

2019 Mission Based Compact

Between the Commonwealth of Australia and Macquarie University

PURPOSE

This compact is an agreement between the Commonwealth and the University. Entering into a compact is one of the quality and accountability requirements, which a higher education provider must meet under the *Higher Education Support Act* 2003 (HESA) as a condition of receiving a grant. Specifically, subsection 19-110(1) of HESA requires that Table A and Table B providers must, in respect of each year for which a grant is paid to the provider under HESA, enter into a mission-based compact with the Commonwealth for a period that includes that year.

All strategies should provide qualitative and/or quantitative measures of assessment.

MISSION

The primary focus of the University over the term of this compact

Macquarie is a university of service and engagement. In 2019, we continue to pursue the seven strategic priorities identified in *Our University: A Framing of Futures*:

- (1) commits the University to building a culture of transformative learning for our students in a research-enriched environment while (2) aims for accelerating and impactful performance in research.
- (3) aims to maintain a culture of caring for the well-being of all members of the community, particularly by building on our commitment to inclusiveness.
- (4) and (5) set out commitments to innovation and to consolidating and expanding our relationships with industry and broader society as well as to further building the University's international presence.
- (6) and (7) commit to ensuring that the University campus is vibrant and sustainable and that support services are best organised to achieve challenges ahead.
- The values and aspirations of Macquarie University, what it does and how it can best serve the interests of its students, staff and key stakeholders

To achieve its strategic priorities, the University commits to values of scholarship, integrity and empowerment: we believe learning, enquiry and discovery improves lives; we conduct ourselves ethically, equitably, and for mutual benefit; and we make our community a source of strength and creativity

The purpose of the University is to serve and engage our students and staff through transformative learning and life experiences; and to serve and engage with the world through discovery, dissemination of knowledge and ideas, innovation and deep partnerships.

 How the University has responded to the French Review recommendations to adopt the Model Code on free speech and academic freedom.

The University has welcomed the report of the Independent Review of *Freedom of Speech in Higher Education Providers* (the French Review). Both the Chancellor, the Hon. Michael Egan AO, and the Vice-Chancellor, Professor S Bruce Dowton, have publicly stated their strong support for the promotion of free speech on university campuses as responsible institutions in our democracy.

Freedom of speech and academic freedom are of fundamental importance to the life and vitality of a university.

The Model Code is consistent with the University's existing *Academic Senate Statement on Academic Freedom* which describes academic freedom as 'fundamental to the values that Macquarie University upholds and strives to cultivate in the wider society'.

The University recognises a duty to actively encourage freedom of speech. As our *Statement on Academic Freedom* says, 'The value of a university as a public institution depends upon its ability and its determination to create new knowledge and understanding, to challenge accepted ideas, test novel hypotheses, and encourage rigorous academic debate.' The *Statement* goes on to identify as a responsibility of the University, that it will 'place academic freedom principles at the forefront in conceiving and implementing its administrative and governance polices and processes.' The French Review has given us an opportunity to consider how well we are meeting this responsibility.

The Review is currently being considered by the University's Academic Senate which has recommended a number of changes to University policies on areas such as public comment and social media guidelines. The Senate has also facilitated consultation processes with staff and students on a University policy on freedom of speech which is now being finalised and will be considered by the University's governing Council

TEACHING AND LEARNING

Objectives and/or priorities for teaching and learning

The University's first strategic priority is to build 'a culture of transformative learning for our students in a research-enriched environment'. Over the past two years, the University has set about designing a curriculum for undergraduates and postgraduate coursework students which is 'fit for purpose for a changing world' with admission processes now open and courses to commence from 2020. In the context of this renewal process, Macquarie University is committed to:

- 1. Delivering transformative learning and teaching through the new student-focused curriculum architecture;
- 2. Providing quality learning environments and resources that will promote inspirational, intellectually challenging and inclusive learning and teaching;
- 3. Designing micro-credentials that afford opportunities for focused learning, development and recognition of employability skills and achievements;
- 4. Integrating and advancing technology-enhanced learning and teaching;
- 5. Identifying how the digital capability of staff and students can be developed to support student success, particularly in the future world of work;
- 6. Providing effective learning support and systems to engender high rates of student retention, progression and achievement;
- 7. Engaging staff in planned continuous professional development and capability enhancement;
- 8. Progressing collaborations with industry and community partners to enhance students' learning; and
- 9. Producing graduates who will be highly employable, globally connected, civic minded, and future-focused 21st century citizens.

The operational plan for the implementation of the above objectives and priorities is currently being finalised as part of a refreshed *Learning and Teaching Strategic Framework*.

The University is also currently implementing the Mudang Dali, Indigenous Connected Curriculum

Framework, a priority of the <u>Macquarie University Indigenous Strategy 2016-2025</u>. Indigenous knowledges and perspectives will be embedded into all curricula and across all faculties and disciplines as an important part of the student learning experience and development.

Strategies to ensure quality in teaching and learning

The University is currently implementing a <u>Student Success Strategic Framework</u> which is designed to support students in all aspects of their university experience: academic success, personal growth and professional development, community and industry partnership, connected information, services and support, and campus environment.

A key part of the implementation of this Framework is through the Student Success Network, a crossfunctional community of practice that brings together the wide range of professionals who provide student-facing service and support across the University. Network objectives include:

- developing and leading the implementation of initiatives aimed at improving the quality of student experience and success outcomes for all cohorts;
- developing effective cross-unit relationships to promote a holistic approach to student success as well as timely resolution of student issue;
- identifying and reviewing processes and policies to improve alignment with student success objectives including making recommendations for change where appropriate;
- identifying and sharing information, best practice, benchmarking and data relevant to functional areas and student success; and
- advising and making recommendations about student success and experience to the University executive and other key stakeholders.

A dedicated Student Transition and Retention team has been established with responsibility for implementing student engagement and early intervention strategies aimed at improving student retention and progression. Student data is used to identify students at risk of non-completion and to inform targeted campaigns/intervention initiatives to address their specific needs and maximise their opportunity to succeed. Results of these initiatives are used to inform business processes and practices and to secure ongoing investments in this area.

A key responsibility of the Transition and Retention team is to carry out calling campaigns to proactively engage and support students throughout their lifecycle with the University. The call out campaigns have been successful in better identifying individual student needs and circumstances impacting on their studies, better promoting University support services available to students and informing more effective communication strategies. Examples of campaigns carried out this year involved reaching out to:

- Students "at risk" of being excluded due to academic poor academic progress and promoting support services and offer assistance to these students;
- New undergraduate students to promote support services available to assist them with
 exams preparations and managing exams stress. The Team contacted those students a
 second time to close the loop and seek feedback on the whether they found the support
 services useful; and
- Students who are currently admitted in courses but not enrolled in any units to explore the
 reasons preventing their enrolment, to encourage them to enroll where appropriate, and to
 identify the reasons behind their disengagement.

A Student Communication Framework has been developed to provide targeted and student-centric communications to students using a variety of media about University processes, and services to guide and support students at every stage of their journey with the University. In line with the

Student Success Strategy, this Framework aims to support a seamless student experience by providing Macquarie students with information that is personalised, accurate, consistent and timely.

 How the University selects students for offers without an ATAR score, as part of its admissions process

In Session 1 of 2019, the University admitted only 14 per cent of undergraduates solely on the basis of their ATAR results, including adjustment factors. Another 25 per cent were admitted on the basis of past study in higher education; 13 per cent through international recruitment processes; and 6 per cent on the basis of their work and life experience. A total of 40 per cent were recent secondary students admitted through pathway programs.

Three major pathway programs are designed to attract students to the University on factors rather than their ATAR results:

- The Leaders and Achievers program is aimed at students who have made an active and significant contribution to their community, who show initiative and commitment, and who can demonstrate academic achievement through their Year 11. Entry is based on Year 11 results combined with a recommendation from the student's school and letters of support from community organisations;
- The Schools Recommendation Scheme also takes account of Year 11 academic achievements and the school's rating of the student's learning ability and aptitude; and
- The Academic Entry program reviews students' performance in individual HSC subjects that correspond to our degrees and then makes an offer to them, dependent on their performance in these subjects. This enables students with strengths in a particular area to build on these strengths rather than potentially being held back by lower performance in unrelated subject areas.

The University's Macquarie University College offers diplomas which start at the same time and have the same cost as for first year degree study and which allow successful students to then move into Year 2 of their bachelor degree. We also offer a standard foundation (four term) program and an intensive (two term) program. For the Diploma programs, applicants must have a Year 12 or equivalent qualification with a minimum ATAR of 60 and for the Standard Foundation and Intensive programs, they must have completed Year 11 with an overall average mark of 50 per cent. All of these programs are taught in seven-week blocks and students receive personalised attention through our small class sizes with teaching and learning activities designed to improve university-level study skills and academic knowledge. Students also have the option of completing free, non-credit bearing English and Mathematics modules to support their progression and academic success.

Our *Next Step Pathway* is also designed for students who don't meet the entry requirements for a Macquarie bachelor degree. Applicants can have completed the HSC within the last two years and have achieved a minimum ATAR of 50. Or they can be non-school applicants (where their HSC or equivalent was completed more than two years ago or when they are over 21 years of age). These students study four units part-time on campus and when the four units are successfully completed, can secure a place in one of 18 Macquarie degrees.

The Special Tertiary Admissions Test (STAT) is another alternative entry method which, rather than testing knowledge of specific academic subjects, assesses a range of competencies important for success in tertiary study, including the applicant's ability to think critically and analyse material. The STAT is available for non-school leavers who were not able to gain a sufficient ATAR rank for an initial Macquarie offer and gives entry to many of the University's bachelor degrees.

Finally, and very importantly, the University has an Aboriginal and Torres Strait Islander Entry Pathway (ATSIEP) which provides opportunities for Aboriginal and Torres Strait Islander students to study in most undergraduate level courses. This pathway is for applicants who haven't completed the HSC or equivalent, who received an ATAR score lower than is required for admission to their chosen course, or who are mature age. The selection process has two stages: a written application and an

interview. The written application includes an educational history (e.g. copies of TAFE transcripts, or a latest school report), a statement of work experience, and a statement outlining the applicant's aspirations for attending university. All applicants then attend an interview to determine their readiness to undertake university study. The interview further explores educational background, work experience, communication skills, aspirations and motivation.

Macquarie University is adding to this pathway for Aboriginal and Torres Strait Islander students by adding a new option for 2020. The Critical Thinking Entry Pathway provides an opportunity for eligible Year 11 students to undertake a university unit while completing their HSC. Successful completion of this approved unit in critical thinking provides the student with an offer into a variety of undergraduate degrees at the University.

• What evaluation strategies are in place for ensuring that students admitted without an ATAR are likely to succeed in their studies.

We conduct an analysis of pathways and their performance twice a year after each census date. Our 2019 review of Session 1 commencements confirmed that students from alternative pathways are performing at least as well as students coming in through the ATAR pathway on measures of success, GPA average and retention. Indeed, our cohort analysis shows that many of these pathways perform better than the ATAR cohort in specific courses.

Detailed information is available on success rates for students in their first year of enrollment after admission for the period from 2015 to 2018. The rate for those admitted on the basis of ATAR results has remained steady at about 89 per cent (the most recent figure is 88.8 per cent in 2018). By contrast, students admitted under the Leaders and Achievers program have succeeded at rates between 92.9 per cent and 96.6 per cent (94.1 per cent in 2018). And students admitted under the Academic Entry program have succeeded at rates between 82.8 per cent and 92.7 per cent (84.9 per cent in 2018).

Oversight of success rates is a responsibility of the Revenue Student Numbers and Planning Group, chaired by the Deputy Vice-Chancellor (Academic). Twice a year, student success is examined through a range of filters including admission pathway and course enrolment. Within Faculties, success is also monitored at the unit level through Unit Moderation exercises held after every teaching period. In these departmental meetings, student success for each unit of study is examined and a report, including any proposed mediations, forwarded by the head of department to the faculty's executive dean.

The University is currently renewing Quality Assurance, Enhancement and Improvement processes across its offerings. This work, including the introduction of annual course health checks and an enhancement of the periodic review process, will incorporate nuanced and course-based success benchmarks set against specific comparator institutions and sector norms. Data-based risk analytics will contribute the implementation of course improvements.

• Strategies to reduce the proportion of students that do not complete their course (including for students from regional and remote areas)

The Student Success Strategic Framework (discussed above in material on strategies to ensure quality in teaching and learning), has been designed to improve student retention and progression. In addition, the University engages with students and their communities as part of outreach efforts to build both student ambitions and the community support that will help them to success.

To help students better prepare for university study, the *LEAP ROADSHOW* was implemented in 2018. This program engages students and families from low-SES backgrounds by bringing a taste of university to regional areas. The University's approach to regional outreach is multipronged, engaging high schools during the day and parents and community members after hours. In response to data which showed a correlation between early introduction of the concept of higher education and future participation, Macquarie initiated a new feature of its roadshow activities in late 2018 by

conducting roadshow activities for stage 4 (upper primary) students. Pilots were conducted with primary school students, initially in Alma Street Public School, Broken Hill.

LEAP inROADS also began in 2018. The program builds on the roadshow experience by inviting regional students, who we visited in the previous year, to have a deeper on-campus experience with more targeted information about university, as well as continuing to build relationships with communities established during the *LEAP ROADSHOW*.

In 2018, *LEAP ROADSHOW* and *inROADS* successfully engaged over 500 students and over 200 community members from regional areas of NSW, including the Far West, Riverina and Mid North Coast. In 2019, these programs continue to provide an important platform to build upon our strong partnerships within these communities.

To monitor success rates for all students, an annual course health dashboard is being prepared for launch in 2020. This will drive continual improvement and will alert the University to completion issues in individual courses. Indicators in the dashboard will include retention and completion data, as well as other diagnostic data points including student success, average completion time, GPA/WAM averages, and progression.

Planning is also underway on a major learning analytics project for 2020 that will draw together new and hitherto unconsidered insights into the student learning journey via a range of new data points held within such institutional repositories as the student management system and the learning management system.

 Evaluation of these strategies, including follow-up with students who do not continue with their studies to better understand the reasons for this decision.

During each teaching session over the past two years, the University has contacted students who are admitted to the University but have not enrolled or who are subject to conditional enrolment and are at academic risk. (They are contacted through personalised email broadcasts, phone calls, or webform engagement.) The goals here are to assist students with reenrolment, or to find out why they want to discontinue so we can apply these findings to better support our students, or to discuss their conditional enrolment arrangements and what they need to do to demonstrate improvement.

In Session 1 this year, 23 per cent of those contacted who were admitted but had not enrolled advised that they either would enrol or were likely to enrol in Session 2. Another 30 per cent asked to discontinue, mostly because they had transferred to another university. Nearly 50 per cent of the total figure do not want to discontinue but are finding it impossible to study at this stage because of their personal circumstances. They struggle to combine life, work and study.

A review of Aboriginal and Torres Strait Islander student engagement in 2017 provided the impetus for a dedicated Academic Engagement Coordinator to counter high attrition among first year students. A program was developed which involved a series of pre-semester events and the employment of 50 First Year Advisors to provide tutoring and mentorship to first year students.

A pilot cohort of 93 commencing Aboriginal and Torres Strait Islander students participated in the first-year engagement program in 2018. Evaluation of the program's second year, 2019, will commence shortly but is expected to confirm the very strong results of 2018: retention of first year Aboriginal and Torres Strait Islander students rose from 68% in 2017 to 91% in 2018; first year Aboriginal students utilizing tutoring rose from 28% in Semester 1 2017 to 73% in Semester 1 2018; the percentage of units passed by first year Aboriginal and Torres Strait Islander students rose from 57% in 2017 to 77% in 2018; and the percentage of first year Aboriginal students who passed all their units rose by 20.5% while students who failed all their units dropped by 15%. Key outcomes of the pilot were increased levels of first year student engagement with Walanga Muru, a stronger sense of community and improved confidence in accessing broader University services.

RESEARCH AND RESEARCH TRAINING AND INNOVATION

Strategies to ensure excellence in research and the strengthening of research capability

The University's <u>Strategic Research Framework 2015-2024</u>- *World-Leading Research; World-Changing Impact* -charts a course for Macquarie's research that is aimed at accelerating our research performance. It is a strategic research framework rather than a research plan, providing overarching objectives, goals and priorities, establishing targets and outlining supporting strategies, while maintaining great respect for scholarship and the principle of academic freedom.

The framework aligns with the University's long-term aspirations and the values of scholarship, integrity and empowerment as expressed in <u>Our University: A Framing of Futures</u> and aims to support the achievement of the seven strategic priorities outlined in this document while having a particular focus on Strategic Priority 2: An accelerating and impactful performance in discovery.

Research excellence is being pursued by building on disciplinary areas of current and emerging strength and by growing external research investment. Supporting the *Strategic Research Framework* we have a suite of sub-frameworks which are interconnected across the University:

- Research Engagement, Impact and Commercialisation Framework
- Research Services Framework
- International Research Training Partnerships Framework 2019 (Higher Degree Research Office)

Each of these documents outlines an array of strategies which have been developed to ensure excellence in research and the strengthening of research capability.

In early 2019, Walanga Muru created a dedicated Aboriginal and Torres Strait Islander HDR Student Engagement Coordinator role to build the numbers of Aboriginal and Torres Strait Islander students and offer professional development and networking opportunities to all Indigenous postgraduates. Since the introduction of this position, the numbers of students have grown from 8 in 2017 to 18 in 2019. The position, in conjunction with the Pro Vice-Chancellor, Indigenous Strategy, (PVC) coordinates the university's partnership with NIRAKN (National Indigenous Research and Knowledge Network). Macquarie University is the NSW NIRAKN Research Hub. The University will release its Indigenous Research Plan at the end of 2019.

 Strategies for the provision of high quality research training, including measures to encourage PhD industry placements. This information should identify the expected number of industry placements.

The Strategic Research Framework: 2015-2024 identifies high quality research training as a major theme. In particular, Key Objective 2 commits the University to "Prepare world-ready higher degree research candidates by attracting quality candidates, providing inspirational supervisions and mentoring, embedding candidates in areas of current and emerging strength, providing opportunities for engagement with industry and the community, providing internationally-aligned degrees, and giving candidates world-class support."

Macquarie has made great advances in its goal of providing an innovative higher degree research training experience with the introduction of the Master of Research (MRes). Macquarie's MRes is achieving its aim of reducing completion times and attrition for PhD students and it has brought the University into line with practices in Europe and North America and complements the structure of the Chinese undergraduate transition to higher degree research.

Macquarie University continues to provide high quality research training centrally via the HDR Support and Development program. This includes HDR Learning Skills, which provides intensive writing support in semester-long, intensive, one-on-one or peer-to-peer format, as well as dedicated software training; the HDR Mentors Program which provides peer-to-peer training in research communication, presentation and networking skills; and the HDR Professional Skills Program which

provides workshops and counselling to support HDR candidates' employability for work both within, and especially beyond, academia. These programs were expanded in 2019 to provide tailored workshops for students with disabilities and this will continue into 2020.

As part of Macquarie's goal of producing world-ready HDR candidates, we are enhancing their experience by ensuring that most, if not all, will spend time learning from those outside the University. In 2019, these opportunities included student exchanges, taking part in the cotutelle or joint PhD programs, visiting the laboratories of international collaborators, being co-supervised by industry experts, attending presentations by world-renowned researchers, or working with industry to solve real-world problems. In 2020 Macquarie will build upon each of these elements but place particular focus on embedding HDR candidates in industry through scholarships connected with industry-linked research projects.

Macquarie has collaborated with the Industry Mentoring Network in STEM (IMNIS) to place 23 PhD candidates in 2019 in mentoring relationships with influential, high level industry leaders. In addition, the University has developed models for an industry placement scheme with Australian Postgraduate Research (APR) Intern, the industry arm of the Australian Mathematical Sciences Institute, to provide short (3-5 month) internships for 10 PhD students in 2019. This close and successful collaboration will continue in 2020. Macquarie's collaboration with the Capital Markets CRC has successfully transitioned following the end of the CRC's term, transferring to the RoZetta Institute which sees 25 Macquarie HDR candidates undertaking their PhD while placed within industry.

From 2017, the University's highly successful PACE (Professional and Community Engagement) program has been expanded to Master of Research students to encourage future PhD candidates to develop their research questions in conjunction with an industry partner. Strategies taken to promote industry engagement comprise awareness raising events with staff and students including a HDR/Industry Showcase, presentations by representatives from APR Intern and IMNIS, emailing candidates close to completion about APR Intern opportunities, advertising via the Macquarie HDR newsletter and communicating through the HDR Mentors, interviewing industry partners for the podcast channel and inviting industry partners to the University Final of the Three Minute Thesis competition. We also have begun to engage with our HDR alumni working in industry through the new MQ Post-grad Alumni group on LinkedIn to create opportunities for guest lecturing, participation on panels and other activities, and create opportunities for industry engagement with current HDR candidates.

 Strategies to encourage research translation and commercialisation, including collaboration and engagement with industry and other end users, and the measures of success that the University monitors in this area

The Office of Commercialisation and Innovation works very closely with Research Services, the Office of Corporate Engagement, the Macquarie Park Innovation District (MPID), and the University's Incubator to ensure seamless communication and cooperation across all aspects of research engagement for the benefit of our collaborators in government, industry, researchers, students, and the community.

In 2019, the University commenced a project to bring the contract research and research consultancy activities that were previously managed by AccessMQ, a controlled entity of the University, back into the University. With research consultancies and contract research being important points of contact with our partners, and often being the first points of interaction in long and mutually beneficial collaborations, it is important that the same high level of policy and process is applied to these relationships. This project will wrap up in 2020 as the new structure is embedded and new policies and procedures become business as usual. To ensure the success of this new model a position of Pro Vice-Chancellor (Research Innovation) has been established and the incoming PVC will commence in February 2020, bringing a wealth of experience working at the academic:industry nexus, in research leadership, technology transfer, and innovation including the establishment of start-up companies and venture capital firms.

The Pro Vice-Chancellor (Research Innovation) will chair the University's Intellectual Property Commercialisation Committee which has representation from across the University and seeks to foster commercialisation of University-developed innovations via support such as licensing, patents, or the creation of new start-up companies. This Committee maintains oversight of KPIs such as patents applied for, patents granted, royalties, and licenses executed.

The University's protocols, such as clear IP Principles and IP scenario guides, assist to effectively execute projects in line with the University's goal to be a world-recognised research collaborator of choice, creating work-changing and innovative solutions. Targeted training programs created around Research Integrity, Ethics, Intellectual Property, Entrepreneurship, Commercialisation and e-research are run through the Early Career Research network, the Office of Commercialisation and Innovation, and Research Services. The University's Impact Canvas, for example, has been used extensively, assisting researchers to capture the direction of their work, and to articulate "what, how and why," along with confirming potential market and value.

Strategies to promote open access to research publications and data.

Macquarie University has an Open Access Policy with a mandate that researchers deposit their research into the Macquarie University Digital Repository. Open access is promoted through strategies that facilitate compliance with the policy. A dedicated team in the University Library helps researchers to publish their research or data on open access platforms. Library staff also work with researchers to load open access versions of research outputs, including links to external funders such as the ARC and NHMRC, into the University's research management system *Pure*. These outputs appear in open access on the University's research portal, which can be viewed worldwide.

EQUITY

Strategies for improving Indigenous outcomes and related targets

The University's Aboriginal and Torres Strait Islander Student and Community Engagement office, Walanga Muru, provides the University with strategic advice on Indigenous higher education, policy and cultural knowledges. On its advice, Macquarie has adopted a whole-of-university approach to Aboriginal and Torres Strait Islander strategy through its inaugural Indigenous Strategy 2016 – 2025 and multiple frameworks and plans to implement strategic initiatives. The following frameworks and plans demonstrate the University's ongoing commitment to success for Aboriginal and Torres Strait Islander students, staff and communities:

- Macquarie University <u>Indigenous Strategy</u> 2016 2025;
- Macquarie University Aboriginal and Torres Strait Islander Workforce Plan, <u>Waranara Djurali</u> 2018 – 2021;
- Macquarie University Indigenous Connected Curriculum Mudang Dali; and
- Macquarie University Indigenous Research Plan (available online December 2019).

The Indigenous Strategy details the following strategic initiatives:

Baduwa (Aspire) – Unlocking the capacity and building the aspirations of Aboriginal and Torres
Strait Islander students and staff through increased access to and opportunity, for tertiary
education. This includes the Macquarie University Aboriginal and Torres Strait Islander Entry
Pathway (ATSEIP), a critical thinking study program for Aboriginal and Torres Strait Islander
high school students, outreach activity in high schools, cultural leadership camps for Aboriginal
and Torres Strait Islander high school students, and engagement activities to improve
retention, progression and success for current Aboriginal and Torres Strait Islander tertiary
students studying at Macquarie.

- Manawari (Discover) Developing cultural capability and discovering new and innovative ways
 of embedding Indigenous knowledges and perspectives into curriculum to support Aboriginal
 and Torres Strait Islander students and staff in the discovery of new paradigms. This includes
 an Aboriginal cultural training program for University staff, an Aboriginal cultural tour app for
 the University, and an Indigenous connected curriculum program to embed Indigenous
 knowledges, perspectives and principles into curricula.
- Djurali (Evolve) Empowering Aboriginal and Torres Strait Islander students and staff to
 evolve, to be responsive to change and to embrace the entire world, stimulating progress. This
 includes an Aboriginal and Torres Strait Islander workforce plan to build a sustainable cohort of
 Aboriginal and Torres Strait Islander staff, an Aboriginal and Torres Strait Islander cadetship
 program, an Indigenous research plan, and higher degree research pathway and engagement
 activities for Aboriginal and Torres Strait Islander research candidates.
- Strategies for achieving equity for regional and remote students, for low socio economic students and students from other equity groups

The University seeks to deliver equity for regional and remote students through our admissions processes. These include adjustment factors and equity scholarships. The University's admission system uses election rank adjustment factors including the regional entry scheme. The University has over 500 students currently studying with us who have equity scholarships, including Indigenous scholarships. Supported by both internal and external funding sources (including alumni, charitable organisations and government), Macquarie University provides three types of equity scholarships for Education Costs, Accommodation, and Higher Study.

A detailed evaluation of the equity scholarships program this year, with responses from 112 students, found that 75 per cent strongly agreed that their scholarship allowed them the time to do academic work while 82 per cent indicated that the scholarship meant that they could meet living expenses. Students also reported that greater financial stability meant that they experienced less stress, improved wellbeing, and stronger academic engagement.

Macquarie also makes a financial contribution to The Smith Family's Learning for Life Program. This Program supports children from disadvantaged families so that they can succeed at school and go on to university. In 2018, Macquarie funded seven students at this University as part of Learning for Life.

• Strategies for reducing unemployment in the regions serviced by institutions, including youth unemployment rates

This is an emerging area of action and strategic consideration for Macquarie University. Specific programs have been funded under the Higher Education Participation and Partnerships Program (HEPPP) including the Suits Library which was successfully launched in the second half of 2019 and also the Create Your Future Program.

The Create Your Future Program is a new part of the <u>Widening Participation Strategy</u> for undergraduate equity students and has been offered to students since Session 2, 2015. The Strategy aims to increase the employability skills of undergraduate students from low SES backgrounds during any stage of their degree. Students who complete all requirements receive a Create Your Future Employability Award certificate. Participants completed a variety of face-to-face and online events designed to assist students to increase their employability by:

- Gaining career direction;
- Developing communication and networking skills;
- Understanding what employers are looking for;
- Finding out how and where to search for jobs;
- Learning how to write an effective resume and gain interview skills; and
- Creating a professional presentation for networking events, interviews and at work.

A total of 68 students from low SES backgrounds participated in the Session 1 and Session 2, 2019 Create Your Future programs. Thirty students met all of the requirements to receive the Create Your Future Employability award.

New strategic priorities and initiatives in Learning and Teaching will also contribute to reducing unemployment in the regions, including the introduction in 2020 of a micro-credential program and the development of an Employability Framework. The micro-credential program will offer opportunities for individuals to upskill and develop industry-focused and industry-driven employability skills; provide them with ways to evidence discrete learning, capabilities and achievements that are explicitly aligned to industry need; and enable them to learn and receive recognition for their learning in a flexible and convenient way from any location or while working.

The Employability Framework will guide and inform the embedding of employability and career learning in the curriculum; articulate institutional services and programs that are offered outside of the formal curriculum and ways these services and programs might complement the formal curriculum; and support students in making decisions about units they might undertake to strengthen their employability and career readiness upon graduation.

 Strategies for increasing student support for relocating students (potentially including specialised on-boarding programs)

The University works with Robert Menzies and Dunmore Lang Colleges to support students relocating from regional, rural and remote areas, particularly students from low SES backgrounds and students who are Aboriginal and Torres Strait Islanders. Both colleges have strong programs of academic support and pastoral care with these programs linked to the University's wider support services and our Office of Indigenous Strategy.

The extensive support provided by the Colleges recognises the extent to which regional students face additional challenges due to distance from family supports, location change, social isolation, cultural change, a weaker higher education culture, limited prior education opportunities, and often being the first in their family to attend university. Aboriginal and Torres Strait Island students may face all of these challenges together with significant cultural dislocation and isolation.

The evidence points to considerable success. At Dunmore Lang College this year, for example, a comprehensive survey including focus groups was conducted with students and parents to measure satisfaction with the College's culture, community and lived values. Results were very good and confirmed the efficacy of the College's programs and support systems.

Strategies to increase community access to University facilities

The University campus is open to the public. There is considerable public use of the Sports & Aquatic Centre and the University Library, including by Year 12 students. (The University offers a safe space for these students to study together with a shuttle bus to public transport.) Almost a third of the childcare places on campus are taken up by the local community and the University runs vacation care and holiday sports programs targeted at the community as well as at the children of our own staff and students. Our sports fields are regularly hired by community groups.

Strategies to increase aspirations and advice to school students on study options.

Our dedicated outreach activities in this space, run by our Widening Participation unit, include the *LEAP School Engagement Roadshow* and *Inroads*, dealt with above in Teaching and Learning as part of the discussion of strategies to reduce attrition and intended to engage with potential students and their families from low-SES backgrounds in regional communities. Other outreach activities include *LEAP UP mentoring*; the *LEAP Rural Students University Experience*; *LEAP LINKS – virtual classroom*; and *LEAP Robotics*.

Macquarie's *LEAP UP mentoring scheme* is designed to increase aspiration for higher education. The program has run since 2011 as a partnership with the NSW Department of Education to engage high school students from low SES refugee and asylum seeker backgrounds. Working with 14 partner

schools in Greater Western Sydney, the Macquarie student-peer network (all volunteers) give agency to school students and support them to navigate to university. So far nearly 3,000 high school students have benefitted. The students themselves say it motivates them to study, supports their study skills, improves their self-awareness and gives them awareness of study options. KPMG calculates the return on investment for the program is \$6 for each dollar spent. At the Australian Financial Review Higher Education Awards this year, the LEAP UP program won the AFR award in the Equity and Opportunity Category.

The LEAP Rural Students University Experience project was piloted in collaboration with the Country Education Foundation of Australia, (CEFA) and Dunmore Lang College. High school students from rural areas are provided with an on-campus accommodation experience, faculty-specific activities and information about pathways to university. The project aims to increase student confidence and foster a sense of belonging to the University.

The LEAP LINKS (Virtual Classroom) program engages regional and remote high school students attending Aurora College, the NSW virtual selective high school, with University academics, via a series of live videoconference masterclasses aimed at providing curriculum enrichment and connection between students in regional and rural communities and the University.

The LEAP ROBOTICS outreach program is delivered by the Faculty of Science and Engineering in partnership with the NSW Department of Education. The program engages high school students in Science, Technology, Engineering and Maths (STEM) activities using robotics technology to inspire them to pursue higher education studies in these fields.

The National Indigenous Science Education Program (NISEP) uses science to place Indigenous youth in leadership positions so they gain the confidence, motivation and skills to stay in school and consider pathways to higher education. This year, NISEP was awarded the Department of Industry, Innovation and Science Eureka Prize for STEM Inclusion.

Walanga Muru's Pathways and Engagement Team take a longitudinal approach to Aboriginal and Torres Strait Islander secondary students' tertiary aspiration. They start working with students in year 7, continuing through to year 12, by running in-school programs and camps including workshops, oncampus activities and critical thinking studies. Students are then offered entry into Macquarie degree programs through ATSIEP.

From 2020, and building on earlier collaborative research, Macquarie will work with 11 other NSW and ACT universities in a trial of career development resources designed to reach low SES students, including low SES Indigenous students and low SES rural, regional and remote students, to ensure that all students across NSW/ACT have access to effective careers information and resources. This project will (1) develop a heat map of careers advice students are receiving across NSW/ACT; (2) co-create twenty-five curriculum-based modules in partnership with students, designed to provide high quality, unbiased careers advice and information; (3) embed the modules through a tiered delivery model that includes teacher professional development, parent engagement and widening participation activities that are coordinated across the State; and (4) trial and evaluate the implementation of the modules utilising the evaluation framework and measures developed by the National Australian Hub for Equity Evaluation and Ideation (NAHEEI). This work will be funded from the 2019 National Priorities Pool for Higher Education Priority Projects and the outcome of the research project will be to develop best practice principles for effective careers advice as well as a guide for partnerships between schools, universities and industry.

LABOUR MARKET OUTCOMES

Strategies for identifying skills gaps within the relevant student and business catchments

The curriculum transformation process undertaken, across 2018 and 2019 for new courses to start in 2020, has brought an increased focus on career success. For example, the new flagship <u>Bachelor of</u>

Arts course is designed – in consultation with industry leaders such as Deloitte, Hays and EY – to enable students to develop the skills they need to succeed in today's workplaces, including the technical skills in discipline-based research, analysis and communication that employers need. An eportfolio system will be utilised to enrich students' resumes and showcase the technical and transferable skills they have developed through the course. They will also receive personal advice from an e-portfolio expert and career adviser.

Approval processes for new courses included specific sections relating to Graduate Destinations and Employability. These asked course convenors to describe the career opportunities for graduates of this course and how students are prepared for the world of work, training and/or further study. This data is intended for prospective students, with work currently in progress towards providing this in our new *Coursefinder* product from 2020. Also, the University is currently investigating labour market analysis tools to better inform and align the institution's curriculum planning and review processes.

The University is currently establishing a new *Macquarie Student Employment* function and through this work is building closer relationships with employers. These discussions are highlighting the changing needs of employers and are also provide the opportunity to better coordinate and expand existing mentoring, volunteering, student group and leadership activities within an employability framework.

Future effort will also focus on the development and implementation of programs to support the employability of international students. This will include providing students with opportunities to better understand the Australian workplace, to develop skills and experience, employability reflections and most importantly, targeted programs to assist students in securing to secure employment as they return to their home country after graduation.

The University has recently launched an online tool which assesses and provides instant tailored feedback on students' resumes. Using artificial intelligence, the tool analyses factors such as presentation, language, content and structure but also delivers advice, tips, employer insight, and best practices to help boost knowledge, confidence and employability.

Strategies for meeting labour market priorities at a local, regional and/or national level

As part of the introduction of a micro-credential program (discussed above in the section on strategies for reducing unemployment in the regions), research is being conducted on current and emerging job markets, and on skills gaps in the global and Australian economies to better understand how labour market priorities can be addressed. Once these priorities have been identified, micro-credentialled opportunities will be scoped and where feasible developed from an industry need focus and then an industry specific design.

 Strategies to address employability and graduate attribute skills gaps to ensure students are work-ready

In 2010, Macquarie University launched its innovative Professional and Community Engagement (PACE) program. Within their PACE unit, students are partnered with a range of external organisations and complete practical/ real-world learning activities with the external partner. The success of the program saw its expansion in 2016, as a mandatory requirement of all Macquarie undergraduate courses. The scope, scale and diversity of PACE is unmatched in the Australian higher education sector, with a network of over 3,000 host organisations within Australia and in 25 other countries around the world. In many courses, students are able to complete more than one PACE unit, or a distinct work integrated learning opportunity (internship program for example).

Activities that a student may undertake in a PACE unit include:

- Internship, professional experience and/or practicum where individual students are provided with hands-on training in a particular profession under close supervision in a workplace.
- Community/industry panel with project mentoring where community or industry experts
 propose projects for students to work on that address a challenge or theme within an
 organisation, industry or sector. These activities usually take place on campus with students

working collaboratively in groups with support from their Unit Convenor and Q&A opportunities with the partner.

- Fieldwork with a partnership component where an activity is conducted on a site in the natural environment that is undertaken with and benefits a partner organization.
- Research and/or evaluation project where the research activity contributes to the creation of new knowledge and/or use existing knowledge in new ways so as to generate new understandings or an evaluation project which is typically undertaken to enable a partner to assess the effectiveness, efficiency and equity of a particular program, process, structure or activity.
- Service learning where the activity gives students the opportunity to directly deliver the services that partner organisations supply as part of their core business (e.g. counselling services for helplines).
- Mentoring, peer-assisted learning and other forms of student service where mentoring
 provides an opportunity for the sharing and development of work related or personal skills
 and experience. Mentors typically provide support, advice or guidance to mentees. Peerassisted learning typically involves unit specific workshops for current students in the unit led
 by trained students who have previously excelled in those particular units. Other forms of
 student service might also constitute PACE activities, e.g. serving on governance bodies, etc.
- Consultancy or advocacy work for a partner organisation

Many opportunities arise for students in the Macquarie Park District, home to 180 large businesses (including Australian offices for 12 of the world's top 100 companies) and 200 smaller businesses. The Macquarie Park Innovation District initiative, started by the University, provides a framework for collaboration and a link to both the University Incubator and the Venture Café which is located in the Park and also supported by Macquarie.

The Employability Framework currently under development will be focused on students' work readiness. This Framework will guide a whole-of-university approach to embedding employability and career learning into each student's course curriculum. It will also ensure that those providing students with academic advice are clear on the institutional services and programs that are available to complement student learning. The Framework will be a resource for students, enabling them to recognise optimal and important times across their degree when they should be seeking advice, as well as who they should seek it from so they can effectively design their study plans.

The application of these strategies to admissions and enrolments

The new 2020 curriculum has standardised the admission points for coursework postgraduate courses in line with the AQF volume of learning. The Macquarie model postgraduate curriculum architecture principles, using the AQF pathways policy, included admission point principles that included the opportunity for students to include informal and/or non-formal prior learning. This allowed courses to reduce the volume of learning for certain students based on factors such as their demonstrated relevant work experience. As part of the curriculum transformation process, all courses were required to specify potential admission points and the criteria for each point such as work experience requirements.

How labour market strategies are taken into account in developing course offerings.

The new 2020 curriculum architecture will see a major transformation in the way Macquarie University designs and offers <u>double degrees</u>. It will be students, rather than academics, who choose degree combinations that best suit their career aspirations. Students are able to pair almost any two single undergraduate or two single postgraduate courses into a double degree. This will enable them to prepare for a career in a work-environment of increasing change and will empower them to approach this work world with flexibility and diversity.

Students will also be able to accelerate their career preparation with our combined bachelor and master degrees. These are specifically designed to ensure an integrated and coherent student learning experience across the undergraduate and postgraduate components that can fast-track their learning in a specialised area.

The University's Aboriginal and Torres Strait Islander Workforce Plan <u>Waranara Djurali</u>, launched in 2016, includes as key priorities to build the Aboriginal and Torres Strait Islander workforce at Macquarie University and develop existing staff through 'grow your own' initiatives and tailored performance development opportunities. Waranara Djurali includes a dedicated Aboriginal Workforce Coordinator role to work with both Walanga Muru and Human Resources to implement the plan and meet the associated KPI's.

Waranara Djurali details the <u>Walanga Muru Cadetship Program</u> which continues to deliver high-quality graduates through tailored, degree specific student placements at the university and with external partners. After an internal review at the end of 2019, increased funding will be earmarked in 2020 to build the capacity of the program.

SECURITY MEASURES

- Actions being taken to ensure the safety of data against cyber attack
- Mitigation strategies in the case of a breach of security
- How the University complies with the Australian Cyber Security Centre's "Strategies to mitigate cyber security incidents" document (https://www.cyber.gov.au/publications/strategies-to-mitigate-cyber-security-incidents-mitigation-details)

Macquarie University acknowledges that the threat of cyber security attacks is increasing, particularly in the higher education sector. All organisations are potential targets of cyber security criminals or state actors who possess significant capabilities, and in some cases, a high level of sophistication.

The University collects and handles a wide range of information to support its functions of learning and teaching, research, administration and related services and the University is committed to protecting the privacy of students, staff and those external to the University.

Macquarie employs a risk-based approach to protect sensitive and valuable information from unauthorised access or damage. Protection measures currently in use by the University include network segmentation, firewalls, intrusion protection systems, advanced email filtering, network and file encryption, antivirus, security testing, vulnerability management, incident response and central log monitoring and alerting.

The University has for a number of years made use of external services from AusCERT and CERT Australia to assist in scanning external systems and providing alerts and bulletins of emerging security issues. External commercial cyber security services are also utilised to continuously monitor the University systems to identify and respond to attacks as they arise.

To continuously improve the security measures in use by the University and reduce the risk of a cyber security incident a three-year cyber security strategy was established in July 2018. The cyber security strategy aligns with the University's strategic priorities identified in *Our University: A Framing of Futures* and focuses on four key strategic areas:

Digital Visibility: Macquarie University operates an extensive and diverse technology
environment. To identify assets and discover malicious activity in such an environment
requires a sustained effort to gather activity logs into a central location for monitoring and
analysis. The University has already invested in sophisticated analytical cyber security
systems with good visibility into the core university environment. This initial capability is

being expanded to include more perimeter systems, network traffic flows and major cloud applications.

- 2. Engagement and Awareness: The University has a vibrant culture with naturally transient portions of the staff and student community. A persistent effort is required to ensure those in the University who make use of the University's systems and handle valuable information are aware of their responsibilities in maintaining privacy and security. While there is currently good engagement across the University, focus areas include performing phishing awareness campaigns, running targeted cyber security and privacy education sessions, and updating cyber security policies and procedures.
- 3. Security Testing and Perimeter Reduction: Recent cyber security incidents reported in the media show that a dominant enabler for data breaches and denial of service attacks is weaknesses in internet-facing systems. It is clear that operating unmaintained or unneeded internet-facing systems presents a significant risk. To discover weak systems and increase robustness of internet-facing services, the University is undertaking to reduce its perimeter surface area by identifying and removing unneeded internet-facing services and performing continuous security testing of its perimeter.
- 4. High Risk User Protection: Macquarie University staff and students are involved in a wide variety of educational, administrative and research activities that results in an increasingly large amount of information being captured and processed. This trend will continue as technology is used to enhance teaching, improve business functions and enable rich research outcomes. In a range of cases, the information gathered is sensitive and needs an additional level of protection as it is being accessed by University staff and students through University computers. Additional protection for technology used by high-risk users is being deployed. This includes multifactor authentication for cloud services and privileged functions, endpoint detection and response tools, encryption and secure password management tools.

The University will continue to strive to achieve a balance between protecting the valuable information in its care and enabling the University community to benefit from the technology at its disposal. While maintaining security in a collaborative and open environment provides a number of challenges, the University is committed to reducing the risk of a cyber security incident through sophisticated technical measures and a culture of awareness.

• Measures in place to enhance the identification and deterrence of foreign interference activities including actions to ensure compliance with relevant legislation.

Macquarie University has detailed policy and procedures on Export Controls and Sanctions with this work oversighted by the Office of Research Services and by an Export Controls Committee which meets regularly to review policy and proposed applications for research. The University also provides face-to-face training for researchers on *Defence Trade Controls Act* requirements and access to online training via I-Learn.

The University is not registered under the Foreign Influence Transparency Scheme but maintains an ongoing review of its obligations.

SIGNED for and on behalf of In the presence of: THE COMMONWEALTH OF AUSTRALIA by Drew Menzies - McVey Full name (please print) Witness (please print) Position Position or profession of witness (please print) of the Department of Education as delegate of the Minister for Education. Signature Date SIGNED for and on behalf of In the presence of: UNIVERSITY S. Bruce Dowton Full name (please print)Vice-Chancellor Witness (please print)

Position

Signature

Position or profession of witness (please print)

Signature