Learning design on campus at the University of Technology Sydney (UTS)

Key Learnings

- A learning model is the lynchpin from which all subsequent actions are taken.
- Build a strong and supportive leadership team
- clear communication of the vison
- Run pilot projects with evidence of impact are key before committing vast sums of money to redevelopment
- Clear commitment to resourcing further innovation
- Research led practice in new models of teaching and learning
- Identify practice that illustrates the learning model and success sharing between academics
- A commitment from academics to improve both their performance and student outcomes
- Student input is vital
- Academic support is crucial to success
- Online and on-campus development that share the same model of learning

UTS is at the forefront of innovation in campus design, teaching and learning with a focus on improving the on-campus experience of students as well as preparing them more effectively for the demands of the 21st century. It has demonstrated success with clear proof points that its initiatives are having the desired impact on student learning and preparedness for the world of work.

> The UTS vision is to be a world-leading university of technology:
>
> *"We will do this by embedding and showcasing leading edge IT and other technologies in all disciplines; performing strongly in the disciplines of science, engineering and technology; remaining highly relevant to industry and the professions; and aligning our education and research with relevant national and economic priorities."[i]*

In pursuit of innovation Learning2014 was set up as an initiative to recognise the importance of a universal approach to innovation by supporting the growth of new ideas to promote better teaching and learning.

> *"Learning2104 is a university-wide approach to achieving large-scale change to students' experiences of learning. The challenge we face is that while there are many examples of successful implementation of Learning2014, it is still not at the scale needed to achieve the step level improvement to the quality of learning for UTS students – the primary motivation for this project. All students at UTS should experience learning that is characterised by active, authentic, engaging learning activities that are both online and face-to-face."[ii]*

Four working groups were set up to focus on the construction and renovation of learning spaces and the development of new education practices by the academic staff which became the UTS Model of Learning. This model is a framework for practice-oriented learning and teaching at UTS:

> *It guides how we design curriculum at UTS and links to the development of <u>graduate attributes</u> — essentially, what we want our students to become.*
>
> *The UTS Model of Learning has three distinctive features, or themes, that are interrelated in our students' practice-oriented learning experience:*

1. ***Integrated exposure to professional practice*** — *through dynamic and multifaceted modes of practice-oriented education*

2. ***Professional practice in a*** *global workplace* **—** *with a focus on international mobility and international and cultural engagement*

3. ***Research-inspired and integrated learning*** – *providing academic rigour with cutting-edge technology to equip graduates for lifelong learning[iii]*

The following working groups were set up:

- Student working group which reviewed enrolment, demographics, time spent on campus
- Curriculum working group based on the UTS model of learning with access to funds to support curriculum change and innovation
- Learning technology working group with a focus on online platforms to enhance content and student engagement with academics and peers
- Learning spaces working group who reviewed students' current use of spaces, researched best practice in other institutions and made recommendations based on the type of students who attended UTS. Pilot projects involved renovations to informal student learning spaces to make them more attractive to students and the redesign of a lecture hall to make it more conducive to the learning model.

Learning.futures

Learning.futures followed on from Learning2014. While the former was to scale best practice and improve learning spaces, Learning.futures is:

> *"..committed to innovating the way students learn and what our teachers can do to support that learning. By combining future-focused curriculum with informed technology use, and championing an approach to learning design that places students at the centre of the creative learning experience."*

The two initiatives inspired a range of new spaces across the UTS campus to support innovation in teaching and learning. The spaces have been designed to support both informal and formal learning and enable both students and staff to collaborate and interact. The various spaces are described and illustrated below:

Collaborative theatres

New collaborative theatres facilitate multiple forms of engagement including lecture presentations, collaborative group work and technology-enabled activities. Many spaces can facilitate larger classes and then be switched to enable smaller group work.

Collaborative pods

These spaces are open for students to use any-time of the day and provide opportunities for technology-enabled project group work.

Hybrid spaces

Situated in Learning Commons, hybrid spaces and are primarily for informal learning. These spaces can also be booked by academics for occasional use to explore different teaching and learning approaches. These spaces lend themselves to learning and research events involving the wider community.

Learning commons

These spaces support students in their activities throughout the day. Found throughout the campus, these spaces are the perfect spot for quiet study, team meet-ups or simply a place to hang between classes.

Specialist labs and research facilities

The newly opened Tech Lab houses a range of specialist labs and research spaces that have been custom designed and constructed. Led by the Faculty of Engineering and IT (FEIT), Tech Lab is designed to facilitate new, integrated ways of researching and developing innovative technologies. It accommodates a range of multidisciplinary, specialist labs with state-of-the-art equipment. Housing them in one location creates new opportunities for cross-pollination of knowledge and innovation. They include:

- Advanced Testing Lab for Structural Dynamic Research
- Acoustics Lab
- Structural Testing Facility
- Multimedia Data Analytics Lab
- Motion Simulation lab

A review was carried out as to the importance of learning spaces were to students. The results are illustrated in the chart below and indicate the significance of redesigning these spaces to match the UTS Model of Learning.

Learning spaces: importance vs. performance
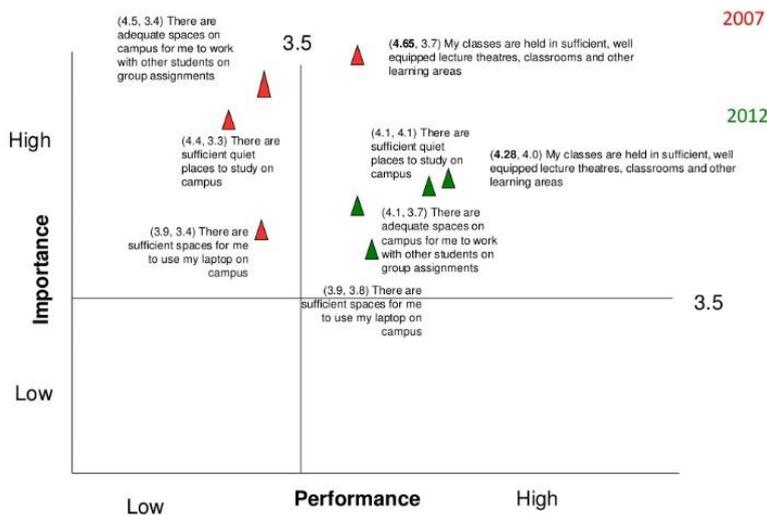
However, and like its predecessor, Learning2014, learning.futures is not just focused on learning spaces. Its focus is on **"how students learn and then what teachers should do to support that"**, combining **"the best of online and face-to-face teaching** *and make use of the new spaces on campus that have been designed to accommodate approaches such as flipped and collaborative learning"*.[iv]

The projects that make up learning.futures include:

- the UTS Model of Learning
- the Graduate Profile framework
- the Graduate Workplace Success strategy
- ongoing innovation in curriculum design

Table 1 below outlines the differences between previous approaches and the learning.futures approach and the learning that came for the former and applied to the latter. For example, the importance of what students can *do* with what they know rather than simply what they know; a greater focus on online learning *blended* with face to face learning; greater use of digital media in addition to traditional resources and changes in pedagogy to make lectures and tutorials more interactive and collaborative.

	EARLIER WAYS	LEARNING.FUTURES
CURRICULUM DESIGN		
LEARNING AT UTS	Practice-oriented learning	UTS Model of Learning: practice-oriented, global and research-inspired
WHAT IS IMPORTANT	What students know	What students can do with what they know and how they do it
SUBJECT DESIGN	Dot point list of content	Linking 'what students can do with what they know' to objectives, learning activities and assessment
GRADUATE ATTRIBUTES	Largely not identified or included	Faculty or course-specific attributes identified, embedded and assessed
STUDENT EXPERIENCE		
LEARNING ACTIVITIES	Primarily lectures, with tutorials, labs or studios and UTSOnline.	Best of online learning combined with best of face-to-face collaborative learning with UTSOnline engagement
LEARNING RESOURCES	Notes from class, readings from Library and textbooks.	Podcasts, screencasts, YouTube, Open Education Resources, online learning resources, readings and digital resources from Library, social media and textbooks
ON-CAMPUS LEARNING EXPERIENCE	Primarily lectures and tutorials, structured labs, individual studios.	Primarily collaborative learning activities. Some lectures/ guest presentations, inquiry-based and research labs and studios
OFF-CAMPUS LEARNING EXPERIENCE	Assignments, studying for exams, UTSOnline engagement.	Engaging in 'real-life' experiences including work placements, community projects, competitions. Preparing for on-campus learning including engaging with podcasts, online material, pre-readings, online tutorials, and engaging in group work, doing assignments, undertaking research.
ASSESSMENT	"What can you remember?"	"What can you do with what you have learned?"
FEEDBACK	Lecturer and tutor feedback on completed work.	Diagnostic feedback. "Benchmarking" and discussion of criteria. Feedback on draft work. Lecturer, tutor and peer feedback. Self-assessment and reflection.
STUDENT SUPPORT		
TRANSITION TO UNIVERSITY	Orientation before week 1, peer support	Orientation. Transition support during semester. Numerous "First Year Experience" project outcomes, peer support.

Table1: the progression from Learning 2014 to learning.futures

Academic support

A learning.futures Academic Hub has been up serves as a one-stop shop for academic staff. Whether you academics need help with subject design, technical assistance or anything else related to learning and teaching, they are guaranteed that they will not walk away from the Academic Hub without a solution to their issue, or at least a pathway to finding a solution. Examples of support are posted on the learning-futures website as in Figure 2 below.

Figure 2: Events to support UTS staff in developing new teaching and learning approaches [Source: https://futures.uts.edu.au/events]

Also see https://sr.ithaka.org/publications/making-a-place-for-curricular-transformation-at-the-university-of-technology-sydney/

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[i] UTS Strategic Plan 2009-2018 https://www.uts.edu.au/about/university/uts-strategic-direction

[ii] Alexander, S. (2018) UTS Learning 2014 Festival Programme. Available online at https://www.uts.edu.au/sites/default/files/article/downloads/Learning2014FestivalProgrammeFinal_0.pdf

[iii] https://www.uts.edu.au/research-and-teaching/learning-and-teaching/uts-model-learning/uts-model-learning

[iv] learning.futures. What is it exactly? https://www.uts.edu.au/sites/default/files/article/downloads/What-is-learning-futures_0.pdf