REVIEW OF ACTIVITIES

1. Transforming our **student experience** through a flexible, **integrated and partnered learning environment**

The success of our students and the quality of their educational experience is very important to UQ. We will continue to adapt to changing expectations brought about by advances in technology, increased competition, and structural reform of the workforce and economy as we prepare our students for an unpredictable future. Implementing our *Student Strategy 2016–2020* is a key priority.

UQ's reputation for global student exchange helped attract 62 Australia Awards – Endeavour Scholarships and Fellowships for 2018, the most of any university in Australia.

KEY PERFORMANCE INDICATORS

STUDENT EXPERIENCE

An improvement in our global reputation

Times Higher Education Academic Reputation Survey results[1]			
	2016	2017	2018
Teaching reputation votes: UQ rank within Go8	5	5	6

A student satisfaction rating that is within the top 5 nationally

Student satisfaction survey results[2]					
	2013	2014	2015	2016	2017
National effective rank of undergraduates (both first and last year) satisfied with the overall quality of the entire educational experience	6	11	11	8	6

An improvement in graduate employment outcomes

Normalised graduate full-time employment rates four months after graduation[3]			
	2016	2017	2018
Graduate full-time employment rate for domestic undergraduates four months after graduation	0.86	0.87	0.90
Graduate full-time employment rate for domestic postgraduates (coursework only) four months after graduation	0.93	0.93	0.97

[1] Source: *Times Higher Education* Datapoints.
[2] National effective rank after accounting for statistical significance; Source: Student Experience Survey.
[3] Normalised against the state full-time employment rate; Source: *Graduate Outcomes Survey* and 6202.0 Labour Force Tables (Australian Bureau of Statistics).

1.1 Expand opportunities for students to develop their employability.

Entrepreneurship and Innovation (E&I) Strategy

During 2018, UQ developed a new *Entrepreneurship Strategy 2018–2022,* with more than 840 people sharing their views during the consultation process. The strategy seeks to build on the range of entrepreneurial and employability activities at UQ, with strategic objectives to inspire and empower ideas that create change, embed entrepreneurship across UQ, and foster enterprising partnerships.

In October, UQ's Dow Centre for Sustainable Engineering Innovation invited students to submit innovative ideas with a tangible engineering focus that address global sustainability issues through the production and use of energy and materials.

Thirty-three students received a share of the $57,500 Sustainability Innovation Student Challenge Award prize money. First prize went to business and IT student Ashley Baxter and chemical engineering student Ashley Chiam, who pitched a unique composting system that can turn 100 kilograms of organic waste into 10 kilograms of fertiliser a day.

Ashley Baxter also took part in the UQ Idea Hub Startup Adventure to Shanghai, a fully funded global internship program. More than 40 students took part in this program in Shanghai and Tel Aviv, with plans to expand to San Francisco and Singapore in 2019. UQ Idea Hub also had 615 participants in its six-week extracurricular core program, including sessions tailored for PhD students; the LeadHers program for women; and the UQ Weekend of Startups. Applications rose by 68 per cent between 2017 and 2018.

Ashley Baxter and Ashley Chiam, Sustainability Innovation Student Challenge Award winners.

Through UQ's ilab startup incubator, 41 startups were supported, while a HYPE UQ SPIN Accelerator program pitch event was held during the Commonwealth Games to encourage sports innovation.

Employability framework

Between 2018 and 2020, UQ is investing almost $12 million in employability initiatives. In 2018, initiatives conducted included:

– Global mobility opportunities to support more than 1200 students to access global experiences that enhance their intercultural competencies and employability through experiential learning and professional development. Activities supported included study abroad, volunteering, internships, rural and remote placements, and presentation of research outcomes at global conferences. A number of hardship grants also enabled students with limited financial resources to access opportunities otherwise beyond their reach.

– Through an embedded collaborative model in partnership with faculties, student clubs and societies, and industry partners, the Student Employability Centre delivered discipline-specific career development learning and work integrated learning services for staff, students and employers. To ensure that this service was responsive to needs and fit-for-purpose, collaborative agreements were developed with faculties, enabling this model to be sustainable, scalable, and context-relevant across a comprehensive university.

Siemens software grant

In November, UQ received a software grant of more than $500 million from Siemens Australia to give students and researchers from many disciplines access to advanced technology—building their skills in digital and data-driven industries and preparing them for an evolving workforce.

The grant includes licences for the Product Lifecycle Management software platform, which digitally tracks a product's life from its design inception through to manufacture, use, maintenance and disposal, and is part of Siemens' commitment of more than $1 billion in advanced software grants to selected universities nationally.

The announcement was linked to the recommendations and work of the Industry 4.0 Advanced Manufacturing Forum—an industry-led group established to support improved collaboration between Australia and Germany on preparing industry for the fourth industrial revolution.

Siemens has previously collaborated with UQ on projects such as medical imaging and health.

Dandelion Work Experience Program

University students with a range of neurodiverse traits boosted their employability through a three-week paid work experience program designed to help them break down barriers, gain skills in robotics, and make vital connections to potential employers. Specifically targeted at students with autism spectrum disorders, the Dandelion Work Experience Program was launched in mid-2018 and offered through UQ's Neurodiversity Hub, which was established in partnership with DXC Technology in 2017 to support students with diverse needs.

Career Development Framework (CDF)

UQ aims to develop well-rounded and capable higher degree by research graduates who understand their personal strengths and have gained the graduate attributes that link to building a career and contributing to society. UQ's CDF provides candidates with opportunities to engage in development workshops and experiences that provide a range of transferable, professional and research skills, fully integrated into their research program. Year-on-year participation has increased by 10 per cent with high satisfaction from participants.

International exhibition

In collaboration with Monash University, and with the support of the Terra Foundation for American Art and the cooperation of the Holt-Smithson Foundation, the UQ Art Museum exhibited *Robert Smithson: Time Crystals* from 10 March until 8 July 2018. Drawing together key works of sculpture, film, photography, drawing, prints and texts from the Smithsonian Institution's Archives of American Art, the exhibition attracted large crowds to view artworks, personal papers and preparatory sketches by one of the most influential artists of the 20th century, much of whose work had never been seen in Australia.

UQ students from multiple disciplines— including physics, information technology, earth sciences, literature, art history, museum studies and philosophy—immersed themselves in the experience. Students were involved in industry-specific training and practice, using the exhibition and its accompanying events as focal points for analysis and inquiry.

▶ Related initiatives for 1.1	
1.4 Students as Partners	pg 19
2.4 Dow Centre partnership	pg 22
4.6 ilab	pg 31

1.2 Configure our pedagogies, assessment and learning spaces to encourage active and collaborative learning.

Student Strategy

Building on the 2017 Student Strategy initiatives, the implementation of the Student Strategy expanded further in 2018 with an additional investment of $7.99 million allocated towards the 2018 Tranche initiatives of:
– blended learning
– professional learning
– enhancing employability
– Students as Partners
– Program Architecture Review – Phase 1.

To oversee the ongoing implementation of these initiatives, a Student Strategy Governance Group was established to provide strategic guidance and oversee the investment of Student Strategy funding. This group was supported by a Blended Learning Steering Group and a Student Employability and Engagement Steering Group to oversee the implementation of related Student Strategy initiatives.

Assessment integrity

UQ continues to work hard to embed a culture of academic integrity through educating students and staff to build an institutional ethos of integrity that encourages a code of honesty.

In 2018, a locally developed, revised Academic Integrity Tutorial, housed on the UQx platform, was introduced more widely, and a trial of Authorship Investigation, a TurnItIn tool aimed at identifying contract cheating, was undertaken.

Learning Space Roadmap

High-quality learning space is critical to the University's mission. To address the current and projected undersupply of informal and collaborative formal learning space, the development of a Learning Space Roadmap was commissioned in 2018.

Bush foods of Australia is just one of the many exciting courses on offer to UQ students, including those who have travelled to the University from overseas on Study Abroad experiences.

This will support the increased use of on-campus learning space that will underpin changes in curriculum towards more active and collaborative pedagogy. The Roadmap was developed by a working party comprising academics, professional staff and student representatives, who undertook broad consultation. The draft Roadmap has been endorsed for further development.

Integrated learning environments

Since 2013, UQ has doubled informal learning spaces at St Lucia, Gatton and Herston to 5280 seats. With the majority of seats available in UQ libraries, these spaces are an intrinsic part of UQ's commitment to create integrated learning environments for our students. The Library continued its refurbishment program in 2018 in both the Dorothy Hill Science and Engineering Library (DHSEL) and the Social Sciences and Humanities (SSAH) Library. Work is currently underway to refurbish Levels 1 and 2 of the SSAH Library, to continue our investment in better learning environment for students.

▶ Related initiatives for 1.2	
1.4 Students as Partners	pg 19
1.7 Program Architecture Review	pg 20

1.3 Expand online and digitised delivery to provide students with flexibility to engage with learning in a way that suits their personal needs.

Blended Learning

The Blended Learning program commenced in 2018, with the initial phase of the program aiming to redevelop the student learning experience across more than 60 of UQ's largest courses by 2021. The work is a collaboration between faculty course coordinators and teaching teams, students, and the Course Design and Development Group in the Institute for Teaching and Learning Innovation. The teams are

developing courses with blended learning formats that feature a combination of high-quality online and on-campus active learning experiences to provide our students with greater flexibility to personalise their learning and enjoy a more engaging learning experience.

Seventeen courses were completed in 2018 for delivery in 2019, including two courses for which a collaborative agreement was signed with Monash University to co-develop online teaching resources.

Digital Essentials

Through its Digital Literacy Taskforce, the Library created Digital Essentials, a series of online modules designed to help students develop and test their digital skills, which UQ schools have begun integrating into their programs. The four basic modules—*UQ systems, Digital citizenship, Internet essentials* and *Communicate and collaborate online*—precede a range of advanced units.

Other important teaching capability improvements included a full review of the Virtual Learning Environment, the Bring Your Own Device (BYOD) policy, the eAssessment project, a pilot of an Authorship Investigation tool, direct SI-net grades transfer capability, and an in-course help tool for students. Groundwork was also laid for the deployment of an in-class active learning tool 'ALP' for all courses during 2019, further enhancing classroom interactions.

IT capital investment

Throughout the year, UQ's Information Technology Services (ITS) worked in partnership with internal stakeholders to provide innovative solutions aimed at enabling a personalised experience, tailored to the individual needs of students, academics and alumni. Several initiatives were introduced to fulfil UQ's ambition of providing the best network and personalised experience in the Australian higher education sector:

– **Class sign-on**, a critical process for UQ students at the start of each semester, involves selection of specific lectures and tutorials. ITS released significantly improved class sign-on functionality for Summer Semester, delivering a mobile-friendly capability for enrolment and class sign-on, significantly enhancing the student experience. Future enhancements will offer alternatives to the current competitive class allocation process, and provide richer functionality for students to manage their classes.

– **WiFi coverage** increased substantially with the deployment of more than 3390 indoor access points across UQ campuses. Outdoor accessibility is also being improved with the deployment of 132 outdoor access points completed at St Lucia, and 24 at Gatton. The increase in access points provides a seamless transition between classroom and outdoor environments, while the underlying wireless infrastructure is also enhancing students' digital experience with the ability to deliver more media-enriched applications across the wireless network.

– The **Analytics Data as a Service** initiative aims to deliver both a technical platform and practices to support an advanced analytics capability across UQ. IT has delivered a variety of relevant upstream data sources, the curation and storage of pertinent datasets in a Data Lake environment, and distribution of key datasets to downstream stakeholders engaged in a variety of analytics programs. Data Analytics will facilitate the transformation of data assets into useful information to support University decision-making and business performance analysis.

– A five-year program commenced in 2018 to replace dated and unsupportable **audio visual equipment** in teaching and meeting spaces across all campuses, with modern digital high-definition systems to improve the learning environment and interactivity for students.

2018 saw the refurbishment of the JK Murray Library at UQ Gatton, which included a new auditorium.

▶ Related initiatives for 1.3	
1.4 Students as Partners	pg 19
5.4 Website updates	pg 34

1.4 Strengthen partnerships between students, researchers, industry and alumni to create a more collaborative approach to teaching and learning.

Teaching and Learning Plan

Development of a Teaching and Learning Plan to underpin the UQ Strategic Plan and to provide research-led direction for implementing a suite of revised Teaching and Learning policies was undertaken in 2018. A draft Plan was released for comment and further development continues to be informed by university-wide consultation via committee networks. The Plan is a companion piece to the Student Life Plan and will, in turn, be supported by subsidiary roadmaps in the areas of learning space, professional development, and eLearning.

Students as Partners

The Students as Partners initiative provided valuable opportunities for students and staff to partner in the enhancement of the UQ student experience. Around 300 student partners, 100 academics, and 50 professional staff collaborated on more than 110 projects across the University. These ranged from co-designing curriculum content and developing digital learning modules, to developing inclusive career learning pathways and contributing to University strategy. UQ hosted a Student-Staff Partnerships Showcase in October with 114 delegates from 18 universities attending.

Professional Learning

Work continued during the year on this initiative, which aims to support a transformed approach to the student experience through the expansion of continued professional learning of university educators through a range of diverse pathways. These will be underpinned by the development of a Teaching Expertise Framework and Professional Learning Roadmap.

Higher degree by research (HDR) placements

In 2016, the Australian Council of Learned Academies review of research training in Australia emphasised the importance of producing graduate researchers equipped with broad skills and abilities for a variety of careers, and recognised the value of industry placements for HDR students. In support of this finding, the Graduate School facilitates industry experiences

Third-year journalism students Kirsten Slemint and Shi Pui Ng participated in the Students as Partners project pilot Co-creation and evaluation of FutureLearn materials in COMU1120, *which aimed to reposition students and staff as active collaborators in the process of teaching and learning enhancement.*

to enable HDR students to gain current practice experience and develop networks while demonstrating and strengthening their skills and capabilities. In 2018, UQ's Graduate School organised more than 70 placements, offered through partnerships with government, industry and the not-for-profit sector.

▶ Related initiatives for 1.4	
1.3 Digital Essentials	pg 18
1.5 Student Life Plan	pg 20
2.2 Research networks	pg 22
3.3 Brand refresh	pg 26
3.4 CX implementation	pg 26
5.4 Grievance process	pg 34
6.2 Research pipelines	pg 36

1.5 Develop our campuses to create a more vibrant learning environment that integrates on-campus learning, community engagement and student life.

Student Hub

The University is continuing to investigate the development and construction of a new integrated, multi-functional, purpose-built Student Hub complex that will house the student union, clubs and societies, retail outlets, formal and informal learning spaces, student services areas, as well as student commons. It is envisaged that the facility will provide students and staff with a sector-leading facility, underpinning the University's academic purpose.

In line with the Student Hub program, development work is continuing to investigate a new high-quality Fitness and Wellness Centre on the St Lucia campus. The objective for such a facility would be to complement the Student Hub, promoting the mental and physical wellness of students and staff. A Fitness and Wellness Centre would be the cornerstone of a Recreation Precinct, which could include an outdoor gym/circuit, five-kilometre running track, additional outdoor basketball courts, an educational playground, a community garden and barbecue areas.

Campus facilities

Work began during the year on the refurbishment of two time-honoured complexes at the St Lucia campus.

A new food court to replace the existing Physiology refectory is due to open in Semester 1, 2019, with seven food outlets, a self-service food preparation kitchen with microwaves, more indoor and outdoor seating, and improved access for people of all abilities.

The UQ Union is set to operate enhanced student leisure activities and services from Building 41 (the old Staff Club). The building will be redeveloped to include the student bar (the Red Room), indoor and outdoor dining, along with function and conference spaces. It will overlook the Natural Amphitheatre, which will also be upgraded to include an outdoor stage with permanent audio and lighting equipment, and capacity for a large audience.

The refurbishments are part of UQ's commitment to enhance campus facilities and services and make pivotal changes to the way higher education is imagined and experienced.

Student Residences Project

Through extensive market research and analysis, it was confirmed that the University is in need of developing additional on-campus, purpose-built student accommodation to supplement the current offerings and provide students with further accommodation choices. The project is currently in the feasibility stage and it is anticipated that a final business case will be available during the second half of 2019 for consideration by Senate.

Student Life Plan

Preparing graduates for life's uncertainties defines the student experience at UQ— graduates who embody curiosity, passion and a hunger for learning throughout their lives. A Student Life Plan seeks to help students engage with that experience by improving accessibility, services and opportunities, fostering wellbeing, and engendering a sense of belonging with UQ and its community.

The University has embarked upon the process of adopting a UQ Student Life Plan, which will act in tandem with a UQ Teaching and Learning Plan. Together, these two plans will guide enhancement of the UQ student experience, and support UQ's Strategic Plan and Student Strategy. The *UQ Student Life Plan 2018–2021* will be where UQ records its goals, approaches, and actions that guide our collective commitment to helping our students with life during their studies.

The Plan focuses on aspects of student life that have the highest impact for large numbers of students. It will naturally highlight areas for development and improvement, but also capture the tremendous efforts already made by staff and students.

Work began on the development of two new student recreational complexes at the St Lucia campus in 2018.

▶ Related initiatives for 1.5	
1.1 Employability framework	pg 17
1.2 Student Strategy	pg 17
1.4 Teaching and Learning Plan	pg 19
4.2 Childcare	pg 29

1.6 Adjust our approach to the development of educational offerings so that there is a greater focus on the whole program.

Online master's degree

In October 2018, UQ launched a fully online postgraduate coursework program through the edX platform, the Online Master's Degree (OMD) in Leadership in Service Innovation. This program adopts a cross-disciplinary perspective aimed at developing the transformational mindset needed for leaders in a rapidly changing world. The program is a natural progression to UQ's activities in the eLearning space, following the popularity of its MOOCs and four MicroMasters, which have achieved more than 2.5 million course registrations.

New and enhanced programs

In 2018, UQ introduced several new programs in response to local and international demand:

– Bachelor of Advanced Business (Honours)
– Bachelor of Computer Science
– Graduate Certificate in Magnetic Resonance Imaging and Positron Emission Tomography
– MicroMasters in Sustainable Energy, and Corporate Innovation (via UQx)
– Master of International Relations/ Master of Peace and Conflict Studies
– Master of Entrepreneurship and Innovation
– Master of Development Economics/ Master of Economics and Public Policy
– Master of International Economics and Finance/Master of Commerce.

The Bachelor of Engineering (Honours)/ Master of Engineering became accessible from first year; the Master of Engineering and Master of Engineering Science offered majors for the first time, including in Fire Safety Engineering; and a Mining Leaders Program, a blended learning professional development program offering credit and pathways towards the existing Graduate Certificate in Executive Leadership and MBA qualifications, was launched.

▶ Related initiative for 1.6	
5.4 HDR administration	pg 34

1.7 Explore opportunities to make our academic calendar more flexible.

Program Architecture Review

The Program Architecture project, launched in 2018, aims to enhance the UQ student experience by reviewing and simplifying program structures and teaching-related policies and procedures. This will enable a more flexible and sustainable approach to program design in order to foster greater responsiveness to a changing world and greater interdisciplinary collaboration. It will be achieved through the delivery of a streamlined portfolio of programs and courses underpinned by rules and policies that are enabling, consistent and transparent. In addition, the work undertaken will examine the extent to which a simplified program architecture can be designed to enable a more agile program structure with an increased potential for interdisciplinarity, including the possible integration of cross-cutting courses and other kinds of innovative learning activities.

Expected benefits include:

– improving retention and progression
– improving timetabling and facilitating the transition to a flexible academic calendar
– improving the quantity and quality of student interaction with staff
– fewer student appeals based on administrative error
– more timely and accurate responses to student enquiries
– automated advice based on consistent policies
– greater support for complex learning needs and mental health
– greater emphasis on program learning outcomes that equip students with core skills vital for future success.

▶ Related initiative for 1.7	
1.6 Online master's degree	pg 20

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2. Enhancing our high-quality research by improving our capacity to **collaborate** to achieve greater **impact**

While rightly proud of our research excellence, over the coming years we need to ensure that our research remains collaborative and continues to achieve great impact. To succeed in our focus areas of enabling healthy ageing, ensuring food security, supporting a resilient environment, developing technology for tomorrow, and positively transforming society, we will be outwardly focused, while at the same time working across disciplines internally.

KEY PERFORMANCE INDICATORS

RESEARCH IMPACT

An improvement in our global reputation

Times Higher Education Academic Reputation Survey results[1]	2016	2017	2018
Research reputation votes: UQ rank within Go8	5	4	5

An increase in normalised citations

Category Normalised Citation Impact (CNCI) score[2]	2012	2013	2014	2015	2016	2017[3]
UQ's rank within Go8 for CNCI score	2	2	2	2	6	6
UQ's Go8 rank on the proportion of publications that sit in the top 10 per cent globally[4]	2	2	2	2	2	4

Rank in the top 3 in Australia on national competitive grants income

Competitive Grants Category 1 research income[5]	2012	2013	2014	2015	2016	2017
UQ's national rank	3	2	2	2	2	2

Rank in the Top 65 global universities across all influential rankings

UQ's position in global university rankings	2014	2015	2016	2017	2018	2019
Academic Ranking of World Universities (ARWU)[6]	85	77	55	55	55	n/a
Times Higher Education World University Ranking[7]	63	65	=60	=60	65	69
QS World University Ranking[8]	43	=43	=46	=51	=47	48
Performance Ranking of World Scientific Papers[9]	56	45	43	41	43	n/a
U.S. News Ranking[10]	-	47	52	52	45	42

[1] Source: *Times Higher Education* Datapoints.
[2] Source: Incites Dataset within *Web of Science* and is based on a rolling six-year window; the document types included in this metric are Article, Review or Note.
[3] Figures for 2018 are preliminary. Data will be finalised in mid-2019.
[4] Based on performance around citations.
[5] Source: Department of Education.
[6] Source: Academic Ranking of World Universities.
[7] Source: *Times Higher Education.*
[8] Source: Quacquarelli Symonds.
[9] Source: National Taiwan University.
[10] Source: *U.S. News.*

2.1 Build a One UQ approach to acquiring, maintaining and utilising research infrastructure.

Research infrastructure model

In 2018, UQ transformed how internal and external researchers identify and access research infrastructure. For increased strategic operations and greater visibility, the University's research infrastructure was centralised and renamed as Central Research Platforms, a framework able to support future high-end research infrastructure and equipment. UQ is currently in the process of selecting a software solution that will give researchers and external collaborators ease of access to UQ's research infrastructure resources.

Transferring research data

A tangible step-change in supporting the research community is the reduction in time to transfer data generated by our research community. In 2018, UQ became the first university in Australia to install a 100 gigabit per second network switch, which will enable our Lattice Light Sheet Research Project to handle the large volumes of data expected to be generated by a revolutionary new microscope being installed at the Institute for Molecular Bioscience. The Lattice Light Sheet Microscope data collection—a new modality for 4D imaging of live biological specimens, ranging from individual molecules to small organisms—is expected to generate up to seven terabytes of imaging data per day. To move one terabyte of data at the present rate (one gigabit per second) can take approximately two hours; however, the upgraded links will reduce that transfer time to just over one minute.

▶ Related initiatives for 2.1	
1.3 IT capital investment	pg 18
5.2 IT governance	pg 32