution was rewarded with a new SMS solution which increased operational productivity, customer and staff satisfaction while reducing operating costs compared with the system it replaced.

TAFE Queensland

TAFE Queensland presented an overview of the vocational education and training sector (VET) in Queensland and their implementation of a Student Management System (SMS). The project was to replace a 10-year-old legacy system with a Software As A Service (SaaS) solution from TechnologyOne. The two and a half year project went live with TechnologyOne in August 2018. TAFE Queensland provided an overview of the detailed project plan.

The biggest challenge was data migration, TAFE said. The project involved ingesting data from three main sources and initially it was difficult to map data from the old systems (including student information, financial data and course data) to the new. The project team needed 38 data migration runs to arrive at the final configuration. The biggest strength of the project was a comprehensive change management plan (including focus groups and journey maps) which took into account the fact that users of the system needed to be considered as well and the technology that made up the solutions.



TAFE QLD

Future tech —

The final common theme from the program was future technologies and encompassed a range of emerging fields from artificial intelligence and machine learning, to augmented reality and blockchain as well as more present-day tools like analytics, 'nudge tech' and Massive Open Online Courses (MOOCs).

During the roundtable discussion in particular, these topics were explored in the sense of their impact on the way education is delivered today and into the future, as well as how it is informing future fields of study.

'Nudge tech', a term coined by IT analyst firm Gartner, leverages the lessons of behavioural science mentioned above. It covers a collection of technologies—cloud, mobile, social and data—which work together to achieve timely personalised interaction with students, staff and faculty. According to Gartner, the idea is for institutions to use data to impact student behaviours. For example, a just-in-time text message (SMS) reminder for class, establishing good studying habits, or making time for fitness in between classes.

Swinburne University is incorporating nudge tech into a project designed to improve the enrolment and on-boarding experience for its students. Using TechnologyOne's Student Management platform as a foundation, Swinburne is building a new, more integrated enrolment pathway to guide students through the process to deliver an optimal experience in fewer steps.

The University of Lincoln has developed personalised dashboards for its tutors which integrate information from across the institution to support conversations with students. This helps, for example, to facilitate conversation about participation (the UK has more strict attendance requirements than Australia).

MOOCs, on the other hand, are enabling students to participate in learning without ever setting foot on a physical campus. They're enabling vocational skills, for example welding, which might previously have been taught in a room with three to four students at a time, to reach a potential worldwide audience of thousands around the world with just one staff member.

All agreed that technology, today and into the future, would be an enabler to complement the 'human touch' rather than replace it; a tool to help the institution improve the learning experience and keep the focus on the pre-eminent relationship between educator, student and their cohort.

La Trobe University

As the first institution in the southern hemisphere to go live with a SaaS Student Management solution, La Trobe has been able to push ahead of competitors to focus on innovation and using emerging technology to challenge its existing business model. One example is the implementation of Robotic Process Automation (RPA) to enhance the student and staff experience. With its team currently spending around 280 hours per year on specialised module results processing, RPA is expected to reduce this to 28 hours. Standard results processing also occurs three times per year and involves a significant manual workload for staff - around 7,140 hours per year. RPA is expected to reduce this effort to approximately 1,071 hours, and La Trobe is now focused on establishing a new Governance model to embed this approach across the University.



La Trobe University



Conclusion

Tertiary institutions hold the keys to many of the challenges facing society today. They are not simply commercial institutions but play a pivotal role in the community, the economy and the personal development of their alumni. But they are more challenged than at any time in history. Expectations on tertiary intuitions rise almost every day but the institutions also have a societal charter to make advanced education available to as many as possible so must continually improve and become more efficient.

Each of the tertiary institutions visited is tackling these challenges in its own way but the Global Mobility Program tour demonstrated that, above all else, they have more in common than they do apart and the opportunities to continue to share knowledge and best practice apply equally in the administrative side of the institutions as they do in the academic.

Acknowledgements

Queensland University of Technology

Queensland University of Technology (QUT) is an ambitious institution, with a rapidly growing research output focused on technology and innovation.

- Alison Shirra Director (Interim) Student Business Services
- · Fran Eden, Director HiQ and Library
- Simon Wilkinson Associate Director,
 Student Systems Student Business Services
- Cindy Meyers Associate Director (interim), Student Management - Student Business Services
- Jon Mahony Lead Analyst (Business Process Automation, Student System -Student Business Services

TAFE Queensland

Queensland's largest training provider, delivering practical, industry-relevant training from entry-level certificates to bachelor degrees across 50 locations.

- Alan Chapman Chief Information Officer
- Brett O'Malley Director, Student Systems
- Kathy Piccardi Business Process & Improvement Change Lead
- Jo Logan Student Systems Configuration & Undates Lead
- Simon Bruce Environment & Interface Lead
- Paul Mann Finance Analyst
- Ellen Andrew Subject Matter Expert & Student Portal Lead
- Jodie Murphy Security & Permissions Coordinator & Subject Matter Expert

Western Sydney University

Ranked in the top two per cent of universities globally, Western Sydney University is a modern, forward-thinking, research-led university, located at the heart of Australia's fastest growing and economically significant Western Sydney region.

- Michael Burgess Chief Student Experience Officer
- Pete Maggs Director Library Services

Macquarie University

Sydney's Macquarie University is ranked among the top one per cent of universities in the world. Since its foundation 54 years ago, they have aspired to be a university that focuses on fostering collaboration between students, academics, industry and society.

- Gail White Executive Director, Student Engagement and Registrar
- Tim Hume Chief Information Officer
- Roz Howard Director, Student and Academic Systems Transformation
- Dr Brad Windon Director, Student and Academic Business Transformation (Program Beacon)
- Jonathan Covell Associate Director, Information Technology, MQ Health

La Trobe University

La Trobe University works with employers to create courses that meet workforce needs, including Australia's first Bachelor of Applied Cloud Technology degree, developed with Amazon Web Services.

- Dr Richard Frampton Executive Director, Student Services and Administration
- Stuart Hildyard Chief Technology Officer
- Peter Powell Chief Information Officer
- Fotios Lampropoulos Director Student Administration
- Antonia Lamanna Deputy Director Student Administration
- Suzanne Sealey Senior Manager Student Advising and Retention

Swinburne University

A dual-sector provider, Swinburne University is home to the Advanced Manufacturing Industry 4.0 Hub and will pioneer a new model of university—industry collaboration where businesses and universities co-create new technologies and innovative business strategy.

- Michelle Gillespie Director Student Administration and Library Services
- Goran Gambiroza Deputy Director Enrolment Services
- Katie Routley Deputy Director Customer Service
- John Della Penna Solution Architect
- Cheryl Fullwood Associate Director Curriculum Implementation
- Malu Cassinides Enrolments Manager
- John Hegarty Associate Director Service Delivery
- Jenny Watson Chief Technology Officer

University of Melbourne

With a strong research performance, excellence in learning and teaching, and intellectual and social capital, the University of Melbourne is consistently positioned with the world's leading universities and currently ranked number one in Australia and number 32 in the world.

- Daniel Buttigieg Director, Applications and Technology Management
- Jason McKay Director, Enterprise Architecture
- Merryn Jackson Director, Student Administration
- Ngaere Blair Manager, Course Planning and Equity
- Elisa Rivera Delivery Manager Academic Applications
- Fred Kodye Lead Business Systems Analyst

Victoria University

For more than 100 years, Victoria University (VU) has offered accessible education to students in Melbourne's west and beyond. VU is ranked in the top two per cent of universities in the Times Higher Education World University Rankings and is the first Australian University to use a 'block' model of learning.

- Prof Ian Solomanaides Deputy Vice-Chancellor (Academic & Students)
- Trish McCluskey Director of Connected Learning
- Simon Lismann Technology Enhanced Learning Coordinator
- Jennifer Murphy Education Services Librarian
- · Loandy Jourdan Student Ambassador

Curtin University

Western Australia's largest and most culturally diverse university with Australia's third largest international student population. Curtin is an innovative university known for its high impact research, strong industry partnerships and commitment to preparing students for the jobs

- Michele Poepjes Director Business Operations & Student Systems
- Mike Seah Manager Student Fees and Statutory Reporting
- Darren Gibbs Manager Examinations and Progression Management
- Caryn Bate Manager Scheduling
- Sue Joubert Manager Student Systems
 & Business Support

