

MASSEY UNIVERSITY INVESTMENT PLAN 2019-2021

TE KUNENGA KI
PŪREHUROA





MIHI

Kei ngā pari kārangaranga o te motu. Tēnā tātou kua pōi mai ki te taupuhipuhi i ngā kaupapa o Te Kunenga ki Pūrehuroa. Tēnei te reo pōwhiri, te reo whakamihhi atu ki a koutou katoa. Inā hoki rā te kōrero, kotahi tonu te hiringa i kakea ai e Tāne a Tikitiki-o-Rangi. Ko te hiringa i te mahara. Ko te kunengatanga ake tēnei o te wānanga ki pūrehuroa.

Greetings one and all, on behalf of Massey University we welcome and acknowledge you, those who continue to contribute to and support our vision. It is said that there was only one inspiration that transported Tāne to the uppermost realm to retrieve the baskets of knowledge; it was the power of the mind. This was the beginning of the pursuit of learning as an endless journey, a sentiment encapsulated in the name Te Kunenga ki Pūrehuroa.



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TERTIARY EDUCATION ORGANISATION (TEO) DETAILS

TEO NAME	MASSEY UNIVERSITY
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1. MISSION AND ROLE

KO TE KUNENGA KI PŪREHUROA TE KAUPAPA E TŪ NGĀTAHI AI TĀTOU HEI WAIHANGA I NGĀ MOMO MĀTAURANGA KI TE PAE O ANGITŪ. HE ARA PUTANGA TAUIRA, HE ARA E HUA AI NGĀ TINI KAUPAPA KI AOTEAROA PUTA NOA I TE AO WHĀNUI. KIA TOI TE MANA MOTUHAKE O TE IWI MĀORI, KIA TOI TE REO MĀORI, KIA TOI TE ORA O TE TANGATA, TE RANGI ME TE WHENUA MĀ REIRA E WHAKATINANA AI TE MANA O TE TIRITI O WAITANGI.

Massey University and its predecessors were established to deliver positive, research-led and innovative responses to the needs of a young nation and to drive and enable economic and cultural advancement. This ethos imbues Massey's past, present and future.

Massey University first founded its international reputation as a world-class agricultural college in Palmerston North in 1927. In 1960, Massey led the way in distance higher education. In 1993, it established a campus in Auckland, and in 1999 it incorporated the renowned School of Design, established in Wellington in 1886. It now delivers teaching and research in a range of areas that combine the universal search for knowledge with addressing real-world problems. Our world-leading reputation now extends across many diverse disciplines, all with international excellence and national significance in common.

Massey University is New Zealand's national university, with major and established campuses in Palmerston North, Auckland and Wellington, as well as an online education virtual campus that supports higher learning anywhere in New Zealand and around the world. Massey University engages more than 30,000 students per year from New Zealand and from more than 160 other countries.

Massey University's unique position and reputation are based on:

- World-leading pure and applied research, conducted in partnership with industries and the communities we serve;
- Curious, world-ready graduates with entrepreneurial acumen and capability, who create jobs for others and are committed to making a better world;
- A heritage of excellence, high quality and integrity, which ensures authentic leadership in contemporary Aotearoa New Zealand;
- Role-modelling excellent practice as a Tiriti o Waitangi-led institution; and
- A reputation for caring, and a commitment to our people and our places.

We are inspired by our name Te Kunenga Ki Pūrehuroa; from inception to infinity. Massey is not simply defined by what we do, but by how we do it.



OUR DISTINCTIVE MISSION AND OUR COMMUNITIES

Massey's distinctive mission is based on its longstanding commitment to access and opportunity. For almost 60 years Massey University has shaped the lives of people in New Zealand and around the world. This is in no small part due to our leadership in distance education (now rapidly transitioning to online education) and our high-quality research. Throughout our history, Massey teachers have continually developed and successfully implemented new pedagogies aimed at delivering a high-quality student learning experience. Massey continues to invest in its online delivery to ensure a flexible and quality learning experience for our students. Massey is committed to testing new paradigms of online teaching, and to continuing to innovate with new technologies to realise our ambition of remaining at the leading edge of tertiary education delivery and learning engagement, in a highly competitive and fast-paced globalised context.

Through its distinctive mission, Massey University remains very committed to supporting the lifelong learning goals of our students and to developing the many and diverse communities we serve. It is worth noting that Massey has unparalleled reach to students across New Zealand and around the world through both our online and our physical campuses. With major campuses in Palmerston North (more than 6200 students in 2017), Auckland (more than 7300 students in 2017) and Wellington (more than 3200 students in 2017), and a virtual distance campus with more than 13,700 students in New Zealand and overseas in 2017, Massey is truly New Zealand's only national university.

A significant proportion of our distance students are from Māori and Pacific communities, where the ability to engage in or continue with higher education studies has been wholly facilitated by online learning access. It is also worth noting that more women than men are represented in our online learning cohort (67 per cent of distance students are female). Most of our distance provision is made up of part-time enrolments, particularly at degree and postgraduate levels. Typically, our distance students are adults who are in full-time employment and seeking to up-skill or re-skill themselves, or seeking to return to the workforce. Our student body comprises young and mature learners who are commencing tertiary study for the first time, and others who are returning to study to build their knowledge base, change career direction or advance their existing employment progression.

Massey is aware of the ongoing difference in educational performance indicators (EPIs) for Māori and Pacific learners, particularly those studying at distance, and the Tertiary Education Commission's (TEC's) intention to increase parity between learners. Massey's student demographic is substantially different from those of other universities in the sub-sector. At Massey, our students tend to be older than the average New Zealand university student. While the university sub-sector has 25 per cent of its EFTS aged 25 years and over, for Massey 40 per cent of our EFTS are 25 years and over. A lot of these students are second-chance learners and Massey supports these students to re-enter tertiary education and in their ambitions to succeed at higher levels of study. The proportion of our Māori and Pacific students who are 25 years and over is greater than the average at Massey (46 per cent Māori, 51 per cent Pacific compared with 40 per cent of total EFTS). As part of supporting these learners, Massey has produced Learner Success Plans for Māori and Pacific. The Plans aim to increase parity of participation and achievement between Māori, Pacific and non-Māori, non-Pacific.

In addition to the provision Massey offers to students across New Zealand, the University has global reach. In 2017, more than 5000 international students from more than 160 countries choose Massey University as their study destination. This number has grown steadily in the past few years as our international relationships and visibility increase. Many international students are drawn to Massey by our highly regarded and distinctive academic programmes. The University can boast independent international accreditation for our programmes in accountancy, aviation, business, communications and journalism, design, economics, fine arts, engineering and construction, finance, food technology, management, occupational health and safety, supply chain management, surveying and veterinary science. Indeed, in the last QS Stars audit (2017), Massey University received an overall 'Five Star plus' rating, with five stars awarded to all nine sub-categories: research, teaching, internationalisation, employability, facilities, distance/online learning, innovation, social responsibility, arts and culture, inclusiveness and specialisation.

In addition to our exemplary learning and teaching, Massey has a particular and distinctive identity as an institution engaged in world-class, highly applied and practical research and discovery. This 'dual focus' gives Massey a special value proposition as both a research-led and a research-engaged university.

Massey University's research sits at the heart of New Zealand's key economic sectors. Our researchers are renowned for taking knowledge and applying it to meet the needs of business and industry, as well as the public, cultural and not-for-profit sectors. We are one of the leading universities in agriculture globally, ranked 22nd in the world in 2018 according to the QS (Quacquarelli Symonds) World University Rankings. Moreover, the University is a founding partner of the New Zealand Food Innovation Network, the host of the world-class, Government-funded centre of research excellence (CoRE), the Riddet Institute, and a key partner in the new international Global Food Alliance as well as the host of the recently established New Zealand Food Safety Science and Research Centre, a collaboration between industry, government and research organisations.

As part of our ongoing commitment to grow New Zealand's wealth and wellbeing, Massey will continue to provide a strong foundation for New Zealand's agri-food industry – a sector the University has supported since its inception, and one that continues to be central to New Zealand's future economic success and the Government's economic growth agenda.

Massey University is the only New Zealand university with a veterinary school. Notably, we were ranked 23rd in the world for veterinary science in 2018 by QS World University Rankings and sixth in the world for our employer reputation in veterinary science. While our history of and reputation in veterinary science provide Massey University with a distinctive research and teaching offer, it is intimately connected with and driven by our leadership in animal health research. Our expertise in animal health is unrivalled in New Zealand and, as such, underpins New Zealand's valuable primary sector. We are proud of our innovation in this area.

Massey University currently hosts one CoRE, the Riddet Institute, and partners in seven other CoREs. Specialising in advanced foods and human nutrition sciences, the Riddet Institute has world-class expertise in the areas of biomaterials science, post-harvest technology, the behavioural and sensory aspects of food choice and consumption, and the digestive physiology relating to nutrient absorption and metabolism. Additionally, the Massey University Institute of Food Science and Technology brings together the knowledge in Massey's School of Food and Nutrition and FoodPilot plant to create New Zealand's leading academic research group in the area of food and nutritional sciences.



SUPPORTING THE NEW ZEALAND TERTIARY EDUCATION STRATEGY

The Tertiary Education Strategy 2014–2019 (TES) identifies six strategic priorities for the tertiary education system. These are further articulated in the Investment Plan Gazette Notice 2017, where the expectation is that tertiary institutions will:

- Respond to learners’ and employers’ need for skills for the labour market (TES Priority 1: Skills for industry);
- Help learners to make informed choices and a successful transition into tertiary study and into employment (TES Priority 2: Getting at-risk young people into a career);
- Provide a credible plan to ensure delivery meets the needs of all learner groups, including Māori and Pacific (TES Priority 3: Boosting achievement of Māori and Pacific);
- Help learners, including adults, to acquire literacy and numeracy skills (TES Priority 4: Improving adult literacy and numeracy);
- Do excellent research and share it effectively (TES Priority 5: Strengthening research-based institutions);
- Engage in value-creating international education (TES Priority 6: Growing international linkages); and
- Invest in quality teaching.

The TES states that in the next decade the tertiary education sector must continue to improve the quality and relevance of tertiary education and research by building international relationships that contribute to improved competitiveness, supporting business and innovation through the development of relevant skills and research, and improving outcomes for all.

Massey University supports this vision and agrees with the need to ensure that the implementation of this strategy by the Government is guided by effective and transparent operational frameworks, particularly around funding mechanisms and relevant and fairly established performance measures and targets, so that tertiary education organisations are able to achieve this vision.

The Massey University Act 1963 describes the purpose of the University as existing “for the advancement of knowledge and the dissemination and maintenance thereof by teaching and research”. Massey University understands its purpose and recognises that its role within the New Zealand context is further defined in the Education Act 1989 section 162 and guided by the priorities set by the TES described above. Through its vision and mission, Massey University continues to deliver on the expectations of universities held by the Government through the TES by:

- Providing tertiary education that is primarily concerned with more advanced learning, with the aim of beginning to develop intellectual independence;
- Supporting research and teaching that are closely interdependent, with most of the teaching done by people who are active in advancing knowledge;
- Meeting international standards of research and teaching;
- Being a repository of knowledge and expertise;
- Accepting the role as critic and conscience of society; and
- Maintaining, advancing, disseminating and assisting in the application of knowledge through a wide diversity of teaching and research, especially at a higher level; and
- Developing intellectual independence and promoting community learning.

The purpose of this Investment Plan is to articulate Massey University’s strategic direction and to contribute to meeting the Government’s priorities for tertiary education in New Zealand for the next three years (2019-2021). How Massey contributes to each goal of the TES is further discussed in Section 3 of this Investment Plan.

Massey recognises that the current TES finishes in 2019 and a new strategy is being developed. Our Investment Plan straddles this period, therefore this Plan is submitted as the TES is currently set. Massey needs to have the ability to revise this Plan in light of the new strategy when the new strategy is released to the public.

PROGRAMMES AND ACTIVITIES SUPPORTING OUR MISSION AND ROLE

Within the framework of a broad academic offer, Massey has developed high-quality, world-leading specialist programmes in agriculture and veterinary sciences, food technology, aviation, design and the creative arts, Māori visual arts, music and media, engineering, social sciences, Māori-immersion preservice teaching, education, humanities, business studies and health sciences.

Massey's distinctive research and teaching strengths characterise each of our campuses. The Manawatū campus in Palmerston North is the University's premier and 'home' base for research and teaching in the life, agricultural, horticultural and veterinary sciences. The expertise located at this campus positions Massey as a leader in industrial innovation through areas such as food science and technology, biotechnology, advanced material sciences and product development. At Manawatū we offer programmes in the sciences, education, business, sport, humanities, Māori visual arts, and social and health sciences. In addition to teaching veterinary science, Massey Manawatū is the only university in New Zealand teaching aviation, a competitive and highly regarded programme with strong industry engagement and graduate outcomes.

Massey's Auckland campus is located in Albany on the city's rapidly growing and culturally diverse North Shore. Massey Albany has a deliberate focus on innovation in a wide range of disciplines. At Albany we offer programmes in mathematics and information sciences, fundamental and natural sciences, food technology, nutrition, health sciences, engineering, humanities and social sciences, business and education. The ecentre, the University's business incubator (based in Albany but with reach to all campuses), is a flagship for the University in developing the entrepreneurs and businesses of the future.

Massey University's Wellington campus has particular strengths in the areas of design, fine arts, music, media, communication, expressive arts, and nursing and public health. The Wellington campus is home to New Zealand's oldest and most distinguished School of Design (established in 1886) – the highest-ranked design school in the Asia-Pacific in the prestigious Red Dot Rankings. The Wellington campus also hosts a number of world-class research centres, including the Centre for Public Health Research, the Sleep/Wake Research Centre, the Research Centre for Māori Health and Development and the Joint Centre for Disaster Research (with GNS Science). Massey Wellington has a strong and rapidly growing identity as a centre of creativity in New Zealand's capital city. Our staff have extensive relationships with industry (particularly in the creative arts sector), as well as with business, public sector, health and social service agencies and other educational providers. Our Wellington campus is widely recognised as a hub of activity and local engagement in the greater Wellington region.

Massey's 'fourth campus' is our virtual online campus. Building on our history of unrivalled expertise in distance education, we are driving hard to deliver on a future-focused vision that will see Massey lead 21st-century learning and teaching experiences in New Zealand higher education. Our aim is to equip students for a rapidly changing world and one with new and diverse work opportunities. We recognise that lifelong learning is no longer the exception, but is rapidly becoming the norm for New Zealanders who have access to further education. As part of our ongoing responsibility to support first-in-family learners and the Government's ambition to achieve access and parity in educational outcomes, at all levels, Massey remains committed to reaching and supporting non-traditional learners, wherever they may be.

1.1 MISSION-RELATED CAPABILITY

Massey University has strong and stable governance in place. In October 2017, the University Council approved the *Massey University Strategy 2018 – 2022*, which sets Massey’s organisational overall strategy and our performance goals and resource allocations, including strategic investment intent. More information about our strategic investment intent is available in Section 6 – Other additional information.

GOVERNANCE

Massey University’s governing body is the University Council. This includes lay, academic, alumni and student members and is responsible for overseeing the management and control of the affairs, concerns and property of the University. The Council Chair and the ceremonial head of the University is the Chancellor, elected by the Council for a one-year term from within its ranks.

As a governance body, the Council requires decisions to be made that are in the best interests of the University as a whole. Each member of the Council is asked to make contributions to decision-making that reflect their individual perspective and knowledge, while recognising that decisions should deliver the best outcomes for Massey University.

Academic governance at Massey University is led by the Academic Board, which is a sub-committee of the Council and is the highest academic authority within the University. All other academic committees are sub-committees of the Academic Board. Proposals are usually considered by several committees as they progress to the required levels of peer review and approval in accordance with the agreed academic decision-making processes and delegations within the University.

The University Council Constitution was reformed in 2015 following changes to the Education Act. The Council’s composition is in line with the requirements and guidance of the legislation in relation to membership, expertise and skills. The Council comprises highly experienced governance members, and operates as a highly effective governance body. The Council has 12 members: the Vice-Chancellor, a student representative, a Māori representative, four members appointed by the Minister of Education, one elected member of academic staff, one elected member of professional staff, and three members appointed on nomination of the Vice-Chancellor. The balance of expertise and representation, including Māori representation, is considered each time membership renewal is required.

In 2017, the Council reviewed all aspects of its practice and adopted a governance framework and best-practice guidelines that are aligned with the TEC Guidelines on tertiary education institution (TEI) governance. These guidelines inform the practice of the Council committees and other governance bodies in the University. The Council is continually improving its processes and examining its progress through annual self-assessment evaluations.

The Massey Council regularly engages in strategic planning, and actively ensures alignment between governance and management on strategic directions. The Council and management strategic planning is undertaken in a coordinated and aligned manner, thereby ensuring strategic alignment in continually improving education quality.

The Massey Council takes responsibility for regular monitoring of Massey’s performance as a university, and has an appropriate reporting system in place, at both senior management and governance levels, that encompasses overall performance monitoring against key performance indicators (KPIs) (including EPIs, measures and targets committed to with the TEC via the Investment Plan mechanism), financial reporting, strategic risk reporting (including a comprehensive risk management framework), health, safety and wellbeing reporting, and other specific reports related to large capital investment projects.



STAKEHOLDER ENGAGEMENT

Massey recognises the importance of stakeholder engagement in the delivery of outcomes for New Zealand, and the benefits of effective engagement with stakeholders from business, government and communities. Effective stakeholder engagement assists Massey to remain relevant and responsive to New Zealand and global trends and opportunities. It also ensures that we are aware of stakeholders' views of Massey so that we can proactively prevent and/or remedy risks and improve the reputation of the University through enhanced networking and association with people and organisations.

Stakeholder engagement is a fundamental part of our strategy; it helps Massey to achieve its organisational goals in priority areas such as:

- Research (e.g. by assessing new opportunities and challenges where Massey can add value and earn new revenue streams; by finding suitable partners for major research opportunities; by finding investors and buyers for Massey enterprise; and by producing research that contributes to social enterprise, community needs and the public good);
- Learning and teaching (e.g. by enhancing the employability of students by enabling them to connect with prospective employers and participate in internships; by developing our students' entrepreneurial capabilities, both business and social, via relationships with entrepreneurs and innovation precincts; by developing advisory boards and other networks that ensure that teaching and research remain relevant to industry and communities; by offering joint teaching offerings that improve reputation and revenue; and by providing sponsorships, awards and scholarships funded by stakeholders); and

- Civic leadership (e.g. by enabling Massey to be a catalyst in the social and economic development of New Zealand, in partnership with relevant agencies, iwi, Pacific communities and local governments; and by enabling Massey to collaborate and use our knowledge to tackle local and global issues in areas such as agri-food, health, sustainability and citizenship).

A further discussion on stakeholder engagement is available in Section 2 – Addressing the needs of your stakeholders, in this Investment Plan.

INFRASTRUCTURE

The University's investment governance structure, reporting to our Senior Leadership Team (SLT), comprises the Technology Enablement Advisory Board, Campus Development Steering Committees and Project Control Groups.

All investment initiatives and infrastructure work are approved, or approved in principle, by the University's SLT and/or the University Council, in accordance with the business case framework policy and procedures. The University prepares operating budgets and a Ten Year Capital Plan annually, which are then endorsed by the SLT and approved by the University Council.

Massey has a capital planning and investment process that takes into account the overall strategy and the four goals in research, learning and teaching, civic leadership and enabling excellence (staff, business and financial), and planning processes including research initiatives planning, academic planning, learning and teaching planning, demand planning (e.g. EFTS pipeline and forecast, demographic analysis, industry demand analysis – currently in development), and enrolment management planning. The planning process is translated into Reporting Lines Multi-Year plans, a Capital Asset Management Plan and Campus Development Plans, which inform the Ten Year Capital Plan and the Three Year Operation Budget.

Following the planning phase, decisions are made for investments (with approval, design, procurement and deployment activities) and maintenance (with monitoring, measuring, servicing, repairing, upgrading, relocation and disposal practices in place). Within the investment consideration, activities such as strategic and risk assessments, capital plan affordability analysis, project prioritisation, business case development, contract and procurement management, project management, implementation readiness, post-completion reviews and benefit realisation activities take place. For maintenance, activities such as asset information systems, health and safety compliance, asset risk management, asset condition assessments, asset utilisation assessments, asset management plans, asset lifecycle reviews and asset decommissioning and disposal take place.

For the next Investment Plan period (2019-2021), the University is planning to invest in the following infrastructure activities:

- Enterprise systems to both support the overall student experience, including the digital experience, and enable student success:
 - For the digital student experience, this includes investment in IT (information technology) audio-visual equipment, IT computer lab and computer desktop replacements; world-class web for the Massey University website, video-linked teaching facilities, rich media learning investment and student management system replacement, among other digital experience initiatives;
- Continued investment in the library collection, particularly the digital collection;
- Investment in buildings with a view to improving the student experience, enabling partnerships with community and industry and enabling the best possible environment for teaching and learning:

- Projects include accommodation refurbishment at the Manawatū campus, the Manawatū Recreation Centre seismic upgrade, the new Wellington Marae, and other accommodation refurbishment. In terms of building partnerships, projects include the community athletic track at the Manawatū campus, the Manawatū hockey and soccer turf, the joint food sciences building with AgResearch, the veterinary complex upgrade programme and infrastructure support for the School of Music and Creative Media Production;
- Continued investment in plant and equipment required for both teaching and learning and research; and
- New infrastructure projects at: the Albany campus, including the development of a teaching complex at the Sir Neil Waters building and the Innovation Complex building; the Wellington campus, with the development of a nursing simulation suite; and the Manawatū campus, with improvements to the School of Aviation facilities.

SUPPORTING STAFF CAPABILITY

Massey is a large and diverse employer, and opportunities exist for both academic and professional services staff to develop their careers. This may be through further developing existing skills relating to the staff members' current roles, through exposure to adjacent areas by working as part of multidisciplinary teams, or through interactions with a variety of other employers and organisations.

Massey recognises that staff development can benefit both the staff members, through skill acquisition and career opportunities, and the University through the utilisation of a more experienced and productive group of staff unit managers, which builds overall organisational capability.

At the ground level, unit managers discuss aspects of capability and development with each staff member, usually in a performance-review-and-planning context, and clarifies area(s) where the staff member could develop further. Senior academics and senior professional services staff also have significant roles to play in coaching and mentoring other staff.



There are a number of development and capability-building opportunities available to staff at Massey University. Examples include:

- **Staff study:** The University supports academic and professional staff undertaking further academic study. In some instances assistance with some time off work and a fees concession are available;
- **Women in leadership development:** as part of the University's commitment to equal employment opportunities, Massey offers an internal development programme to support the movement of talented women staff into senior academic and administrative roles;
- **Senior leadership development programme:** this is a practical and applied leadership development programme. The aim is to enhance senior leadership collaboration, learning and performance, and lift collective leadership effectiveness across the University to achieve our strategic objectives and key goals;
- **Leadership wānanga for Māori staff;**
- **Explore Your Management Potential Programme:** a reflective and shared learning experience focused on managerial leadership development within Massey University's business context. The programme looks to enable staff to make informed decisions on their career paths and be in a position to make successful transitions for those who aspire to, and demonstrate managerial leadership potential;
- **Development calendar:** a range of seminars and workshops offered through an internal catalogue of capability-building opportunities, which staff can book online. These includes Te Tiriti workshops;
- **Capability development consultancy:** assessment tools for use in individual and team environments, and/or customised consultancy offered to managers and teams on request to People and Organisational Development to help build individual or collective capabilities;
- **Information technology systems training:** workshops and self-paced training in a number of computer applications; and

- **Professional development for academic staff** delivered through a dedicated National Centre for Teaching and Learning, where academic staff can assess consultation services, online delivery through learning management system support, evaluation of teaching, and teaching development (practical examples include peer review of paper design, teaching and learning circles, core teaching development modules, Stream – the online learning platform – related teaching development, self-directed online teaching development, customised teaching development, strategic teaching development projects, and accredited teaching development qualifications).

Professional services staff represent various fields or job 'families', such as finance, academic administration, secretarial, student support and facilities management. These usually call for specialist knowledge and skills, of which some will be acquired on the job. Many jobs are multifaceted and the incumbents can develop to be proficient in all of these and take leadership roles in some aspects.

Many positions require similar generic skills (work organisation, problem-solving, customer relations, project management, computer skills, etc). Some of the technical and generic skills can be transferable and applied to positions in other fields. Staff may also have the opportunity to develop new skills through one-off projects or secondments, through involvement in committees and cross-functional teams, or through voluntary roles provided these do not adversely affect their performance of their core positions. Staff can explore such opportunities with their managers as they arise or in a performance review and planning context.

Academic staff have the opportunity and are encouraged to develop their credentials in areas of teaching, research and service. These three broad domains provide a staff member with scope to build and grow a personal academic profile. Developing academic staff is something to which Massey is committed. There is considerable guidance available as to what constitutes academic performance at Massey. Unit managers and senior academic staff are encouraged to provide reinforcement, coaching and other personalised advice in these areas. In addition, the Provost is instrumental in defining expectations of academic positions, for example in developing the University's Strategic Research Capability Policy and the annual academic promotion round.

Massey has been proactively identifying gaps in our capabilities and working to ensure that we invest in best practice. For instance, Massey University identified a gap in staff induction and, as a result, it has completely revised its staff induction programme. The new induction programme honours Te Tiriti and it is now being offered to all new staff, with the Vice-Chancellor and the SLT leading the programme.

Massey is also working to introduce online performance development planning, which will help us to capture individual and collective strengths and recognise gaps and target areas for development in real time.

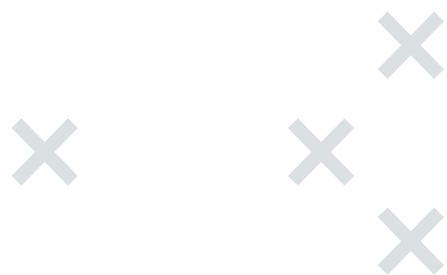
As part of its leadership development, Massey also provides 360-degree feedback to its senior leaders against its existing leadership capability framework. This is now being refreshed in alignment with Massey’s new strategy; we are currently in the process of developing a University-wide capability framework identifying behavioural and technical capabilities for every role at the University. The new framework proposes three core capabilities for every staff member:

- We are Tiriti-led, upholding Te Tiriti o Waitangi principles through our practice;
- We work together with mutual respect and caring; and
- We are future-focused, are results-oriented and strive for excellence.

There are other capability gaps being identified through the Learning and Teaching work stream. These relate to capabilities needed, for example, to lead the sector in digital learning, both in the technical aspects of the technology involved to deliver digital learning, and in the pedagogy development needed for leading digital learning. Increased capabilities in digital learning will also have positive impacts on student success and should therefore have an impact on our EPIs, particularly for distance students.

Massey University can already evidence quality in both technologically enhanced learning and teaching pedagogy. The University is proud to employ many of the nation’s most inspiring teachers; indeed, no fewer than 19 national Tertiary Teaching Excellence Awards have been conferred on our staff since 2002. It is worth noting that our staff development programmes place a primary focus on the continuous improvement of teaching practice to ensure that Massey maintains a national leadership role in teaching innovation. However, our intention is to further boost the quality of the student learning experience and thus meet students’ expectations of personalised learning by placing an increased emphasis on customised delivery modes and state-of-the-art technology. We will do this by both investing in technology to enhance digital learning and investing in professional and academic staff capabilities to build on our strengths.

Finally, Massey University is the first New Zealand university granted the right to accredit staff as associate fellows of the Higher Education Academy (HEA), the first step to becoming fellows of HEA. Massey University is one of only 10 institutions outside the United Kingdom to offer staff development programmes accredited by the academy. The University’s first HEA-accredited continuing professional development course, Introduction to Teaching, was launched in July and is designed to support academics who are new to teaching, PhD students who have some teaching responsibilities, researchers with some teaching responsibilities and support staff who undertake teaching as part of their jobs. An additional programme, the Postgraduate Certificate in Tertiary Teaching and Learning, has been aligned with the academy’s ‘senior fellow’ level and is targeted at mid-career and experienced academic staff.



RESPONDING TO KEY GLOBAL AND NATIONAL TRENDS

Massey seeks to understand its environment through regular and best-possible environmental analyses in order to identify, monitor and respond to key national and global trends, and to ensure we invest in provision that responds to these trends, from not just an economic point of view but social, cultural, health and environmental points of view. The University uses a number of sources to inform its analysis and planning, including datasets from the government such as educational data (secondary school roll projections, tertiary education EFTS consumption, and performance indicators such as successful course completion (SCC), first year retention, qualification completions, progressions, employment outcomes of tertiary education and participation levels). Massey also seeks intelligence from other datasets, such as the Census, labour market projections and analysis, regional development statistics, regional development plans, and information from the various Chambers of Commerce in New Zealand given our national reach.

Massey is also very committed to understanding its performance as an academic institution in relation to other similar providers, as well as other national tertiary education systems. As such, the University engages in a number of benchmarking exercises, both qualitative and quantitative. These exercises help the University to inform itself on how to respond to these key challenges. Examples in the past have included benchmarking of international student employability post-study outcomes, international rankings, the Association of Commonwealth Universities benchmarking, independent audits such as the QS Stars, and the various independent accreditation processes that the University undertakes – at both national and international levels. All of these activities add to the wealth of information the University needs to consider when responding to local and global trends, as well as inform its planning processes, performance evaluations and areas where it needs to consider investments in tertiary provision and support for research projects.

RESPONDING TO KEY NATIONAL TRENDS

New Zealand's domestic economy is currently strong and growing, which translates into an expanding, rather than a contracting, labour market. This is likely to continue for the foreseeable future. Along with scale, the nature of work will change – not just through the impacts of digital disruption, artificial intelligence and other new technologies, but through a 'disruption' to traditional patterns of work where 'whole of working life' career models were the norm. We are witnessing too a significant shift towards 'portfolio' working lives, where moving in and out of different careers will no longer be the exception, but the rule. Together with massive shifts in student demand and expectations – the dominance of 'just in time, just for me' expectations where students expect to be consuming their learning wherever and whenever they choose (and using both synchronous and asynchronous modes of engagement) – largely driven by the experience of learning through massive open online courses (MOOCs), the 'unbundling' of the traditional academic packages and the increase in private-sector providers, universities are facing new challenges. There is also increasing acceptance (both by our markets and gradually through the New Zealand policy settings) of 'lifelong learning', which, in many respects, plays to Massey's strengths, since this is what we have always done.

Massey's response to this will be to ensure not only that we keep pace with demand and shifting expectations, through both what we offer and how we offer it, but that we maintain a leadership role in terms of our ability to reach a diverse (and dispersed) range of learners. Alongside our solid and continuing efforts in the past two years to successfully focus our academic offer and whittle down our large academic footprint, we have also been responsive to new opportunities by developing new programmes and reviewing existing qualifications.



Due to our flexible learning platform and our ethos of 'anywhere, anytime' learning, Massey has always had a large mature-age student cohort, i.e. over the age of 25, and high levels of part-time student enrolment. We realise that, in a highly competitive environment, we need to work hard to retain this market and deliver high-quality experiences to our students. Moreover, we are committed to continual improvement to ensure that we are offering excellent learning experiences to our students – wherever they are based and wherever they have come from.

Specifically, Massey is responding to changes in student demand by exploring micro-credential opportunities; we are developing new, short 'fee for service' courses, especially in the applied sciences and agricultural sciences areas. We are also offering new learning experiences, such as Toro Mai, a new and unique MOOC experience showcasing Māori language and culture, to be offered online and internationally; the courses will commence late in 2018 and will be taught via an immersive multi-media platform. The Academic Committee is sponsoring work on revising our 'recognition of prior learning' credit arrangements, due to be considered in late 2018, and a further project looking at how we assess and integrate e-portfolios into curricular and co-curricular activities (developing reflective practitioners), including the type, how we best encourage uptake and offer value to both students and future employers, whether paid or voluntary.

We are also piloting, in semester 2, 2018, a new employability initiative, 'Kahurei' (which literally means 'an adorned cloak', a reference to the range of formal and informal skills that students develop during their time at university), which is distinctive to Massey in its effort to recognise and reward 'soft skill' development through both formal academic and extra-curricular activities. The concept behind this programme is that students will come to recognise (as will employers) the range of diverse capabilities that students develop and take with them through their learning experiences. We want to recognise this skill development through the verification of activities and competencies to ensure that our students are graduating with clear and defined sets of skills that will make them truly competitive in the workplace. A further aim of this programme is to enhance levels of student engagement and so, ultimately, improve our levels of retention and success.

Massey is also, through a number of targeted investments, this year activating our new strategy. Two of the key priority areas are Student Success and Digital Transformation, which are directly addressing the need for new investment in developing our capabilities and systems and infrastructure as well as driving longer-term cultural change (among our workforce in particular). Alongside this, work is progressing on our Student Enterprise strategy, which will ensure that every Massey student has the opportunity to have an 'enterprising' or 'entrepreneurial' experience – be that focused on work-integrated learning, a professional placement or a service learning opportunity. Academic planning is currently underway for this, with a concerted effort on driving new investment to this space planned for 2019.

As a Tiriti-led University we are committed to demonstrating authentic leadership in contemporary Aotearoa New Zealand as we uphold Te Tiriti o Waitangi, the founding document of our nation, and its principles through our practice. Massey embraces this not just as an obligation but as a real opportunity for the nation and its people. The University will champion new strategies for the advancement and integration of te reo Māori and Māori knowledge, demonstrate informed practices consistent with tikanga Māori and embrace kaupapa Māori in our activities. Massey's teaching and research will contribute to advanced outcomes for whānau, hapū and iwi.



RESPONDING TO KEY GLOBAL TRENDS

Dramatic technological innovations create new opportunities and challenges in teaching and research. Students demand a superb, personalised learning experience that is student focused and flexible and delivers technologically appropriate learning, wherever and however they choose to study. Blended learning continues to reduce the barriers of distance as it transforms the way that on-campus students learn.

Competition for students and staff – both domestic and international – and funding remains intense. Massey University is a globally engaged university with an international reputation. The University's staff, both academic and professional, are highly internationalised, representing more than 50 nationalities. Each year Massey hosts more than 5000 students from 160 countries around the world. Additionally, the University recognises 275 partners in 47 countries (Internationalisation Framework 2017-25).

Massey intends to grow and develop its international presence. International students have been studying with Massey in New Zealand for many years. International student numbers (a 38 per cent increase in 2014-17) and revenue (43 per cent increase) have grown consistently in recent years, primarily as a result of successful agent, university-to-university pathway/articulation, mobility and scholarship recruitment channels. The establishment of the Massey University Worldwide (MUWW) initiative in 2014 was part of a deliberate strategy to build on the University's distance education capability and grow the number of students studying with Massey University while offshore. Moreover, our longstanding partnerships and strong international relationships continue to pay dividends, particularly in Asia and the Americas.

The Massey University Internationalisation Framework 2017-2025 sets out a pathway for the University to engage strategically and continue to grow successfully our international reputation, profile, influence and reach.

The framework emphasises international initiatives that support new and existing research collaborations and drive growth in and the diversification of both the onshore and offshore student body, through new and existing teaching collaborations and partnerships and the promotion of new and existing capability- and capacity-building projects. The framework recognises the importance of those regions and countries where we have strong existing research and teaching relationships, and those where the University intends to develop strategically our presence, visibility and impact. However, the University recognises that it cannot be complacent. Global competition for the recruitment of students and academic staff, the dynamic nature of international education markets and models, the rapid expansion of online delivery of higher education programmes coupled with the impacts of disruptive technology on education systems, along with changes to government policy, mean that the University is proactively reviewing its position and considering its next steps in order to continue the positive momentum achieved in recent years.

Global megatrends such as climate change, population growth, urbanisation, demands for food and water security and sustainable energy, personalisation and geopolitical uncertainty require that universities such as Massey step forward and respond. They must create important new knowledge, educate the next generation of leaders and be the critics and consciences of society.

Our educators are preparing a new generation of global leaders. Our students are diverse and are attracted to Massey because they want to achieve their personal goals or make their marks in the world. Our programmes are research led and informed by the best local and global experience, and have international standing.

We work to ensure that our students experience world-class learning that recognises their intellectual and cultural strengths, expands their horizons and prepares them to contribute to a rapidly transforming world with disciplinary and technical skills, critical and creative thinking and leadership. We are working to integrate curricula, pedagogy and digitally supported learning environments to support our students' learning journeys.

We are also working to ensure that our students have the opportunity to work in industry, with communities and community agencies or iwi, or as active citizens, artists, writers or researchers. Our students are encouraged to develop entrepreneurial skills that ensure individual success. Our best advertisement is the achievements of our graduates, who make positive contributions and create jobs for others.

We are working to encourage evidence-based critical debate and to ensure that a Massey education includes the skills of critical thinking, curiosity and commitment that are essential for national and global citizenship. Massey graduates will be equipped to lead in an uncertain future.

We are working to ensure that all Massey campuses become effective innovation ecosystems, acting as magnets for smart enterprises. Wherever we are, we will operate in partnerships founded on respect, trust and mutual benefit.



2. ADDRESSING THE NEEDS OF YOUR STAKEHOLDERS

STAKEHOLDER ENGAGEMENT IS INTERNATIONALLY RECOGNISED AS A CRITICAL ELEMENT OF STRATEGIC PLANNING THAT UNDERPINS REPUTATION MANAGEMENT AND ORGANISATIONAL SUCCESS. MASSEY UNIVERSITY IS COMMITTED TO IMPLEMENTING A PURPOSEFUL, COORDINATED, PAN-UNIVERSITY STRATEGY FOR AND APPROACH TO EXTERNAL STAKEHOLDER ENGAGEMENT SPANNING RESEARCH, LEARNING AND TEACHING, AND CIVIC LEADERSHIP. THE *MASSEY UNIVERSITY STRATEGY 2018 – 2022* UNDERLINES THE IMPORTANCE OF DEVELOPING MUTUALLY BENEFICIAL PARTNERSHIPS WITH GOVERNMENT, INDUSTRY AND COMMUNITY STAKEHOLDERS TO ACHIEVE OUR GOALS.

At Massey, we engage most frequently with the following types of stakeholder:

- **Our learners:** Coming from a wide variety of ethnic and educational backgrounds as well as geographical locations, our learners range from school leavers looking to engage in tertiary education for the first time to young learners and mature second-chance learners looking to obtain their first tertiary qualification, and mature learners returning to tertiary studies to progress their studies to higher levels, retrain, upskill, change careers or invest in their lifelong learning experiences;
- **Business and industry:** Examples include major corporates, primary-sector producers, innovative, fast-growth small and medium enterprises, industry associations, training organisations and Chambers of Commerce across New Zealand;
- **Central government agencies and ministers:** Examples include the Ministry of Education, TEC, the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment (MBIE), New Zealand Trade and Enterprise and many others;
- **Local government, agencies and community groups:** Examples include regional councils, city councils, district health boards, regional economic development agencies, mayors and councillors in areas where Massey has campuses, as well as regions that are a high priority for recruitment and research purposes e.g. Hawke's Bay, East Coast, Taranaki, Waikato and Northland;
- **Māori:** Iwi, Māori businesses and communities to which we connect to understand their needs and support their continuing success through education and research collaboration;
- **Pacific:** Pacific businesses and communities to which we connect to understand their needs and support their continuing success through education and research collaboration;
- **Not-for-profit and non-government organisations (NGOs):** Examples include charities such as the New Zealand Cancer Society and the Young Enterprise scheme, and NGOs such as the World Health Organization;
- **Research funding agencies and research partners:** Examples include MBIE, Crown research institutes, the Health Research Council of New Zealand and Callaghan Innovation;
- **International stakeholders:** Examples include international universities, international government representatives, research organisations and embassies and other diplomatic representatives;
- **Schools and influencers:** Examples include schools across New Zealand and recruitment influencers such as parents, whānau, teachers and career advisers; and
- **High-net-worth individuals:** Examples include alumni and other prospective donors to the Massey Foundation.

RESPONDING TO THE NEEDS OF OUR LEARNERS

Our learners are central to our mission. Good outcomes for our learners include exceptional learning experiences that equip them with the skills and knowledge, as well as critical thinking and leadership skills, that they will need to participate in their communities as global and local citizens, as well as enable them to achieve their life objectives, which include the skills to develop and attain good careers throughout their lives.

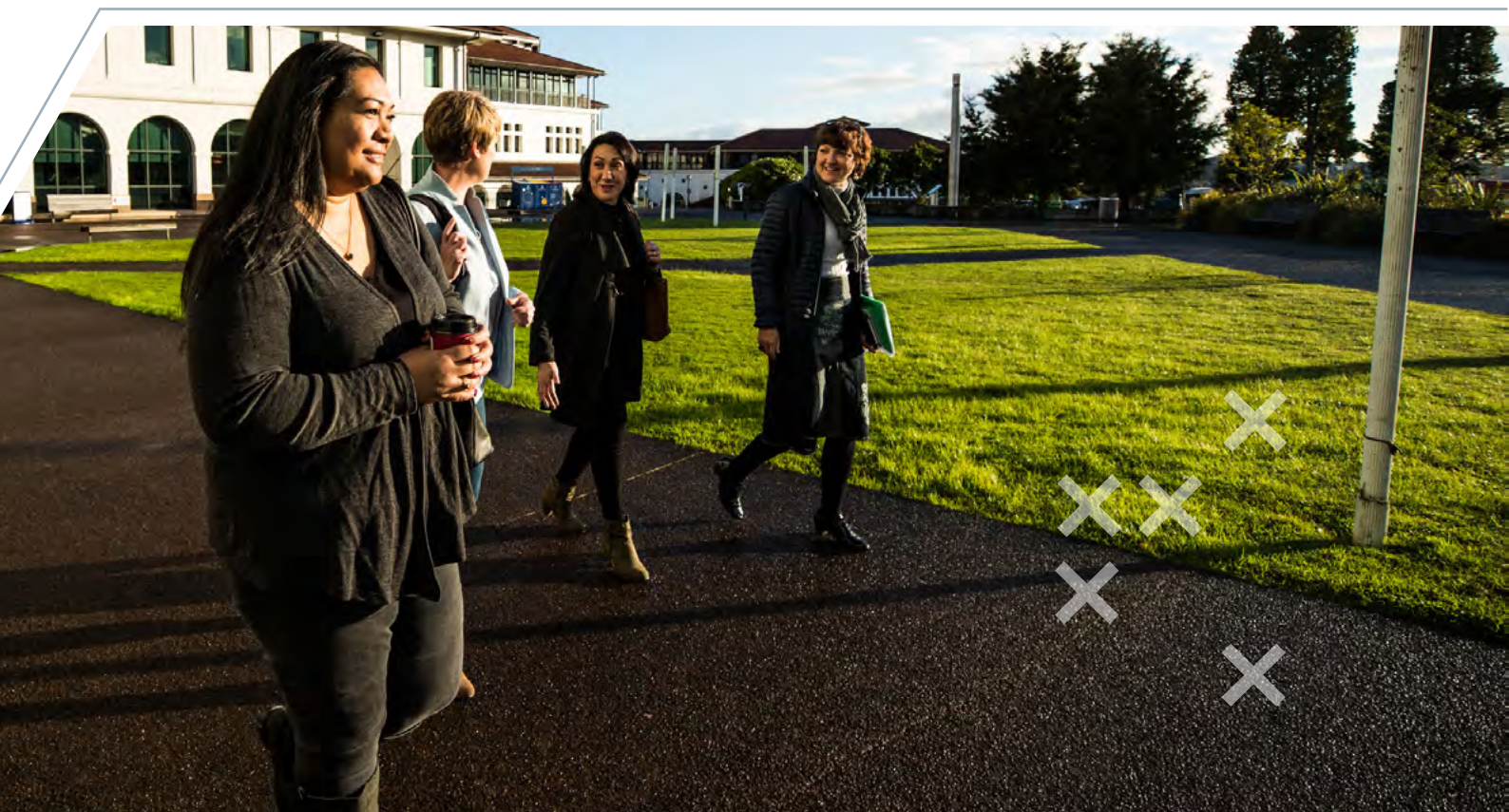
Massey responds to these needs in several ways: through the continuous improvement of our curriculum and pedagogy and having student representation in qualification review processes; by investing in initiatives to ensure student success; by enabling students to exercise leadership opportunities and engage in work-integrated learning practices while studying; and by being responsive to students' voices through formal and informal channels (e.g. Vice-Chancellor student forums, the Student Experience Survey and the Massey Online Survey Tool [MOST] teacher survey). In addition to commitments to KPIs and EPIs, the University produces a number of demographic and profiling trend analysis reports with the aim of supporting a better understanding of what our demographic is and its changing needs.

RESPONDING TO THE NEEDS OF OUR STAKEHOLDERS

Engagement with our stakeholders happens at different parts of Massey University: colleges, support services such as the recruitment team, the International Office, the Māori and Pacific Office, the University Registrar's Office, the Research and Enterprise team, alumni and the Massey University Foundation team, and the MUWW team. All of these engagements are at a personal or organisation level.

Regular engagement is important for our ongoing relationships; however, one of the most critical times to engage is during consultations and strategy development. In 2017 members of the Massey University community – staff, students, the University Council, alumni and stakeholders – came together to revise the University's long-term strategic plan and the result, the *Massey University Strategy 2018 – 2022*, was published in October 2017. This strategy will guide us in the coming years and our stakeholders played a fundamental part in its development.

As a result of the consultation process with our stakeholders, our activities for the next five years have been clearly defined and prioritised around four pillars that form the basis of our new strategy: research, learning and teaching, civic leadership and enabling excellence.



Our strategy states that, as a university, research defines who we are and what we do. Along with supporting and delivering excellent learning and teaching experiences, research sits at the heart of our purpose and mission. Notably, our strategy commits us to investing strategically in both applied and 'discovery' research. This dual focus, which covers our ability to address both 'real-world' and pure research problems, along with our responsibility to build a better New Zealand, clearly differentiates us from other New Zealand universities. As part of the stakeholder engagement, the strategy calls for deepening strategic research collaborations and relationships nationally and internationally, and particularly with industry for mutual benefit.

We have publicly declared too that, in order to provide a distinctive and quality student-centred learning experience, we will ensure that our academic offer and profile are sustainable and fit for purpose and provide students with the knowledge and skills they need to enter the workforce or progress into further research. As part of our University-wide academic approval process, proposers are obliged to demonstrate evidence of meaningful consultation with end-users and other stakeholders, particularly employers, industry groups and professional bodies, on the value, worth and efficacy of their particular programmes. A considerable amount of engagement and 'testing' is conducted through the early-phase development (or review) of a programme. Massey is committed to placing the end-users at the centre of what we do – be they students, employers or 'NZ Inc' – and ensuring that this remains a strong and clear focus in our academic planning. Schools and colleges at Massey also have course advisory or programme advisory groups where stakeholders are represented. Further mechanisms for understanding the views of stakeholders and responding to these are found in the Graduating Year Reviews (which are reported externally to the Committee on University Academic Programmes [CUAP]) and our ongoing dialogue with the Academic Quality Agency for New Zealand Universities (AQA) with regard to the closing off of the Cycle 5 academic audit and the development of Cycle 6.

We regularly and routinely survey our students, most notably through the Student Experience Survey in addition to MOST, Massey's internal survey tool. Our clearly defined graduate attributes mean that Massey graduates leave university with the skills and capabilities to participate actively as educated and global citizens. Stakeholder engagement is crucial in achieving this goal, as our students need access to work-integrated learning experiences and innovation precincts.

In an uncertain and volatile world, where truth is often seen as malleable and sometimes dispensable, we believe that universities and evidence-based research are needed now more than at any other time in our history. They include the civic leadership responsibility that modern, 21st-century universities have: to continue to speak 'truth to power' fearlessly and without reproach. At Massey we aspire to be known for our leadership on matters of interest nationally and internationally, particularly on the social, economic, cultural and environmental issues faced by Aotearoa New Zealand, including those that affect tangata whenua. In our strategy, we aim to achieve this by facilitating discussion and consultation with relevant economic and social development agencies, whānau, hapū and iwi, as well as Pacific communities and local government to maximise our impact.

Finally, we are committed to ensuring that Massey University is sustainable and endures for future generations. Stakeholder engagement in our campuses, by enabling our physical spaces that give life to our innovation ecosystems, is an important part of our strategy. Our new plan has imbued Massey with a renewed sense of purpose and a strong strategic focus, and collaboration with all stakeholders will support the achievement of our organisational goals.

Massey University formally communicates its progress towards improving its organisational performance and how it is meeting stakeholder needs through the Statement of Service Performance and 'year in review' in the Annual Report. Massey undertakes regular consultation with stakeholders on specific matters and provides soft information on meeting stakeholder needs through other forms of publication and social media.

3. GIVING EFFECT TO THE TERTIARY EDUCATION STRATEGY 2014–2019

3.1 DELIVERING SKILLS FOR INDUSTRY

Institution Objective	Provide a distinctive, student-centred learning experience for all students. Graduates will be enabled to participate in the existing and new economies as educated citizens around the world
Description of Related Activities (If Required)	Provision of qualifications that are quality assured
Performance Indicator	Increase the number of undergraduate EFTS in work placements and entrepreneurship activities
Baseline, 2016	3246
Interim Target, 2019	4100
Final Target, 2021	4500
Where this is not explicitly stated please indicate how this objective is reflected in your mix of provision (mop) and/or educational performance indicators (epi) commitments	This is a separate target that will be used to demonstrate Massey's commitment to providing practical experiences to students, where they can apply the knowledge and skills gained through their academic study
Additional Information (e.g. where is this taking place – region, industry sector etc.)	Across New Zealand

Massey is committed to providing an exceptional and distinctive learning experience for all students and to supporting the needs of all our stakeholders, including learners, industry, employers and the community. An educated and skilled workforce is necessary to contribute to the economic development of New Zealand. The *Massey University Strategy 2018 – 2022* provides the reference point for our overarching new Learning and Teaching Strategy, which is currently in draft for consultation. Our draft Learning and Teaching Strategy, which will outline how we deliver our teaching and why, is based on three key pedagogical and curricula principles:

- We are committed to pedagogies and curricula designed to develop curious, critical, creative and resourceful learners;
- We define learning as social, relational and collaborative; and
- We enable learning that is applied, active and relevant (to learners, communities, stakeholders and the wider world).

These principles will be supported by an interconnected framework of a learning community; high-quality, research-led teaching; support for student success; and coherent curricula.

A new Academic Plan, which is currently being developed, will be complementary to our Learning and Teaching Strategy. It will define what we teach and speak to the distinctiveness of our activities. It will enable us also to concentrate our efforts to ensure that our portfolio is fit for purpose and aligned with the needs of our stakeholders, which include employers and industry.



STUDENT SUCCESS IS A FUNDAMENTAL PART OF OUR MISSION

Our students and their families have placed their trust in us to provide a high-quality education with a reputation that will last the test of time. Alongside discipline-specific education, our learners will develop resilience, goal-setting and problem-solving skills, as well as learning how to work in a range of cultural settings with respect and through partnership. They will leave us able to think entrepreneurially and create opportunities in the new and changing ways of work. They will leave us as educated citizens, contributing to our mature democracy and able to reap the benefits economically and socially that a university degree provides. We know that our education transforms lives – not simply those of the students but their families and communities, and the next generation.

The University's Student Success Strategy captures our aim of ensuring that all students – and especially non-traditional learners – realise their potential, are successful through their learning journeys and receive supportive and holistic student experiences. At Massey we work with students as individuals to ensure their success at university and in their future careers. Every student is unique and we seek to understand their needs, both intellectual and material, so that we can support them to fulfil their aspirations. We are guided by and our approach is distinctively based on Sir Mason Durie's model of student success and support – whakapiri, whakamana and whakamārama.

Section 6 of the Investment Plan discusses the 'Transforming Massey' programme, of which student success is a major component. Alongside the programme, there are already a number of support services and programmes operating at Massey, such as orientation and university skills programmes. We also recently launched the 'Strengths@Massey' programme. The programme delivers an online talent assessment followed by a short series of face-to-face workshops designed to help students discover and engage their strengths for academic success and future employability. At the other end of the student journey, we need to ensure that when our students leave Massey they flourish in their employment. In 2017, students in four courses were able to participate in the trial of the 'Kahurei' programme (Massey's employability framework).

As part of Kahurei, focus groups were held with employers (small to very large) on all three campuses to better understand the skills and competencies employers are seeking and their understanding of what it means to be a 21st-century citizen. We explored what work is in the 21st century, how we best prepare our students to be 21st-century citizens and what the key transferable competencies/cultural competencies/skills are of a 21st-century citizen. In 2018, under the student success initiative, the trial has been extended.

Kahurei – a treasured cloak that adorns its wearer – is a unique Massey initiative to facilitate the development of graduates as 21st-century citizens and reflective practitioners by adopting a holistic approach to learning. Students are encouraged to create a kahurei, or portfolio of academic, work-related and personal experiences, with a particular focus on transferable skills, knowledge and competencies that enhance their employability opportunities. Kahurei focuses on developing five main employability characteristics: self-management/tū māia; information literacy/tū mātau; enterprise/tū hihiri; exercising leadership/tū rangatira; and global citizenship/tū te ao. Participating students receive Kahurei transcripts – which serve as Massey University quality-assured records of transferable skills and competencies – complementing the traditional academic transcripts.

This programme was developed following extensive consultation with employers, the majority of whom said they wanted to employ graduates who possessed transferable skills as well as competencies and academic knowledge.

It is hoped that schemes such as this will build on Massey's already impressive employability performance, which contributes to delivering skills to industry. In 2017 our Graduate Destination survey found that 90 per cent of our graduates had entered jobs at the conclusion of their studies, and we were ranked one of the top 300 universities worldwide for student employability in the QS Graduate Employability Rankings.



DIGITAL LEARNING

As New Zealand's leader in distance education, we are constantly ensuring that the University's digital learning and teaching platforms are future oriented and sustainable. In 2017 we produced the draft Learning and Teaching Digital Strategy, which will help to guide our decision-making in coming years. Ahead of the finalisation of the strategy, we have started to make improvements to our online learning platform, Stream, and provide academic staff with enhanced professional development so they can better utilise online platforms and integrate systems, learning platforms and support. Section 6 of the Investment Plan discusses the programme of work as part of 'Transforming Massey' that will enable a digital platform for students that will contribute to our education outcomes, which supports the government priority of delivery of skills to industry.

Massey University remains confident that demand for online learning will continue to grow. It is now abundantly clear that an increasing number of New Zealanders in work want simultaneous access to high-quality, industry-relevant and appropriately packaged university-level qualifications in order to achieve personal growth goals while improving their career development. The ubiquity of the internet, along with the democratisation of access to information and the social media revolution, means that students now want 'just in time, just for me' learning experiences. The global rise of MOOCs means that universities are challenged to assert clearly their value propositions to current and prospective students (school leavers as well as adult learners). Moreover, it is clear that student expectations of learning experiences have shifted and universities must meet and exceed those expectations. Massey is committed to leading digitally enhanced distance-learning provision in and across New Zealand. We believe that blended learning via the online mode can reach more New Zealanders seeking to learn, and thus constitutes a critical capability-building project for the nation; this in turn enhances the productivity and efficiency of the New Zealand workforce and further builds social, cultural and intellectual capital.

SKILLS FOR INDUSTRY

Massey regularly and systematically engages with employers to understand their workforce needs. We do this through the academic approvals process for new programmes, as a matter of practice, and where we are making major transformations to existing programmes. For example, in the interests of building relationships with employer communities the College of Humanities and Social Sciences engaged with Business Central as part of a Bachelor of Arts refresh project. Business Central administered a survey to employers in the Wellington region, which informed the college's analysis of and prescriptions for a refreshed BA. The relationship between the college and Business Central has continued (e.g. the chief executive of Business Central, John Milford, spoke at the Arts21 event held at Te Papa in 2016); in recent years the college has also established relationships with regional Chambers of Commerce in the lower half of the North Island and with BusinessNZ.

In addition, the College of Sciences has recently proposed a suite of 21 new short courses for credit, which are responding directly to industry and employer needs and demand.

PRACTICAL EXAMPLES OF STUDENT ENTREPRENEURSHIP AND INDUSTRY LINKAGES AT MASSEY

A key part of the Massey University academic experience is regular, consistent and coordinated exposure to and engagement in experiences that develop employability skills and knowledge. Key goals are to leverage from existing academic programmes that enhance employability skills' development, and leverage from our existing relationships with employers, develop new ones and sustain these from the perspective of collectively supporting positive post-graduation outcomes for all Massey University students. Practical examples include:

- From the College of Creative Arts, which embeds many opportunities for its students to develop and demonstrate enterprise and entrepreneurship in their academic programmes:

- The Creative Future paper spurring design students Jenny Buckler, Kareena Harris and Priscilla Loong to take their idea for repurposing paper into uniquely crafted notebooks, before recycling, to create Misprint Co. The former students took the idea to Spring, a creative enterprise programme at the college, and further developed it at Lightning Lab Manufacturing, a start-up programme incubator. They are now housed at Wellington’s Creative HQ, a start-up development base;
- *The Exposure Exhibition* of work by final-year students at the School of Art and the School of Design, which is the biggest student exhibition in New Zealand. More than 350 students showed their work in 2017. Exhibits included a hand-held scanner for measuring the quality of kiwifruit, a coffee and water refill, re-use and recycling service, and a proposed new typeface that would provide visual clues to English speakers about the correct way to pronounce te reo Māori;
- Industrial design graduate Nicole Austin’s win of the top prize in the New Zealand section of the James Dyson Award 2017 for her Moray Lamb Detailer, an innovative hand-tool designed for sheep-farmers to assist in lamb docking or tailing iron. In the 17 years that the award has been run in New Zealand, it was the first time that a woman won the award. Three of the four runners-up for this prestigious award were Massey graduates;
- Industrial design graduate Holly Wright’s specialised saddle for disabled riders receiving a Best of the Best Award at the Red Dot Awards in Singapore, and a gold pin at the Designers Institute of New Zealand Best Design Awards. Ms Wright worked with Hutt Valley staff from the national charitable organisation Riding for the Disabled, where she saw the opportunity to improve the assisted therapy experience for disabled riders and their volunteer walking helpers by analysing and rethinking the existing equipment; and
- The award of gold pins in the Design Institute of New Zealand Best Design Awards 2017 to 11 staff, students and graduates of the College of Creative Arts for graphic, spatial, interactive and product design. Fifty-three student projects and five staff projects were finalists. Professor of Industrial Design Tony Parker was awarded a purple pin for best design, having also earned a gold pin for his hand-held digital weigh scale designed in conjunction with Gallagher Animal Management Systems. College Pro Vice-Chancellor Professor Claire Robinson and senior lecturers Karl Kane and Tim Parkin were awarded gold pins in the public good category for their work in developing VoteLocal, an online game-like questionnaire that guided people towards finding the best match among their local mayoral candidates in last year’s local body elections. VoteLocal was also a finalist in the New Zealand Innovation Awards;
- A new student hatchery and ideas’ generation space called the Wonder Room, which was opened in June 2016 to foster innovation at Massey University’s Auckland campus. The concept is to enhance collaboration opportunities by bringing together students from various disciplines to work alongside business and industry to either solve a problem for a business or enable students to work on their own social enterprise;
- A cross-disciplinary approach that involved a number of fourth-year Bachelor of Engineering (Mechatronics) students working on a project with veterinarians resulting in a new device that is changing the way we understand animal pain. Early testing indicated the device’s accuracy and highly repeatable results in more than one testing.

- The prototype pasture meter robot, which was showcased at the 2017 National Field Days and serves as another great example of how we're able to provide students with opportunities to engage in 'real-time and real-world' problem-solving. The C-Dax pasture meter robot, which was supported by Massey Ventures Limited, the University's research commercialisation arm, and developed in conjunction with Massey postgraduate engineering (mechatronics) students, has been designed to help measure pasture precisely and autonomously, saving both labour costs and the over-fertilisation of land;
- An offer from Massey Business School of a total of \$192,000 in scholarships to participants in Entrepreneurs in Action 2017. Each participant received a \$1000 scholarship and each challenge winner received an additional \$2000. The inaugural Massey Innovator's Award and a \$2000 scholarship each went to a team of eight secondary-school students and their Inkdicator concept. The Inkdicator Smart Strip uses colour-changing ink on packaging to let consumers know if a food product is still safe to eat, as packaged dry goods decrease in moisture and increase in nitrogen. The competition is run by the Young Enterprise Trust and each year Massey develops a challenge focused on stimulating New Zealand's economy and future prosperity to test the young entrepreneurs.

The University chose food innovation this year because of its importance to the country's economy, and also because feeding the world well will become increasingly difficult in coming decades; and

- The Auckland Community Accounting initiative, which was developed in partnership with Auckland North Community and Development and offered for the first time. The service is modelled on a successful Community Accounting project that has run in Palmerston North for three years and that is coordinated by the Palmerston North Community Services Council with the support of the School of Accountancy. Both projects provide free financial advice to small to medium-sized community groups and give students invaluable work experience in the process.

Massey University is also building students' ambition to participate and lead within our University, their communities and nations. Events to inspire school-age students to aspire include: Create1world conferences, mock United Nations Security Council Global Summits, Rams Academy (Sport); Health Alliance Day; the Massey Manawatū Maths and Stats (M3S) Competition, the Finance Festival, Young Leaders Symposia (Shout It Out: Young People Find Their Voice), Young Women in Leadership, the Business Boot Camp (commerce and economics), Entrepreneurs in Action, and the Māori and Pacific Veterinary Science and Technology Experience.



3.2 GETTING AT-RISK YOUNG PEOPLE INTO CAREERS

Massey University recognises the important role that tertiary education organisations have in getting at-risk young people into careers.

Massey University endeavours to help prospective learners to make informed choices about tertiary enrolment. Student recruitment advisers visit secondary schools and participate in a variety of regional and local career/tertiary study planning events on an annual basis. These advisers also work closely with career advisers in schools and support students referred to them.

A range of approximately 30 prospectus and programme guide booklets is distributed through schools and to individuals who request career/study advice – this includes guidance to assist parents of prospective students. More detailed information is available on the University’s website and through one-to-one advising appointments with the University’s 18 full-time student advisers.

On-campus visits are arranged for particular groups of transitional students, such as those in STEM (science, technology, engineering and mathematics) subjects, Māori students and those from high schools in the regional centres. On-campus open days are held before each major enrolment cycle begins at our Auckland, Palmerston North and Wellington campuses – these provide ‘taster’ lectures and hands-on experience as well as targeted advising and information sessions for prospective students and whānau. Massey offers STAR (Secondary Tertiary Alignment Resource) and Accelerate enrolments to students in secondary schools who are recommended by principals as needing depth or breadth extensions to their secondary schooling – a dedicated coordinator works with schools to arrange these enrolments. For distance students particularly, the student advisers offer a number of webinars addressing specialised interest in particular subject areas, as well as one-to-one advising sessions by phone and Skype. Dedicated Māori and Pacific student advisers provide advice, support and peer-to-peer engagement for prospective and current students and whānau on each campus, for example through the Te Rau Tauawhi service.

While Massey (like other tertiary education organisations) is only able to deliver face-to-face in schools with Year 12 and 13 students, we do engage widely and frequently with teachers and career advisers to keep them updated on recommended and required subjects for entry to university. We provide update breakfasts, regular weekly communications, and a published subject guide that we distribute to schools to ensure they are well aware of the requirements for their students.

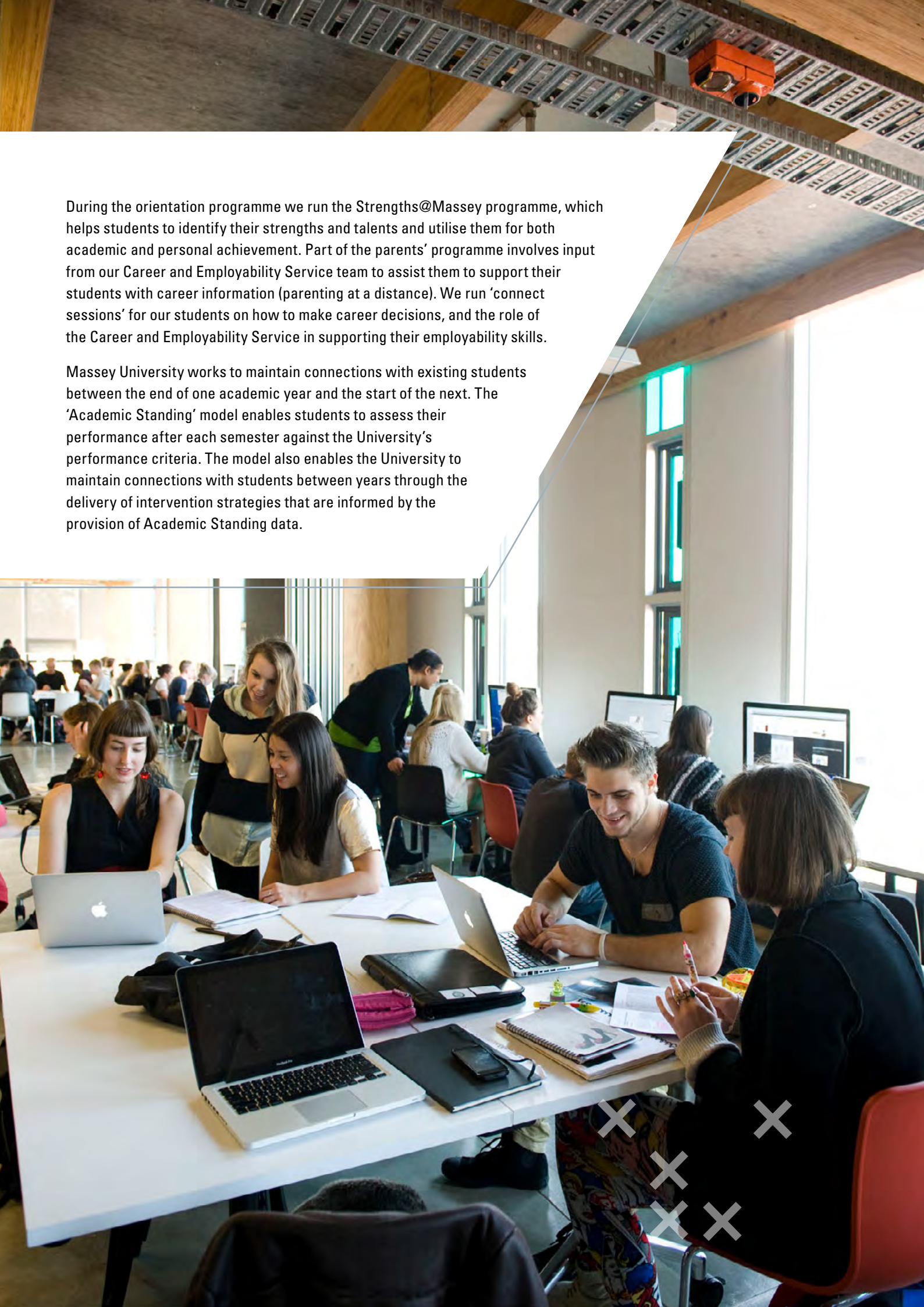
Massey also holds Information Evenings nationally, which are promoted as ‘all age’ community events where advice is given on subject options and entry to university. These are complemented by on-campus open days in Auckland, Wellington and Palmerston North. These are widely publicised and all potential students, including those just starting their journeys through education, are encouraged to attend.

Massey also engages with the whole range of high-school students through careers and options evenings in the schools. These are generally open to the entire school community and attract families with students in Years 10 and 11. Massey also hosts Year 10 taster days on campus towards the end of the year, where we are able to talk about the generalities of attending a university and opportunities to focus on required and recommended subject choices.

Massey supports students to make successful transitions from school to tertiary study. Massey runs a new student orientation programme that includes elements around transitioning to the Massey environment, ensuring that they are engaged with the University, they feel Massey cares about them and they are actively communicated with and appropriately supported.

More specifically, our students’ employability is enhanced after attending Massey University. We support skill development that will enable students to apply their learning and develop as good citizens and independent enquirers.





During the orientation programme we run the Strengths@Massey programme, which helps students to identify their strengths and talents and utilise them for both academic and personal achievement. Part of the parents' programme involves input from our Career and Employability Service team to assist them to support their students with career information (parenting at a distance). We run 'connect sessions' for our students on how to make career decisions, and the role of the Career and Employability Service in supporting their employability skills.

Massey University works to maintain connections with existing students between the end of one academic year and the start of the next. The 'Academic Standing' model enables students to assess their performance after each semester against the University's performance criteria. The model also enables the University to maintain connections with students between years through the delivery of intervention strategies that are informed by the provision of Academic Standing data.

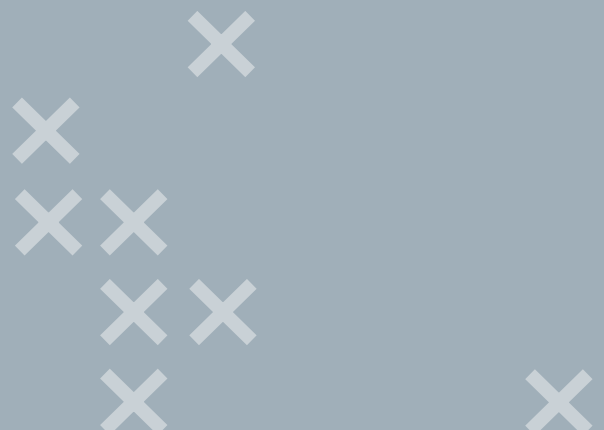


3.3 BOOSTING ACHIEVEMENT OF MĀORI

Institution objective	Delivering high-level outcomes for Māori academic excellence, whānau-centred participation and Māori student success at all levels of study
Description of related activities (if required)	
Performance indicator	First-year retention for undergraduates (L07)
Baseline, 2017	57.7 per cent
Interim target, 2019	62.0 per cent
Final target, 2021	64.0 per cent
Where this is not explicitly stated please indicate how this objective is reflected in your mix of provision (MoP) and/or educational performance indicators (EPI) commitments	
Additional information (e.g. where is this taking place – region, industry sector etc.)	Across New Zealand

In October 2017 the *Massey University Strategy 2018 – 2022* was launched. The strategy has a strong commitment to Māori in its key pillars, demonstrated by:

- Apopo Our Future: A Tiriti-led University advancement and integration of te reo Māori;
- Nga Kete o te Wananga Research: Indigenous knowledge development and leadership, particularly among Māori;
- Te Ako Learning and Teaching: Delivering high-level outcomes for Māori academic excellence, whānau-centred participation and Māori student success;
- Hei Arataki Civic Leadership: Leading by example through the promotion of Māori leadership and bicultural leadership models; and
- Te Pae o Angitu Enabling Excellence: Building staff competencies to honour Te Tiriti o Waitangi and its principles.



KIA MĀRAMA

Kia Mārama 2018-22 builds on Kia Mārama 2013. For teaching, learning and research there is recognition of obligations beyond the University, to iwi and Māori communities and to their changing needs as the post-settlement era evolves. Kia Mārama 2018-22 includes a set of high-level aims, and to address the aims five pathways (Ngā Ara ki te Mārama) have been adopted. The pathways are based on current and future trends and are aligned with staff and student priorities, the *Massey University Strategy 2018 – 2022*, and the wider priorities of Māori.

The sections from the refreshed Kia Mārama strategy that follow are the key drivers for our Learner Success Plan for Māori.

NGĀ WHAI PAINGA (THE VALUES)

“Our approach will be contextualised by values that are important to Māori and to the University.”

- **Whakamārama:** Teaching, research and the transfer of knowledge should lead to enlightenment.
- **Kotahitanga:** The strategy requires collaboration within the University and beyond.
- **Te Pae Tawhiti:** A future focus recognises the need to adapt to changing circumstances.
- **Ngā Huanga:** The strategy is about distributed benefits to individuals, groups, the University and te ao Māori.

NGĀ TUMANAKO (THE AIMS)

“We will adopt a strategy that will lead to gains for Māori students, staff, the University, iwi, hapori and whānau.”

- The Massey experience will provide Māori students with the skills and knowledge necessary for life-long learning.
- The Massey commitment to te reo Māori and to Māori development will be integral to all aspects of the University mission and culture.
- The Massey profile of staff and students will be consistent with national demographic trends.

- The Massey approach will embrace the several disciplines of academia as well as the values and insights from mātauranga Māori that will be considered in the University’s teaching and research programme.
- The Massey outreach will seek collaborative opportunities with other wānanga, universities, iwi and Māori communities.
- The Massey impact will be felt beyond the University by iwi, hapū, hapori and whānau.

NGĀ ARA KI TE MĀRAMA (THE PATHWAYS TO SUCCESS)

“We will build pathways that lead to the implementation of Kia Mārama.”

In order to address the aims, a series of pathways to success – ngā ara ki te mārama – is proposed. Each pathway incorporates markers of success – ngā pou o te mārama. They provide a basis for measuring the overall effects of the strategy.

The five pathways are brought together as an interrelated set of priorities for the University and for Māori. Each pathway has an alignment with one or more objectives in the Massey University Strategy, and as a group they represent a summation of the next iteration of Māori aspirations for Massey University as a Tiriti-led institution.

The five pathways are:

1. Ngā puāwaitanga: Comprehensive outcomes for students;
2. Te hautūtanga: Strong Māori leadership;
3. Ngā pūtahitanga: Integrated solutions;
4. Ngā hononga: Sustainable partnerships; and
5. Te whakaritenga: Managed implementation.



**Ngā puāwaitanga
(comprehensive outcomes for students)**

“We will provide opportunities and support for Māori students to excel in a wide range of endeavours.”

While completing courses and qualifications is an important goal, the University learning experience is also an opportunity to acquire other skills and accomplishments that have long-lasting benefits.

Desirable outcomes for Māori students include at least six pou that have equal relevance for internal and extramural students:

- **Te Whakawhitinga | Transitions:** Moving from secondary school to Massey University or from full-time work to Massey will be easier if there has been adequate preparation, information, scholarships and accommodation that enable new-to-Massey students to enrol in appropriate programmes of study. Establishing relationships with secondary schools will ease the transition and introduce options that may not otherwise have been considered. Similarly, relationships with industry and Māori organisations will increase opportunities for undergraduate and postgraduate entry;
- **Te hiringa | Academic excellence:** The conventional measures of success at university include course completions, high grade point averages, completed qualifications and the attainment of higher degrees. For Māori students those same measures are important. Academic excellence requires opportunities for students to be involved in a range of learning activities, both formal and informal, and also expects that Māori students will have outcomes that are comparable to those of the wider student population – or better. Students involved in extramural study should also be able to join online study groups and academic networks;
- **Whakapiki wairua | Cultural enhancement:** Apart from attaining excellence in academic pursuits, Māori students at Massey will have the chance to strengthen their cultural identity and to expect that the University will provide opportunities for gaining greater fluency in te reo Māori, on-campus Māori cultural activities, marae experiences, and the exercise of tikanga and kawa. The marae at the Wellington campus and the facilities at Te Pūtahi a Toi will be important as bastions for cultural enrichment;

- **Whakahoahoa | Collegial associations:** Being part of a student group, either on-campus or through e-networks, will not only have the potential to contribute to academic success, but also generate comradeship and friendships that can endure after graduation. Participation in kapa haka, or a sports team, or a University club will enrich the University experience and joining the University alumni and the Massey Māori Rōpū will extend the association well after student days are over;
- **Mana rapu ara | Career benefits:** Although university study has not always emphasised future work opportunities, there is increasing demand for courses of study that enable students to enter careers that have particular relevance to Māori futures. Massey has a wide array of applied programmes in all colleges, as well as opportunities for mix-and-match postgraduate degrees that are student centred. To ease the transition to work, Massey’s relationships with potential employers such as iwi authorities, Māori business networks, Māori health and education entities and Māori NGOs will be increasingly important; and
- **Mana tangata | Personal gains:** Quite apart from other benefits, the University experience has the potential to strengthen resilience, commitment, confidence, adaptability, a capacity for establishing positive relationships, and the adoption of healthy lifestyles. It will also equip students for self-directed life-long learning.



MĀORI STUDENT SUCCESS

To deliver high-level outcomes for Māori academic excellence, whānau-centred participation and Māori student success at all levels of study, the University has invested in focused student support. Te Rau Tauawhi, the Māori Student Centre, was established in December 2017. Founded on tikanga Māori principles of whānau manaakitanga, whanaungatanga and mātauranga, the centre provides a range of general and pastoral care services to help prospective and current students and their whānau to engage with the University.

Services include promoting Māori student participation and success, mentoring programmes, helping to connect students to existing Massey services, facilitating relationships with career and employability services, and establishing Māori cohort learning supports. The team supported more than 500 students enrolled in summer school 2017, worked in partnership with BASE+ (the College of Humanities and Social Sciences' student engagement programme), and Māori business mentors and engaged with newly enrolled students and their whānau for 2018. The centre is a crucial step in Māori achievement and retention at Massey. Built on successful Massey programmes such as Te Rau Puawai and the former Te Rau Whakaara, it offers a whānau-centred approach that is culturally safe for Māori students and whānau.

In addition, A Guide for Good Teaching Practice: Considering Māori students was developed and released by Te Mata o Te Tau, the Academy for Māori Research and Scholarship, aimed at increasing Māori student retention and success at Massey. The guide encourages teachers to be culturally engaged when dealing with Māori students. It provides a checklist to help teachers think about their teaching practice, strategies for working with Māori students, and teaching and learning resources.

PŪHORO SUCCESS

Massey continues to support and invest in 'Pūhoro' – the Māori Academy of Science launched in January 2016. For Māori science students, the biggest withdrawals nationally occur between Year 11 and Year 12. Research indicates evidence of low pass rates among Māori NCEA students sitting external examinations in STEM subjects. The Pūhoro programme is designed to guide secondary school pupils through NCEA and prepare them for transfer to tertiary study and ultimately to employment in scientific careers. All Pūhoro students are required to sit external exams. Students in the programme achieved pass rates that surpass nationwide averages in core external achievement standards in NCEA Level 1 physics, chemistry and biology.

- Chemistry (AS90944): Non-Māori 67 per cent; Māori 62 per cent; and Pūhoro students 87 per cent.
- Physics (AS90940): Non-Māori 74 per cent; Māori 71 per cent; and Pūhoro student 76 per cent.
- Biology (AS90948): Non-Māori 72 per cent; Māori 64 per cent; and Pūhoro students 76 per cent.

The Pūhoro programme engaged 97 students in 2016; in 2017 the programme intake was 106 Year 11 students and 86 returning Year 12s. Participants represent more than 40 iwi throughout Aotearoa and attend schools in the Manawatū and Bay of Plenty regions. Schools include: Te Wharekura o Mauao; Murupara Area School; Te Kura o Kauwhata; Hato Pāora College; Feilding High School; Awatapu College; Manukura; and Palmerston North Boys' High School. Kaihautū (navigators) work within schools to complete tutorial/mentoring sessions once per week and one field trip per term. Student selection to the programme is based on student desire to join the programme and commitment to undertake the additional requirements including the tutorial/mentoring sessions. Students who are already excelling in science are not chosen; those who are on the cusp of success or who need extra help are admitted.

In addition to the Pūhoro intake, 20 students from schools in and around Whāngārei were chosen for the Māori Accelerate Programme in 2016. The programme, launched in 2016 by Massey, is aimed at helping Māori secondary students to recognise their potential to succeed and to achieve their goals and get into tertiary study.



NEW MĀORI PROGRAMMES

Te Aho Paewera, the first university-based postgraduate programme in Māori-medium initial teaching, was launched in 2017 with 18 students in the first cohort. The one-year, distance-study programme enables those with existing degrees to upskill as teachers. The programme is delivered in partnership with Te Rūnanga Nui o Ngā Kura Kaupapa Māori o Aotearoa, which means students have access to many of the key experts and leading architects of the kura kaupapa Māori movement. Te Aho Paewera builds on the success of the University's refreshed undergraduate programme Te Aho Tātairangi, which delivered its first graduates in 2016. The Bachelor of Teaching Māori Medium/ Diploma Māori Education is a four-year double degree designed to train teachers ready to go into the country's kura kaupapa Māori. The course was designed in partnership with Te Rūnanga Nui o Ngā Kura Kaupapa Māori o Aotearoa and is one of the few tertiary education programmes in the country to be modelled on Te Aho Matua, the founding document and driving force for kura kaupapa Māori. Five students from the College of Humanities and Social Sciences were among 30 recipients in 2017 of Ministry of Education TeachNZ \$15,000 Kupe Scholarships. The scholarships are awarded to highly talented Māori and Pacific people who have leadership expertise, and who will be role models of the teaching profession in their communities.

A new Māori agribusiness major within the Bachelor of AgriCommerce was made available in 2016. The qualification produces graduates with both the core skills of an agribusiness graduate and cultural information to help organisations collaborate with Māori. Students take core papers from the Bachelor of AgriCommerce as well as specific Māori agribusiness papers such as Māori Agribusiness Systems and Māori Policy in Agribusiness.

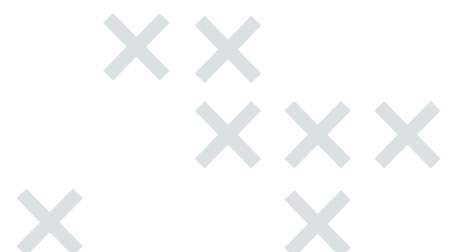
MĀORI STUDENT SUCCESS

In the period 2013-2017 there was a significant improvement in SCC rates among our Māori students in full-time study, in a number of programmes and colleges, including:

- College of Health (74.7 per cent in 2013 to 82.5 per cent in 2017)
- College of Humanities and Social Sciences (71.1 per cent in 2013 to 79.7 per cent in 2017);
- Massey Business School (65.8 per cent in 2013 to 75.3 per cent in 2018);
- Manawatū campus (76.1 per cent in 2013 to 80.1 per cent in 2018); and
- Distance study (67.5 per cent in 2013 to 73.4 per cent in 2018).

However, in the period 2013-2017 there was little improvement in the overall SCC rate for Massey Māori learners compared with non-Māori, non-Pacific.

Year	Māori	Non-Māori, non-Pacific
2013	70.0%	82.5%
2014	70.7%	82.5%
2015	71.7%	84.4%
2016	71.7%	84.7%
2017	73.9%	85.1%
Average annual change	1.0%	0.7%



MASSEY UNIVERSITY MĀORI LEARNER SUCCESS PLAN

Massey has developed a Māori Learner Success Plan to address the TEC's and Massey's concerns around disparity between the performance of our Māori learners and that of our non-Māori, non-Pacific learners.

Massey acknowledges that it must, and can, provide better services and achieve better outcomes for our Māori learners. The Māori Learner Success Plan sets out our understanding of the key areas that we need to address and the additional actions, and associated monitoring, we have put in place to achieve our desired outcomes for our Māori learners. The actions set out in the plan are driven by the *Massey University Strategy 2018 – 2022* launched at the end of 2017 and are aimed at complementing both the specific and generic initiatives and services already in place.

The existing initiatives have supported Massey's overall Māori SCC rate increase from 68.8 per cent in 2013 to 73.8 per cent in 2017, an average per-annum increase of 1 per cent. The additional activities set out in the Learner Success Plan are aimed at lifting this level of SCC improvement in the next two years to 1.8 per cent per annum.

The plan details specific new activities that are aligned with the TEC's three parity targets for Māori learners. Some of the new activities are focused specifically on lifting performance among our distance students while others are focused on our campus students. The new activities in the plan sit alongside our new Tiriti-led initiatives, which will reshape the way we engage with Māori and focus our distinctive student-centred learning experiences.

These new actions represent a significant increase in our annual investment to achieve parity of outcomes for our Māori learners. They are aimed at extending the improvements that Massey has achieved for our Māori full-time learners to our distance/part-time Māori students and accelerating the improvements across all Massey's programme delivery.

Some of the activities represent expansions of proven existing initiatives and others are new initiatives. A key parallel activity, already underway under our Student Success and Enterprise Transformation Programme (Section 6 of this Investment Plan), includes a review of current student advice services. As noted in the 'Plan implementation governance and management' section below, we have unified these work streams by assigning the governance of our Learner Success Plan to the same SLT governance committee.

The plan details specific activities and milestones that are aligned with the TEC's three parity targets for Māori learners. Some of the new activities are focused specifically on lifting performance for our distance students, while others are focused on our campus students.

FOCUS AREA – TAI TOKERAU NORTHLAND

Massey University is supporting the TEC's goals and expectations for providing the people of Tai Tokerau Northland with stronger pathways to the right tertiary qualifications by working with students, communities, local groups and local businesses. Information can be found in Section 6, 'Other additional information'.



3.4 BOOSTING ACHIEVEMENT OF PACIFIC PEOPLES

Institution objective	Growing the participation and success of Pacific students at all levels of study
Description of related activities (if required)	
Performance indicator	First-year retention for undergraduates (L07)
Baseline, 2017	58.3 per cent
Interim target, [year]	62.0 per cent
Final target, [year]	64.0 per cent
Where this is not explicitly stated please indicate how this objective is reflected in your mix of provision (MoP) and/or educational performance indicators (EPI) commitments	
Additional information (e.g. where is this taking place – region, industry sector etc.)	

Effective 1 January 2018, Massey's new strategic plan sets out our approach to learning and teaching:

"We will provide a distinctive student-centred learning experience for all students. Graduates will be enabled to actively participate in the existing and new economies as educated citizens around the world.

We will do this by:

- Providing first-class, digitally enhanced learning experiences informed by the student voice;
- Growing the participation and success of Pacific students at all levels of study;
- Leveraging data analytics to support student learning and the student experience; and
- Building student scholarships that encourage the academic progression of undergraduate students, particularly to postgraduate level/advanced degrees."

The strategic intent for Pacific success at Massey University is articulated through Growing Pearls of Wisdom, our Pacific strategy. It has five strategic goals: student achievement; research and policy; engagement; organisational capacity and capability; and Pacific curriculum development.



The student achievement goal aims to support the academic excellence of Pacific students by creating a learning environment that is cognisant of their cultural values and practices, and where Pacific success is a norm. The priorities include establishing and supporting Pacific student learning needs and styles, building staff capacity to support Pacific students' learning needs and styles, and celebrating Pacific Peoples' values and success.

These goals are being executed through the implementation of the following strategic actions:

- Develop academic pathways into and through tertiary education to optimise the potential of Pacific students;
 - Develop and implement a strategy for enhancing the success of Pacific distance learners;
 - Develop and implement an enabling framework that enhances Pacific students' success;
 - Engage with Pacific learners using approaches and pedagogies that recognise their learning styles and cultural values and practices;
 - Engage with partners and stakeholders who are crucial to Pacific students' achievement, including secondary schools, Pacific families and communities, churches, providers, other institutions and industries;
 - Engage Pacific students who are high achievers at Massey as role models for Pacific success;
 - Establish and strengthen engagement and collaboration with colleges and services at Massey to enhance student success;
 - Increase Pacific enrolments in strategically important qualifications;
 - Create opportunities for Pacific students and graduates to apply Pacific innovative practices to Pacific social, economic, cultural and environmental issues;
 - Develop a framework to identify at-risk students and implement effective interventions; and
 - Support the development of leadership capacity among Pacific students.
- In terms of activities, in 2018 our focus has been on initiatives such as:
- **Pacific students' orientation:** Pacific orientation is designed to introduce new students to support services, staff, selected returning students and campus amenities in a Pacific-friendly environment. The aim is to ensure that, together with information delivered by mainstream orientation, our students are well equipped and prepared for the year ahead, and if they face any obstacles they have knowledge of the support services available to them;
 - **Pacific students' welcome lunch:** The Pacific welcome lunch is held on all three campuses. These lunches are held on the first week of the semester to enable new students and the wider returning student body to connect and network. The lunches are also used to introduce students to academic and support service staff who work closely with Pacific students;
 - **Support for MAPSA (Massey Albany Pasifika Students Association):** This association was established in 2017 to enable Pacific students to access funding available to them via the student levy;
 - **Weekly communication to students:** Learning advisers seek to build strong relationships with students. Weekly emails and online correspondence advertise things like Pacific-focused social events and weekly workshops. Through constant communication we aim to help students remain motivated and connected and seek support from Pacific learning advisers;
 - **Student retreat / leadership camps:** We want to provide a setting where students are able to come together free from their normal preoccupations and the busyness of study life to network and build on existing leadership qualities. It is hoped that such leadership qualities will then be employed to support other Pacific students upon their returning to everyday student life on campus;
 - **Pacific awards evening:** This is a new initiative set to be rolled out in 2018-19;
 - **Academic workshops:** This is within the role of the National Centre for Teaching and Learning's Pacific learning advisers/consultants. These workshops are conducted face to face and online to capture the needs of distance-learning students;

- **Massey Business School peer mentor study groups:** Tutors are selected from and paid by the Massey Business School to provide paper-specific support and to facilitate each session. Historically Pacific students have not fared well with the Massey Business School's core programmes; hence the creation of this initiative;
 - **Manatua leadership mentoring programme:** The Manatua leadership mentoring programme started in Palmerston North in 2010. In 2018-19 it will be introduced to both the Wellington and Albany campuses;
 - **Generic study groups:** These have proven successful in building supportive learning communities and healthy study habits among Pacific students. In tandem with the mentor programme, we hope to ensure strong support networks within the various Pacific student communities; and
 - **Student academic consultations and pastoral care support:** This is the core of the learning advisers' role for Pacific students. These workshops are either face to face or online. They provide Pacific students with safe environments in which to build their confidence in pursuing tertiary studies in a mainstream tertiary setting;
 - **Regional distance-learning workshops:** The majority of Pacific students study via distance learning, and historically their success rates have been lower than those of internal students. Contributing factors include a lack of timely access to academic and study skills support, feelings of isolation from University physical campuses, and a lack of good time management. Pacific students choose distance learning as it is convenient for them due to reasons such as family, work and distance from campuses. It is vital that, throughout each semester, consistent communication and face-to-face meetings are set up with distance-learning students to ensure they feel connected and engaged. Workshops in the South Auckland and Northland regions have been conducted in the past. For now this service will only be facilitated by the National Centre of Teaching and Learning Pacific team. The regions are determined by their proximity to each of our three campuses;
 - **Pacific postgraduate student writing retreats:** The postgraduate fono provides an opportunity for Pacific postgraduate students to connect, discuss the challenges faced, and share their research with others. Academic staff are invited to make presentations on priority areas of students' learning needs. Given an increase in the number of PhD students, a writing retreat is proposed for 2018;
 - **Pacific Excellence Awards:** 15 awards are available under this initiative. Recipients are recognised at the annual Celebration to Honour Pacific Graduates;
 - **Pacific students' culture night:** About 80 per cent of Pacific students are from outside Palmerston North. Acknowledging and celebrating our Pacific cultures is critical to strengthening our students' sense of identity and in building a strong student community. The culture night provides an opportunity for students from each ethnicity to share an aspect of their culture. This is important as there is quite a small Pacific population in Palmerston North. Each year the event attracts 200-250 participants; and
 - **Pacific scholarships.**
- The University also supports outreach initiatives to support the participation of Pacific students. Examples include:
- Language weeks for Niue, Cook Islands;
 - Support for the Pacific Fusion Festival in Northland: The festival is used to engage with stakeholders and the Pacific community from the Northland region;
 - Aganu'u: My Cultural Space;
 - Support to the ASB Polyfest: Massey University has sponsored the Tongan stage for more than 11 years. To date this stands as our biggest community engagement event. The festival is run over four days with close to 100,000 people attending;
 - Celebration to Honour Pacific Graduates: This is an important event for Massey. It is one of the few times that our Pacific communities visit Massey in celebration of their families and friends who have graduated. The social media aspect of the celebration also allows substantial community outreach; and

- Pacific community awards: The Pacific community awards are proudly sponsored by Tongan community group, Fofō'anga Inc. Recipients are recognised at the annual Celebration to Honour Pacific Graduates.

PACIFIC STUDENT SUCCESS

In the period 2013-17 there was a significant improvement in the SCC rate for Massey Pacific students, with an average per-annum increase of 2.4 per cent compared with 0.7 per cent for non-Māori, non-Pacific. However, the SCC rate for Massey Pacific students is still unacceptably low for both our distance and campus students.

Year	Pacific	non-Māori, non-Pacific
2013	52.3%	82.5%
2014	57.2%	82.5%
2015	58.6%	84.4%
2016	64.5%	84.7%
2017	62.1%	85.1%
Average annual change	2.4%	0.7%

Guided by our new strategic plan, Massey is increasing its focus on Pacific learners in an effort to improve performance in key EPIs. Massey has identified the following EPIs to be addressed in this Investment Plan period:

- SCC rates and retention rates at entry level for foundation and degree programmes; and
- SCC rates for our Pacific distance learners.

MASSEY UNIVERSITY PACIFIC LEARNER SUCCESS PLAN

Massey has developed a Pacific Learner Success Plan to address the TEC's and Massey's concerns around disparity between the performance of our Pacific learners and that of our non-Māori, non-Pacific learners.

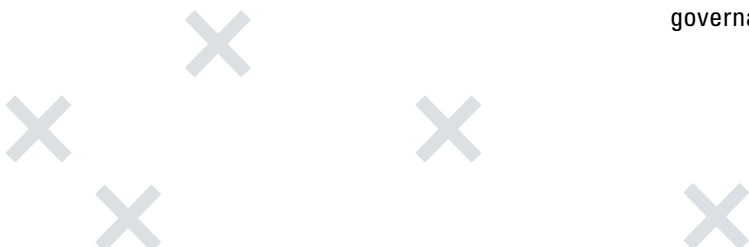
Massey acknowledges that it must, and can, provide better services and achieve better outcomes for our Pacific learners. The Pacific Learner Success Plan sets out our understanding of the key areas that we need to address and the additional actions, and associated monitoring, we have put in place to achieve our desired outcomes for our Pacific learners. The actions set out in the plan for Pacific are driven by the *Massey University Strategy 2018 – 2022* launched at the end of 2017 and are aimed at complementing both the specific and generic initiatives and services already in place.

The existing initiatives have supported Massey's overall Pacific SCC rate increase from 53 per cent in 2013 to 62 per cent in 2017, an average per-annum increase of 2.4 per cent. The additional activities set out in the Pacific Learner Success Plan are aimed at lifting this level of Pacific SCC improvement in the next two years to 3.3 per cent per annum.

The plan details specific new activities that are aligned with the TEC's parity targets for Pacific learners. Some of the new activities are focused specifically on lifting performance among our distance students while others are focused on our campus students.

These new actions represent a significant increase in our annual investment to achieve parity of outcomes for our Pacific learners. They are aimed at extending the improvements that Massey has achieved for our Pacific full-time learners to our distance/part-time Pacific students and accelerating the improvements across all Massey's programme delivery.

Some of the activities represent expansions of proven existing initiatives and others are new initiatives. A key parallel activity, already underway under our Student Success and Enterprise Transformation Programme (see Section 6 of this Investment Plan), includes a review of current student advice services. As noted in the 'Plan implementation governance and management' section below, we have unified these work streams by assigning the governance of our Pacific Learner Success Plan to the same SLT governance committee.





3.5 IMPROVING ADULT LITERACY AND NUMERACY

Massey University recognises the important role that tertiary education organisations have in improving adult literacy and numeracy. Massey does not see its primary role as being to improve adult literacy and numeracy, and understands this priority is better addressed through other tertiary education organisations.



3.6 STRENGTHENING RESEARCH-BASED INSTITUTIONS

Institution objective	Be a world leader in our chosen areas of research
Description of related activities (if required)	
Performance indicator	External research income
Baseline, 2017	\$74 million
Interim target, 2019	\$72 million
Final target, 2021	\$76 million
Where this is not explicitly stated please indicate how this objective is reflected in your mix of provision (MoP) and/or educational performance indicators (EPI) commitments	
Additional information (e.g. where is this taking place – region, industry sector etc.)	

Massey University is a research-led New Zealand university with a reputation for excellence in innovation and the creation of new knowledge. Our research spans discovery, commercialisation, scholarship and the production of creative works and is inclusive of both professional and clinical practice. We have an unrivalled record of research excellence in subject areas vital to New Zealand's society and economy, reaching back almost 60 years and more than 130 years in the creative arts.

Our areas of research strength are veterinary science, land- and food-based research, nursing and public health, key areas of the social sciences, and creative arts and design. At Massey we define 'excellence' as best practice and we value both pure and applied research. We are distinguished by our focus on solving 'wicked problems' and contemporary societal challenges, in addition to maintaining our commitment to fundamental knowledge discovery. This dual focus, along with our unwavering responsibility to build a better New Zealand, differentiates Massey from other New Zealand universities. This approach to our research also informs the connection with our teaching and postgraduate supervision through the teaching-research nexus. Our academic offerings, driven by our research, offer students opportunities to work alongside practitioners and engage in applied learning contexts and to solve 'real world' problems.

As part of the *Massey University Strategy 2018 – 2022*, Massey intends to achieve its goal of being a world leader in its chosen areas of research by:

- Strategically investing in focused areas of both applied and 'discovery' research;
- Promoting and rewarding excellence in research;
- Investing in the next generation of researchers by creating an environment where the world's best young researchers can flourish;
- Deepening strategic research collaborations and relationships nationally and internationally, particularly with industry and communities for mutual benefit;
- Maximising the commercial benefits of intellectual property and other outcomes derived from research; and
- Actively facilitating indigenous knowledge development and leadership, particularly among Māori as tangata whenua of Aotearoa New Zealand.



RESEARCH STRATEGY

In 2017 we launched major strategies that will support a stronger focus on strategic investment in research capabilities at Massey University in coming years. As a university, research drives us and defines us; we see research excellence at Massey as being leaders in our chosen areas of research. Moreover, we have chosen to invest strategically in both applied and discovery research. It is this dual focus – our emphasis on both ‘real-world’ and pure research – that makes us truly distinctive.

In December 2017, He Rautaki Rangahau Research Strategy 2018-2022, which supports the University’s strategic plan and links to the colleges’ research plans, was approved. The aim of the strategy is to ensure that researchers at Massey University are supported to achieve their full potential, whether as individual researchers or as part of a team, in an effort to continue our record of research excellence in subject areas vital to New Zealand’s society and economy. The strategy is based on the following commitments:

- Developing and maintaining the high quality of our research and researchers;
- Being a leading institution in New Zealand for the recruitment, development and retention of researchers;
- Increasing research income and providing world-class infrastructure;
- Having active relationships with key partners nationally and globally to ensure mutual benefit and effective capacity- and capability-building;
- Developing, supporting and excelling in both the depth and breadth of our research; and
- Leading effective knowledge transfer, engagement and entrepreneurial activities to realise social, cultural, economic and environmental benefits.

We also launched He Waihangā Ake i te Whare Rangahau – Building a Research Powerhouse 2018-2022, our strategy for improving our performance in international research rankings. The strategy acknowledges our signature research areas and seeks new opportunities to foster, extend and capitalise on these strengths to ensure that ‘Massey research’ means excellent research.

Most of Massey’s teaching staff are on ‘balanced’ academic tracks, which means they must engage in research in addition to engaging in teaching (normally at both undergraduate and postgraduate levels). While the ‘teaching-research nexus’ (research-informed teaching) is most clearly evident at the postgraduate level, where students are often working on research-led projects, staff research informs and drives the shape and content of our pedagogical approaches and our academic curriculum. As a research-intensive university, our systems of recruitment, development and reward (academic promotion) give effect to our commitment to research-led teaching.

Massey benchmarks research productivity against international standards through our active engagement in international research ranking systems, of which the most notable are QS and THE (Times Higher Education) World University Rankings. In 2018 we have implemented our new Research Rankings Strategy 2018-2022, which focuses our collective efforts on ensuring that we continue to support subject areas where we are highly ranked, and commit to support and develop subject areas where we recognise there are new opportunities for research excellence. Our success in securing internationally competitive research funds is a further metric of research benchmarking, as is our ability to recruit and attract globally competitive researchers to Massey and who want to partner with Massey. Benchmarking is also implicit in businesses that wish to purchase our commercialised research, both on- and off-shore. Moreover, given that doctoral candidates normally select the institutions at which they will study in terms of working with particular researchers, our ability to attract high-quality international PhD candidates is a proxy for research excellence (see, for instance, the Riddet Institute cohort of doctoral scholars). As an aside, locally competitive research exercises, such as the Performance-Based Research Fund (PBRF), also contain a measure of international benchmarking.



Massey actively collaborates with a range of other research organisations, including Crown research institutes such as AgResearch (through the New Zealand Food Safety Science and Research Centre), the Riddet Institute and the Hopkirk Research Institute, Plant and Food Research, and the Cawthron Institute, to name just a few. Our efforts in this regard are designed to optimise nationwide capability and minimise duplication through a range of research projects, especially in the applied animal and food sciences areas.

RESEARCH DEVELOPMENT AND SUCCESS

In 2017 a targeted programme of support and investment for Massey researchers to develop and submit high-quality proposals for key contestable funds was rolled out. Additionally, a new Strategic Research Excellence Fund, which promotes research that aligns with the University's strategic objectives and supports high-quality research, was instigated, with 22 awards made.

During 2016 and 2017 we achieved significant success in securing external research funding.

- Massey researchers received more than \$15.6 million in funding for 26 projects from the Royal Society of New Zealand's Marsden Fund in 2017, setting a new record for the number of projects funded and the amount of funding secured at Massey. The successful grants – which comprise 10 'Fast-Start' grants for new and emerging researchers and 16 standard grants – represent 18 per cent of the total \$84.6 million funding available from the fund. In 2016, seven Massey University projects shared \$3.1 million from the Marsden fund. The number of successful applications for Marsden funding made by the College of Humanities and Social Sciences increased from two in 2015 to five in 2016. The 2016 result put the college among the most successful humanities and social sciences colleges in New Zealand.

- Two researchers received nearly \$6 million from the Health Research Council of New Zealand in 2017, targeting occupational disease in New Zealand as well as international alcohol policy and its impact. Almost \$5 million, the largest funding award made by the council in the 2017 funding round, went to Professor Jeroen Douwes, Director, Centre for Public Health Research. In 2016 the University was awarded more than \$4.4 million in funding from the council to tackle issues including screening for cervical cancer, cancer survival rates in Māori, improving smoking cessation rates, managing nurses' fatigue, and occupational risk factors of cardiovascular disease.
- Five research projects received a combined \$9.85 million from MBIE's 2017 Endeavour Fund. The Health and Ageing Research Team received almost \$4 million, bringing the total funding the team has secured for research into the health and wellbeing of older persons in New Zealand to \$11,326,400. The project seeks to answer the crucial question for an ageing population: 'How can government, employers and workers maximise older New Zealanders' participation in the workforce?'
- In 2016, six research projects involving Massey University were awarded more than \$2 million from the Government's \$4.75 million Catalyst Fund, which aims to link New Zealand with other world-class international research groups and initiatives. Massey projects include developing 5G communication technology worldwide, predicting the next volcanic eruption, child development in New Zealand, quality housing for the elderly, creating metals from plants, and distinguishing 'doomed' endangered species from those that can be saved.



- Three projects received MBIE Unlocking Curious Minds contestable funding in 2017: New Zealand National Biomechanics Day: FORCE is needed to start a MOVEMENT (\$48,000); Experiential learning about climate change (\$27,500); and Ōtātou tamariki, ngā kaitiaki taiao. Our children, our environmental guardians (\$26,000). Dr Faraz Hasan and Dr Fakhru Alam, in partnership with PrimoWireless, received Participatory Science Platform funding for a project that engaged students at New Plymouth Boys' and Girls' High Schools in exploring the state of wireless connectivity in Taranaki. The project involved practical exercises to help students appreciate the challenges and research issues pertinent to Wi-Fi connectivity. In 2016 four Massey University projects were awarded combined funding of \$217,894 from this fund; Massey received the highest number of awards among New Zealand universities.
- Massey University researchers are also involved in teams led through other institutions that have received funding.

An additional 30 PhD scholarships were made available in 2016. In 2017 our doctoral enrolments exceeded 1000 students, with 185 candidates awarded their doctoral degrees. Of this cohort, 58 per cent were female and nearly half, 48 per cent, were international students. Ten students were presented with Dean's Awards for theses of exceptional quality by the University's inaugural dean of research.

We are building student scholarships that encourage the academic progression of undergraduate students, particularly to postgraduate level/advanced degrees. The Massey University Foundation received a \$3.4 million gift in 2017 from an anonymous donor. It is the largest single donation in Massey's 90-year history. The money will be invested in perpetuity in the foundation's endowment fund and the proceeds used to support postgraduate scholarships.

We also made significant progress towards the 2018 PBRF round, with funding provided to colleges to support staff completing their research portfolios.

Our own highly regarded publishing house, Massey University Press, enabled us to share our research with a wider audience. Since its establishment in 2015, the press has published 32 books, of which 26 were written or edited by Massey staff and have made a significant contribution towards their PBRF portfolios. It has also published Rangahau: Research at Massey, which profiles 30 current and recently completed projects from across the academic spectrum of Massey's five colleges and multiple research centres. Another significant book published in 2016 was From Empire's Servant to Global Citizen: A history of Massey University, by Professor Michael Belgrave. The press also will provide the publishing infrastructure for Te Papa Press following an agreement signed in July; Te Papa Press and Massey University Press books will continue to be published under their respective imprints, but the publishing partnership will benefit both organisations.

OUR FOCUS ON THE PRIMARY INDUSTRIES

Massey University continues to advance its role of contributing to primary industries and the economy of New Zealand. A School of Agriculture and Environment and a School of Veterinary Science superseded the Institute of Agriculture and Environment and the Institute of Veterinary, Animal and Biomedical Sciences respectively in the College of Sciences from 2018.

The New Zealand Food Safety Science and Research Centre, officially launched in May 2016, is continuing to build New Zealand's reputation as a global leader in the supply of safe food by delivering world-class, strategic scientific research driven by the needs of government, consumers and industry. The centre's inaugural director is Massey Professor Nigel French, a world leader in molecular epidemiology and public health research.

The New Zealand-China Food Protection Network, also established in 2016, enhances communication between research scientists, government organisations and industries in New Zealand and China, and works alongside and in tandem with the New Zealand Food Safety Science and Research Centre.

The new Alpha-Massey Natural Nutraceutical Research Centre was launched in April 2016. The centre is a cooperation between the Riddet Institute, Alpha Group Holdings Limited and Shanghai's Tongji University. The centre's research will evaluate extracts for biological activity from plants common in New Zealand and thereby enhance New Zealand's research and innovation capacity in natural nutraceuticals.

The Massey-led Science of Food platform received \$1.5 million in funding from the High-Value Nutrition National Science Challenge in 2016. The Science of Food platform will address the technological challenge of creating food products that provide enhanced health benefits by delivering natural, health-enhancing compounds (bioactives) to the body. Up to \$1.5 million was also allocated to Consumer Insights Limited for research at Plant and Food Research, with a focus on the health and wellness needs of Asian consumers.

Construction started in early 2018 on a \$45 million food science facility in partnership with AgResearch. The facility will sit alongside the existing FoodPilot plant at the Manawatū campus. The facility will be the epicentre of science for FoodHQ.

The Riddet Institute will lead the Proteos project, which is being funded by an international consortium of food industry sectors. The Global Dairy Platform, based in Chicago, has undertaken the role of coordinating the project on behalf of the various industry sponsors. Proteos aims to characterise the quality values of the world's food proteins and has the potential to improve world food security dramatically and meet the nutrition needs of burgeoning populations. It responds to a recent call from the United Nations Food and Agriculture Organization (FAO) to provide state-of-the-art information on food protein sources. Its ultimate value is likely to exceed \$7 million.

The Institute of Food Science and Technology has a new research partnership with Canterbury-based dairy company Synlait. A research and development team will be based at Massey's Manawatū campus and use facilities in the FoodPilot, and also provide new equipment that will be available for use by other research teams at the University.

2017 marked the 30th anniversary of the New Zealand Food Awards. The awards recognise innovation and excellence in New Zealand's largest export sector. Massey University owns and organises the awards and is a leading provider of knowledge for food and health innovation in New Zealand. The gala event brought together dozens of the nation's finest food and beverage producers to showcase the innovation and quality that make our industry the envy of much of the world. Each year the scale and prestige of the awards grow, and the opportunity to connect with many of our graduates who work in the important agri-food sector is very valuable. Companies that win New Zealand Food Awards are able to use this quality mark to promote their products' excellence and innovation to Kiwi customers and in international markets, which helps to promote, grow and strengthen New Zealand's reputation as the home of major food producers.

A Social Science Food Network was established at Massey University to foster greater cross-disciplinary and collaborative research to make fundamental food science research more socially applicable and effective.

The range of food-related areas to which social science researchers can contribute includes: societal understanding of foods; consumption and consumer acceptance of foods; food communication and the mediation of food; the history of food; the sociology of food and eating; the health psychology of food; food poverty and insecurity; food banks/social justice and food; food policy; overeating and dietary practices; new migrants and food; what, how and why people eat what they do; fast food and commodification; the pleasures of food; food substitution and supplementation; food safety scares; food practices in the context of food allergies; vegetarianism and other eating practices; families and food; food waste and dumpster diving; and food markets, local food and sustainability.

The EpiCentre and the Molecular Epidemiology and Public Health Laboratory (mEpiLab) at Massey were recognised in 2017 as World Organisation for Animal Health Collaborating Centres. They are the only centres of this type to be recognised in the Asia-Pacific.

Massey University Wildbase Hospital's move to its new purpose-built, 250-square-metre space was celebrated in January 2017 at an official opening event with Shell New Zealand chairman Rob Jager. Shell New Zealand, a Gold Conservation Partner, has sponsored Wildbase for 13 years. In 2016 Wildbase cared for 327 native animals, comprising 265 wild native animals, 14 young kiwi as part of Operation Nest Egg and 48 captive native animals, including those held at zoos and captive breeding programmes. Patients included rare and endangered native birds, reptiles and mammals from all over New Zealand, including kiwi, takahē, morepork, geckos, bats and many more. The new larger facility will allow the treatment of many more animals, and also enhance the hospital's ability to teach the next generation to care for wildlife. The Oiled Wildlife Response Training programme module one has been chosen by one of the world's largest providers of oil-spill-response trainers, Oil Spill Response Limited, to include in its portfolio of education programmes.

More than 400 people will enrol through the Oil Spill Response partnership in the online training module, which is a partnership between the only two universities in the world (Massey and the University of California, Davis) that teach in and research the area of oil wildlife response. A further four modules are under development and are due to be progressively released in the next two years.

The AI Rae Centre for Genetics and Breeding, based at AgResearch's Ruakura Research Centre in Hamilton, was launched in July 2017. The centre, led by Professor Dorian Garrick, will build world-leading expertise in the field of quantitative breeding, genetics and genomics to benefit New Zealand's agricultural sector. Postgraduate courses will focus on creating the next generation of scientists with quantitative breeding and genetics skills in both plant and animal breeding. Professor Garrick has been integrally involved in the development and implementation of national animal evaluation programmes, performance recording databases and breeding schemes around the world. The centre is named in memory of one of the founders of modern animal breeding, Massey Professor Alexander Lindsay Rae (1923-2009).

A \$250,000 gift from the Norman FB Barry Foundation enabled the funding of four PhD scholarships, one postdoctoral fellow, two eminent visiting scientists, and workshops. Professor Hugh Blair has been a key driver of the project.

MĀORI RESEARCH

Both the Kia Mārama He Ara Mātauranga (forging academic pathways), and He Puna Mātauranga (generating new knowledge relevant to Māori development) priorities require Māori research development. A Māori research demand project was completed in 2017. The project identified current and projected research capacity, capability and demand.

Highlights in the previous plan period included:

- Dr Krushil Watene, Ngāti Whātua, Ngāpuhi, starting a three-year study into how Māori and other indigenous perspectives can have a stronger voice in discussions of social and global justice. The project, funded with a \$300,000 Marsden grant, explores fundamental questions such as: What does it mean to do philosophy in a Māori way? Current 'mainstream' Western theories of justice often don't consider indigenous perspectives; this new study aims to introduce Māori concepts such as whakapapa, māna and manaakitanga into international scholarly discussions and to empower indigenous communities;
- Te Mata o Te Tau's Dr Charlotte Severne receiving \$90,000 in 2017 for the National Science Challenge, Our Land and Water, 'Māori Agriculture Think Piece';
- Massey University leading the Mātauranga Māori research programme within the Resilience to Nature's Challenges National Science Challenge. This project directly contributes to the Māori community by supporting 11 Māori researchers around the country in seven institutions;





- Professor John Cockrem was awarded a two-year Vision Mātauranga grant to work with the Ngāti Toa community based at the Hongoeka Marae north of Porirua to develop new methods for re-establishing breeding populations of kororā, little penguins, by installing nest boxes and playing penguin calls to attract birds at night. The scientific approach to conservation has evolved into a programme for kororā that's firmly rooted in the Māori concept of kaitiakitanga or guardianship;
- College of Science continued to support Ngāti Rangi and Whanganui iwi. Through these relationships Massey is providing a PhD scholarship to one of the iwi members to undertake a PhD related to their environmental management aspirations. This in turn allows the student to continue to be employed part-time with the iwi;
- Research project 'He Tātai Whenua: A Te Ao Māori landscape classification', co-led by Associate Professor Jonathan Procter and Mr Hone Morris, receiving \$2,870,000 from MBIE's 2017 Endeavour Fund (Research Programmes) to integrate traditional indigenous knowledge of the land with existing geographic information systems for use in improved environmental reporting and monitoring;
- Associate Professor Johan Potgieter, School of Engineering and Advanced Technology, project team lead for 'Electro spun Bioprinting Technology in the Production of Complex Collagen Tissues' receiving \$998,532 from MBIE's 2017 Endeavour Fund (Smart Ideas). The research proposes to develop a 3D printing machine for use in the ever-growing medical transplant industry. The prototype creates cornea (a world first) for human transplant using collagen sourced from the scales of hoki fish, which have been shown to be acceptable by the human body. Worldwide, nearly 10 million people need cornea transplants, and a donor cornea is the only current solution. The team is working on how to take the prototype design out of the lab, to use it for mass production; the mass production process could be ready for testing by the end of 2018. The fish scales are a waste product, and discussions have begun with iwi fishery interests to find a partnership that will provide the raw material, which would stimulate and grow a new Māori economy;
- Māori health research postdoctoral and master's scholarships and a Pacific health research PhD scholarship being awarded by the Health Research Council of New Zealand for three separate projects. The total funding for the three separate projects is more than \$500,000;
- Dr Jason Mika, School of Management and co-director of Te Au Rangahau (Māori Business and Leadership Centre) was a co-author of the Tairāwhiti Māori economic development report that was launched in February, alongside the Tairāwhiti economic action plan, entitled He Huarahi Hei Whai Oranga. We are working with a range of stakeholders in the Gisborne area, such as the Tairāwhiti Region and Eastern Community Trust, to see how we, along with other educational providers, can meet the research and educational needs of the region. Dr Mika was also invited by Sir Mason Durie, Pahlia Turia and Mavis Mullins to develop a Māori economic development strategy for Manawatū-Whanganui. Te Pae Tawhiti is one of a number of strategies and initiatives that contribute to Māori wellbeing;

- Dr Jason Mika and Dr Pushpa Wood ONZM, Westpac Massey Fin-Ed Centre director, receiving a \$30,000 grant from the SKYCITY Auckland Community Trust for a research project to measure the financial capability of Māori entrepreneurs and their ability to start and run Māori enterprises. The project's name, Te Manu ka Rere, is taken from the Māori saying 'Ma te huruhuru te manu ka rere', which means that, adorned with feathers, the bird is able to fly; and
- A new journal, Te Kura Nui O Waipareira, co-edited by Professor Meihana Durie, head of Massey University's Te Pūtahi-a-Toi, being launched in August 2017 by the urban Māori authority Te Whānau o Waipareira. The purpose of the journal series, which is open access and internet based, is to share new Māori knowledge created by those working within whānau ora provision. The research journal comprises articles about Māori and indigenous peoples' social outcomes measurement, West Auckland whānau narratives and emerging research findings on critical determinants of flourishing whānau.

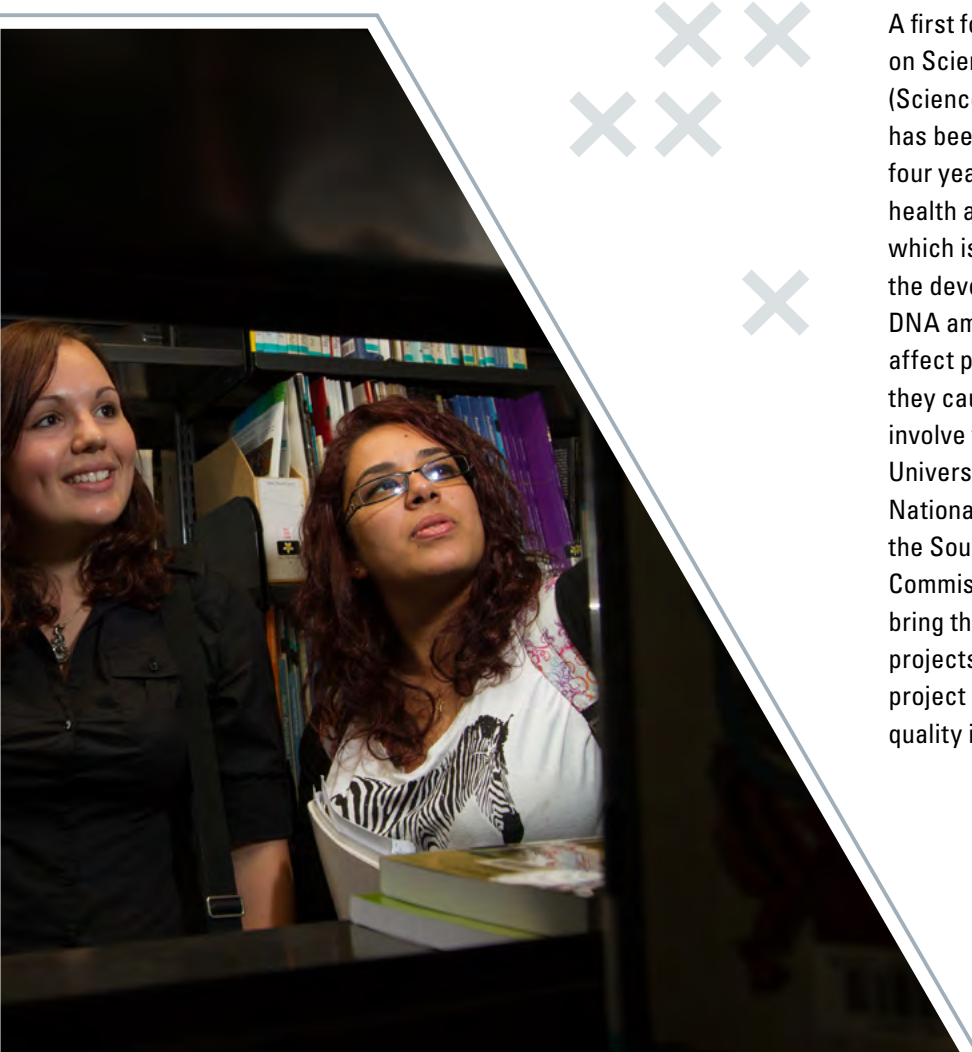
PACIFIC RESEARCH

Massey University's memorandum of understanding with The University of the South Pacific was renewed in August 2016.

Tātai Angitu e3@Massey, a new Massey University centre aligned with the Institute of Education, was established to innovate and extend services (tailored education training, expertise and support to schools and organisations) to a wide range of learning communities. Tātai Angitu translates from Māori as 'linking opportunities' and e3 denotes its three core strands: education, efficacy and enterprise.

In July 2016 the centre won the New Horizons for Women Trust's Teupoko'ina Utanga Morgan Memorial Innovation Award for a Palmerston North project aimed at strengthening early literacy and numeracy learning in Pacific settings. The centre is also working with the Tokelauan Government and the New Zealand Ministry of Foreign Affairs and Trade on stage two of a four-year plan to restructure Tokelau's education policy and to invest in its teacher training and development. Other projects include working with the FAO in Niue on community development and knowledge in the local agriculture sector.

A first for New Zealand UNESCO UNITWIN Network on Science for Pacific Small Island Developing States (Science for Sustainability in Oceania) partnership has been established. Projects undertaken in the next four years will be varied, involving studies of human health and natural resources. One of the key projects, which is led by Professor Peter Lockhart, centres on the development and evaluation of field-deployable DNA amplification diagnostics for pathogens that affect people, livestock and crops, and the problems they cause for economic security. Initial projects involve four founding institutional partners: Massey University, Unitec Institute of Technology, the National University of Samoa and The University of the South Pacific. The New Zealand National Commission for UNESCO provided initial funding to bring the founding partners together to identify first projects. It also provided financial support for a project aimed at assessing and improving water quality in Samoa.



Additional financial support has also been provided by AGMARDT, the Massey Lincoln Agricultural Industry Trust, the Bio-Protection Research Centre and MBIE (through its Catalyst and PreSeed Accelerator Funds).

Massey University and Pacific Adventist University in Papua New Guinea are in the initial stages of developing a research project to develop a renewable energy curriculum and capacity-building programme. It is anticipated that this will establish the Pacific Adventist University Institute of Alternative Energy as a leader in renewable energy systems education in Papua New Guinea and across the Pacific region, and ultimately result in socially, culturally and environmentally sustainable and technically appropriate solutions.

Dr Tracie Mafile'o, School of Social Work, organised the first Pacific-wide symposium on social work. Held in Fiji in March, the 'Advancing Pacific Social Work Symposium', organised in collaboration with The University of the South Pacific and Western Sydney University, provided a forum for Pacific social work educators, policy-makers and practitioners from across the region to share practices and perspectives for developing social work education in the South Pacific region. Other partner institutions are Te Wānanga o Aotearoa and Whitireia New Zealand.

Rae Bainteiti, a Fijian-born School of Social Work student, was invited by the United Nations High Commissioner for Human Rights to be part of the panel in Geneva, Switzerland on human rights, climate change, and migrants and persons displaced across international borders. His focus was on the regional situation in the Pacific, including opportunities at the United Nations Framework Convention on Climate Change.

Professor Bruce Glavovic, School of People, Environment and Planning, was invited by the Intergovernmental Panel on Climate Change to serve as coordinating lead author for 'Chapter 4: Sea Level Rise and Implications for Low Lying Islands, Coasts and Communities' of the panel's Special Report on the Ocean and Cryosphere in a Changing Climate.

ENTREPRENEURSHIP AND COMMERCIALISATION

Massey University is committed to translating innovative academic research into commercial opportunities, through existing commercial enterprises or new ventures. A new spin-out company spearheaded by Professor Ian Yule, Hyperceptions Limited, was incorporated in 2017 and received its first contract to survey plantation forestry using a hyperspectral imaging camera. In 2016 Massey University sold down a proportion of its stake in the assets of Magritek Limited and completed the sale of New Zealand Veterinary Pathology Limited to IDEXX Laboratories (NZ) Limited, a wholly owned subsidiary of leading global veterinary diagnostic company IDEXX Laboratories, Inc.

In 2016 Massey Ventures Limited was awarded \$927,692 of devolved PreSeed Accelerator funding by MBIE. The funding, allocated over three years, is being matched by investment from Massey Ventures and others and is being used to support early-stage commercialisation projects in progressing towards commercial outcomes. More than \$1.8 million will be allocated to Massey staff and student projects with the potential to attract research investors from fields such as veterinary technology, food technology, fundamental science and engineering.

Budding entrepreneurs were given a behind-the-scenes look at some of the North Shore's most innovative companies as part of the University's first start-up bus tour in 2016. The entrepreneurs were hosted by ecentre, Massey University's business incubator in Auckland, and given the chance to pitch their ideas to an invited audience. In 2017 ecentre in Albany, through a Callaghan Innovation service expansion contract, offered a new 12-week programme, Sprint Launch, for start-up companies. The new programme draws on Massey Master of Management graduate Hattaf Ansari's research and complements our Sprint Foundation and Sprint Develop programmes.

Jackie Young was appointed ecentre's new chief executive in May. ecentre has begun working with Northland Inc, Northland's regional economic development agency, to deliver services to start-ups from Te Tai Tokerau.

The five-month agritech-accelerator Sprout programme, which is supported through the BioCommerce Centre in Manawatū and Massey University, was delivered in 2016. It is designed to fund the next generation of agritech start-up companies in New Zealand.

SUPPORTING ECONOMIC DEVELOPMENT

Following the publication of *Rebooting the Regions: Why low or zero growth needn't mean the end of prosperity*, edited by Distinguished Professor Paul Spoonley, Massey University hosted a 'Rebooting the Regions' conference in November 2016 at the Manawatū campus. Key stakeholders from the regions were invited to participate in the symposium and discussions were held on how to revitalise the regions and how Massey University can assist in this aim.

A detailed action plan to boost the Manawatū-Whanganui economy was launched in August 2016 as part of the Regional Growth Programme, which identifies ways to increase jobs, income and investment in regional New Zealand. The implementation work programme, known as Accelerate25, is led by the Horizons Regional Council. The Manawatū-Whanganui Economic Action Plan was informed by a growth study completed in 2015 and aligns with He Kai Kei Aku Ringa – The Crown-Māori Economic Growth Partnership.

A team of Massey staff supported the Flourishing Regions Initiative which is being undertaken in collaboration with the Horowhenua District Council, and Te Puna Whakatipu supported the Global Market Immersion Programme for food executives, being led by FoodHQ.

Food Futures – Taranaki 2016, an event organised by Massey University and Venture Taranaki, provided case studies as well as information and guidance from agri-food specialists for people interested in Taranaki's food and beverage sector development.

A first-of-its-kind conference on national security was organised by Massey's Centre for Defence and Security Studies in 2016. Around 150 top government, agency and academic representatives from the security sector came together at the Auckland campus to discuss issues ranging from threats such as cyber-hacking and IS recruitment to broader regional and economic security. The conference was a precursor to Massey's Future New Zealand Forums on security.

The next phase of 'Grow North', a 'smart innovation district' project in Auckland North, was announced in May 2016, following a major research project on the feasibility of an innovation district in the region. Cornerstone partners to the initiative are Massey University, Auckland Tourism, Events and Economic Development (ATEED) and Bank of New Zealand. Key priorities into 2017 included: creating an open database and map of innovative companies and innovation resources; connecting with emerging innovation hubs around Auckland; and building skills and exchanges between innovators and the education sector.

The College of Humanities and Social Sciences offered 'Our Changing World', a free public lecture series tackling hot-button issues and questions such as: How do we best cope after a natural disaster? Who do we allow to migrate here? What's with the growing distrust in politics ahead of this year's election? With the housing crisis and associated insecurities? Big Issues series in Business, and Security, Fascination Science lecture series, and Ideas on Tap, which was organised in conjunction with the Royal Society of New Zealand, were held, aimed at promoting research of interest to the public.

3.7 GROWING INTERNATIONAL LINKAGES

Institution objective	Building international education to extend the Massey University global influence in areas of strength, and gaining international accreditation for programmes and strong rankings for subject areas wherever possible
Description of related activities (if required)	
Performance indicator	International students (headcount)
Baseline, 2017	5092
Interim target, 2019	5250
Final target, 2021	5500
Where this is not explicitly stated please indicate how this objective is reflected in your mix of provision (MoP) and/or educational performance indicators (EPI) commitments	We have chosen to use headcount for this target to demonstrate the volume of international students enrolled at the University and the impacts of our contribution to international education exports and to the local economies where our campuses are situated
Additional information (e.g. where is this taking place – region, industry sector etc.)	On all of our campuses

Massey University is an internationally engaged university with a global impact. The University is ranked in the top 3 per cent of universities worldwide, with many of its areas of specialism recognised by high world rankings and international accreditations. The University's staff encompass more than 50 nationalities, and Massey hosts more than 5000 students from 160 countries around the world. The University recognises 275 partners in 47 countries as part of its Internationalisation Framework 2017-25.

Massey has made clear its intention to grow and develop its international presence. While international students have been studying at Massey in New Zealand for many years, the establishment of the MUWW initiative was part of an intentional strategy to build on the University's distance-education capability and grow the number of students studying with Massey University from offshore. As well, our longstanding and strong international relations (as a central service and through the work of our academic staff) continue to pay dividends, particularly in North Asia and South America.

Massey has demonstrated significant success to date in its internationalisation work. However, the University cannot be complacent. Within New Zealand international student growth varies by campus. Offshore enrolments are growing steadily.

The Massey University Strategy 2018-2022 recognises that students demand superb, personalised learning experiences that are student focused, flexible and deliver technologically appropriate learning, wherever and however they choose to study, in New Zealand or internationally. Massey cares about our students, and our staff aspire to provide a distinctive student-centred learning, living and life experience for all students. Graduates will be enabled to participate as educated global citizens in the existing and new economies around the world.

However, global competition for students, the rapid expansion of online delivery and the impacts of disruption on education systems, along with changes to government policy, mean that the University needs to review its position and consider the next steps we should take to continue the achievements of recent years.

As part of the adoption of the University's new strategic plan, revisions were made to our Internationalisation Framework 2017-2025. The framework sets out a pathway for the University to engage strategically and continue to grow successfully our international profile, reputation, reach and revenue. The four key themes are international reputation, global reach and impact, strategic relationships, and student and staff internationalisation. Of substantial note, the number of international fee-paying students recruited continues to grow at Massey University and exceed targets. This reflects the University's strong international reputation, particularly in China, and our joined-up, strategic approach to internationalisation.

MASSEY UNIVERSITY WORLDWIDE

Flexible, globally relevant, high-quality education is required to respond to the needs of international students both now and into the future. MUWW enables us to extend and expand our international learning and teaching platform through transnational education (delivered offshore via face to face, online or a mix of both) and deliver our degrees and bespoke programmes to people and companies located offshore.

MUWW is transforming how the University positions itself in international education, our day-to-day business, and how we contribute to the major challenges facing the global community. The University has reframed the nature of the work it undertakes as part of the MUWW initiative into a formal business transformation programme. This is allowing the University to take a leading role in New Zealand's international tertiary education sector and scale up our international projects to grow student numbers, generate new income and extend our international reach.

In November 2016 a cohort of international distance students from Afghanistan, Bangladesh, Bhutan and Nepal, and who are part of the Massey One Health Epidemiology Fellowship Programme 'Education into Action', graduated from Massey University. The qualification attempts to stem the spread of infectious diseases from animals to humans, like Ebola, by educating doctors, veterinarians and wildlife experts together.

The three-year programme was funded by the European Union and is part of Massey's efforts to build capability across South Asia to detect and respond to emerging epidemic and pandemic disease threats through the implementation of innovative 'One Health' programmes.

The Master of Science in horticulture '3+2' pathway programme with Zhongkai University of Agriculture and Engineering, China, commenced in September 2017. Fourteen students are participating in the inaugural course, which sees them study at Zhongkai University for three years, followed by two years at Massey, during which time students are expected to complete a Certificate in Science and Technology that includes an internship in the horticultural industry, before commencing their master's studies.

A partnership agreement between Massey University, the University of Peradeniya and the New Zealand Aid Programme was formally signed in February 2016 in Sri Lanka, at an event attended by Prime Minister the Rt Hon John Key. The twinning project, 'Transforming Agriculture for Economic Prosperity and Poverty Reduction through Strengthened Veterinary Education in Sri Lanka', is within a model introduced by the World Organisation for Animal Health in 2012 that aims to raise the standard of veterinary education around the world, particularly in developing and transition countries.

The East Indonesia 'Innovative Farm Systems and Capability for Agribusiness Activity' project was launched in February 2016 at the University of Mataram on the island of Lombok, east of Bali. This project is a collaboration between the University of Mataram, Indonesia, and MUWW. Massey University is lending its expertise to the four-year Indonesian agribusiness development project to help Indonesian farmers build capability and to realise long-term sustainable development goals. The Ministry of Foreign Affairs and Trade has contributed \$4.2 million to the project via the New Zealand Aid Programme. This support will enable farmers to build infrastructure, improve productivity and create new businesses, drawing on the best of New Zealand's agricultural expertise.

A major training agreement was signed with the China Scholarship Council to provide Chinese academics with the ability to identify and implement new teaching methods for agricultural students. The agreement formalised an arrangement that has resulted in 228 academics from 38 Chinese universities participating in a short course delivered by the University's Centre for Professional and Continuing Education in the past three years.

A contractual agreement was signed in 2017 with the Royal Brunei Armed Forces for delivery of the Postgraduate Diploma in International Security in Brunei Darussalam.

Negotiations advanced with:

- Guangdong University of Foreign Studies for an academic English and foundation course offshore block programme delivered in China, with a pathway to study at Massey University in New Zealand; and
- University of Economics in Ho Chi Minh City, Vietnam for the Massey University Master of Management (human resource management), delivered offshore via the University of Economics in Vietnam as a block programme. All three contracts were arranged through Massey Global Limited and form part of the MUWW portfolio.

The Retail Academy of Singapore approached Massey to collaborate on an MBA with a specific focus on retail. The academy is accredited by the Council for Private Education and is therefore fully supported by the Singapore Government to collaborate with Massey to offer the MBA. Currently there is no other provision of this kind on offer in Singapore. The Singapore retail industry has a sustained need to train and educate middle- and high-level executives to provide the leadership the industry needs.

STUDENT EXPEDITIONS

Two Massey University projects received Prime Minister's Scholarship awards in 2017 that enabled Massey University students to travel to universities overseas. In the 'Bridging New Zealand and China' project, 15 students undertook six weeks of language learning and business experience at Peking University, while in the 'Latino Aotearoa: Spreading the Word Across the Pacific' project, four students each from Spanish language, Māori Studies (te reo Māori) and Māori Visual Arts programmes travelled to the Universidad de Antioquia, Colombia to explore cross-cultural links between Spanish, English and Māori languages and cultures as well as indigenous languages and cultures of Latin America.

More than 60 international students from the United States, Canada and the United Kingdom took part in the National Expedition and Internship programme in 2017. It is an intensive, 30-credit programme in which students complete customised academic study tours of New Zealand and are also assigned to workplace internships in Hawke's Bay and Wellington. Massey piloted the National Expedition and Internship programme in 2014, with one course option for 'Agriculture and Environment' students. Due to its success and strong interest, particularly from the US market, three more courses have been offered: Communication and Marketing, Creative Expression and Digital Media, and Disaster Risk and Emergency Management. In 2017, 27 students participated in the Agriculture and Environment option; 17 students in the Communication, Journalism and Marketing option; nine students in the Creative Expression and Digital Media option; and 11 students in the Disaster Risk and Emergency Management option. The students can credit the courses towards their degrees in the US, Canada and UK.



EXAMPLES OF OUR GROWING INTERNATIONAL COLLABORATIONS

Massey University has earned an excellent reputation and standing over many years in China, working with our partners there. Professor of Animal Science Hugh Blair was presented with a China Friendship Award in Beijing in October 2016. It is the highest award for foreign experts who have made outstanding contributions to China's economic and social progress. The award was presented to Professor Blair by Vice Premier Ma Kai at a special ceremony in the Great Hall of the People.

In 2016 we signed important agreements in China with:

- the People's Liberation Army Academy of Art, Beijing, to increase the exchange of students between New Zealand and China. The relationship was initiated after the visit of Chinese First Lady Madame Peng Liyuan to Massey's Wellington campus to receive an honorary doctorate from the College of Creative Arts in November 2014;
- the China Scholarship Council, the leading Chinese Government funder of scholarships for overseas training and study. The agreement is aimed at increasing recruitment to programmes that show visiting Chinese academics New Zealand teaching methods in the subjects of agriculture and animal science. Subsequently, in 2017 a doctoral scholarship agreement was entered into with the council through which it will support top Chinese students in all disciplines to complete their PhDs at Massey;
- Tsinghua University's Academy of Arts and Design and the College of Creative Arts in a bilateral exchange agreement. The academy, located in Beijing, is China's number-one-ranked art and design school, with a global QS ranking of 23. Massey University is ranked in the top 100 for Art and Design by QS World University Rankings; and
- Zhejiang Gongshang University, formalising the relationship with the signing of a memorandum of understanding focusing on food science and technology. This followed the establishment in May 2016 of a joint research laboratory.

In addition, the 10th anniversary of the Massey University-Wuhan University joint teaching programme was celebrated in July 2016 in Wuhan, China. Under the programme, finance and economics students spend two years at the School of International Education at Wuhan University, then move to the School of Economics and Finance at Massey University for the final two years of their Bachelor of Business Studies degrees. It is one of the most successful and long-lived partnerships between a New Zealand and a Chinese university.

The International Centre for Animal Health and Breeding, a joint centre between Shihezi University and Massey, opened in July 2016. Shihezi University is in the north-western province of Xinjiang, China and is sanctioned by the Chinese Ministry of Science and Technology. Professor Paul Kenyon, Professor Stephen Morris and Professor Hugh Blair were given honorary professorships at Shihezi in 2016 – the first non-Chinese to receive such an honour from the university.

In May 2017, we launched with China's top language university the Massey University – Beijing Language and Culture University Joint Research Centre for Applied Linguistics. The centre is poised to become a top-level institute in the Asia-Pacific region for the teaching of the Chinese language – recognised as critical to trade, diplomacy, education, tourism and cultural awareness for the 21st century. The development of innovative online Chinese language programmes for learners across the Pacific region is at the heart of the partnership. The centre is the first of its kind for language education run jointly by the Chinese government and a New Zealand university. Professor Cynthia White's 2016 project, 'Synchronous Chinese Online Language Teaching (SCOLT)', received MBIE Catalyst seed funding to develop the project with Beijing Language and Culture University. The pilot project was based on one-to-one online tutorials between a trainee Chinese language teacher from Beijing Language and Culture University and a Chinese language learner from Massey University. Professor White was also awarded MBIE Catalyst funding of \$63,400 for the project 'Investing in Human Capital: Growing Workforce Expertise in Speaking Mandarin'. A jointly organised International Conference on the Teaching of Chinese was held in China in October; a similar conference was held at Massey's Auckland campus in 2016.

Seven (out of 10) visiting Chinese scientists under the Royal Society of New Zealand's 'Catalyst: Leaders' exchange programme chose Massey as their 'host institution'.

An agreement between the Singapore Institute of Technology and Massey University was signed in February 2016, and sees the two institutions offer a jointly awarded honours degree programme in food technology.

In October 2016, a longstanding bilateral memorandum of understanding between the University of Brawijaya, Indonesia and Massey University was renewed. Brawijaya is the largest public university in East Java. It has 12 faculties and about 60,000 students and has particular strengths in economics, animal husbandry, veterinary medicine and agriculture.

Massey University and the Universidad de Antioquia in Colombia signed a memorandum of understanding in October 2016 aimed at promoting collaboration in academic fields ranging from indigenous experience to education. The relationship initially focuses on the field of humanities and social sciences and is expected to expand to other areas, such as science and agriculture, that are subject strengths of both universities.

Massey University is now a full technical partner to the Management Agent for the Fleming Fund (Mott MacDonald), a £265 million investment by the British Government and Wellcome Trust to improve surveillance and reduce the impacts of antimicrobial resistance, using a One Health approach in 26 low-income countries across South Asia, Southeast Asia and sub-Saharan Africa. The initial project is for five years, with a possible extension for another five years.

Dr Peter Jolly, Institute of Veterinary, Animal and Biomedical Sciences (now School of Veterinary Science), secured \$180,000 as technical partner to the management agent. Dr Jolly also secured \$70,000 from the FAO Asia-Pacific region to develop and pilot a novel web-based platform for secure and rapid sharing of epidemiological and animal disease outbreak information between chief veterinary officers in the eight South Asian Association for Regional Cooperation countries. In addition, the International Development Group was awarded \$200,000 in total by the Bill and Melinda Gates Foundation, the United States Agency for International Development 'PREDICT', and the Massey University Foundation. The money will fund an international study tour for the graduates of the European Commission One Health Fellowship programme, including visits to Massey University and attendance at the fourth International One Health Congress in Melbourne.

Mr Richard Fong, Massey Genome Service, received an award from Oxford Nanopore Technologies in the UK for developing a diagnostic technique for tuberculosis (TB) in Myanmar. The bacterial genome enrichment technique is applied through the 'MinION' sequencing and Illumina MiSeq technology, and is able to reduce the time taken to diagnose multiple or extensively drug-resistant strains of TB. Myanmar is one of 14 countries that is present in all three of the World Health Organization's lists for a high burden of TB, TB-HIV and multiple-drug-resistant TB, with an annual mortality rate of more than 26,000 cases per year and 9000 new cases of MDR-TB per year. Dr Joanna McKenzie, Institute of Veterinary, Animal and Biomedical Sciences (now the School of Veterinary Science), co-led a five-day workshop on 'Training-of-Trainers for Foot-and-Mouth Disease Control' held in Myanmar in August.

4. PROGRAMMES AND ACTIVITIES

Massey University is committed to delivering programmes that are flexible, contemporary in design, research-led in content, strategically important and financially successful. Our Mix of Provision template for the next two years is attached to this plan.

INCREASING PARTICIPATION

Massey remains committed to contributing to increasing the participation of students in tertiary education. This is underpinned by our growing distance provision and through our position as a market leader in distance education in New Zealand, as well as by our campuses' presence in Auckland, Manawatū and Wellington.

Massey plans to increase participation by working on a number of fronts in the next plan period. These include the implementation of our Student Success Strategy, the review of student advice and communication, and ensuring that our offerings are better articulated to the public through marketing and student recruitment initiatives. All of these activities are closely monitored by our SLT.

Massey has been working for a number of years on strategies to increase student success. This means, in practice, providing better support for students, leading to more successful course completions in papers and students being retained in study. In 2017, as part of Massey' strategic initiatives, the work on Student Success and Student Enterprise has been prioritised (more information on Section 6). We are implementing more strategies and activities to ensure increased student retention across all of our campuses and modes, and investing in our digital provision to better enable students in their learning journeys, increasing their success as learners and ensuring that they achieve their outcomes.

As part of this process, Massey has also undertaken to review its student advice and communication processes. Student advice and communications are provided by a range of services and academic units. The problem is that across the student journey, student advice and communications are not fully integrated. The purpose of this review is to evaluate the relevance, quality and sustainability of student advice and communication from pre-admission to graduation, in all degree programmes, and make recommendations on opportunities for service improvement and to enhance the student experience at Massey University.

Timely and relevant student advice and communication are crucial to the University being able to deliver on its strategic aspirations. The review will consider current mechanisms and processes that facilitate student advice and communication in relation to both academic and non-academic aspects of each student's experience, throughout their journey with the University from pre-admission to graduation, including career advice to promote employability. The key output from the review will be an independent report that includes commendations for work well done and recommendations to improve integration.

The *Massey University Strategy 2018 – 2022* recognises that students expect and deserve superb, personalised learning experiences that are student focused, flexible and deliver technologically appropriate learning, wherever and however they choose to study. Massey cares about our students, and staff aspire to provide a distinctive student-centred learning, living and life experience for all students. Our graduates will be enabled to actively participate as educated citizens in the existing and new economies around the world.

This work began in 2017 with a view to implementing improvements during the plan period. We expect the improvements to generate better support for students and therefore increase retention and convert enrolments during recruitment periods.



MARKETING AND RECRUITMENT

The campaign for 2019 enrolments began in August 2018. Utilising a variety of channels, including outdoor, digital and radio, each channel has been selected to provide the best possible targeting for our priority programmes, student cohorts and regions.

To enable our communication to prospective students and their influencers, a clever use of new digital media buying allows us to send geo-located messaging to targeted groups in set regions, for example Albany, and serve up key priority programmes. Within the broader overview of Massey generally, priority programmes have been selected for additional upweighting and a stronger digital presence on the likes of Facebook and Instagram. These include (but are not limited to) engineering, agriculture, horticulture, nursing, education, construction, food technology, social work and business.

The outdoor element of the campaign allows us to upweight different messages at different locations; for example, we are using a predominance of adshells targeting high schools in and around Albany, and buses in Wellington.

Radio is being used to meet a range of target audiences: school leavers, distance learners and critically Māori and Pacific, with a clear focus on this last group by running an education special on Flava. We are also concentrating effort on using culturally diverse creative and boosting content from our own Māori@Massey page by targeting pages in which Māori and Pacific are likely to be interested (e.g. Māori Television, Māori rugby league tournament web pages).

Working alongside the public relations team, our recruitment team is using long-form native content to tell a more thorough story about what Massey has to offer.

From a student recruitment perspective, our team of advisers is delivering events nationwide with the purpose of recruiting a broad range of students to Massey University. We also have two tailor-made outreach programmes targeting Māori and Pacific students – Te Manu Tāiko and Aganu’u respectively.

Recruitment efforts continue throughout the year, with a focus on engaging with identified priority schools nationwide as well as targeting the wider communities. The schools’ outreach programmes consists of initial overview visits, representation at careers evenings (to engage with not only students but their whānau as well), course planning (to assist with applications and course selection), and invitations to on-campus and community events (listed below). In the year to date (August 2018) 406 of these visits have taken place with priority schools and their students.

Engagements with schools focus not only on the students, but also on the careers teams – Update Breakfasts are delivered nationally at the beginning of each year, with ongoing updates on priority programmes being provided both formally and informally throughout the year, to ensure that these key influencers in the schools are also able to appropriately advise students of their options at Massey.

In terms of wider community outreach to recruit students, the team runs a series of Information Evenings nationwide. In 2018 these have been delivered in:

- Whāngārei;
- Auckland – Albany campus and central Auckland;
- Palmerston North;
- Tauranga;
- Hamilton;
- Rotorua;
- Whakatāne;
- Gisborne;
- Napier;
- New Plymouth; and
- Nelson.

Postgraduate Information Evenings are also hosted on all three campuses to engage with this community of prospective students.



Other outreach initiatives targeting priority students and programmes include:

- New Zealand National Agriculture Fieldays (Massey is a significant sponsor of this event);
- National Secondary School Kapa Haka competition;
- Senior STEM and Health Day (150 students at Albany);
- Pūhoro Wānanga (Year 11 and 12 Māori Students Science Day);
- Aganu'u in Auckland, Wellington and Palmerston North;
- Te Manu Tāiko in Auckland, Whāngārei, Rotorua and Whakatane;
- RAMS Academy, Palmerston North;
- Pacific Fusion Festival;
- ASB Polyfest – main sponsor of the Tongan stage;
- Kia Ora Hauora and Science for Hauora (in partnership with regional district health boards);
- Taranaki – Putaiao expo – working with WhyOra to deliver a science-focused programme to Māori students in the region;
- Information Evenings (as listed); and
- Open days – specifically running buses to the Albany campus open day from Whāngārei and South and West Auckland.

OUR PROVISION SUPPORTING PRIMARY INDUSTRIES

Massey University continues to advance its role in contributing to primary industries and the economy of New Zealand, and leading transformational change in the agri-food sector. Massey is continually evolving its teaching and research activities in response to the rapid pace of change in the primary sector, for example the greater use of technology in production systems, the reshaping of agri-food value chains, the strengthening leadership role of Māori, and the increasing focus on balancing environmental, social and economic outcomes in production systems.

Massey is already very well regarded internationally for its agricultural, animal and veterinary science programmes. For agriculture, Massey University's 2018 QS Ranking is 22nd in the world and number one in New Zealand. Across the University we have expertise spanning the food value chain, including pastoral-based animal production, plant and soil sciences, horticulture, genetics, water quality, animal welfare and health, precision agriculture, agribusiness (including farm business management), food science and technology, food safety, biosecurity, nutrition, and enabling technologies that are becoming increasingly important in agri-food systems (e.g. sensing, robotics and automation, and artificial intelligence). Our postgraduate teaching activities involve strong collaboration and integration with Crown research institutes (e.g. Plant and Food Research, AgResearch), research institutes and centres (the Riddet Institute, the New Zealand Food Safety Science and Research Centre and the Massey Agritech Partnership) and Massey enterprises (e.g. FoodPilot).

Our programmes supporting the primary industries are also concerned with environmental issues, with a growing understanding of the impacts that agriculture and horticulture have on the environment, and looking at solutions to mitigate the adverse impacts for better environmental outcomes.

To support primary industries and the technological needs of industries, Massey is investing in a refreshed Bachelor of Science degree with a view to shifting the curriculum emphasis to align with more modern technological systems (2019 CUAP submission).



Massey is also investing in new and revised degrees to support the primary industries. Subject to CUAP approval, a substantially revised Bachelor of Agricultural Sciences (BAgrSci) will be introduced in 2019. The curriculum will have a stronger emphasis on environmental management and the use of technology in agriculture, reflecting major shifts in agricultural practice. In addition, a new Bachelor of Horticultural Sciences (BHortSci) qualification will start in 2019, again subject to CUAP approval. We have worked in close collaboration with industry in the development of these qualifications; this has included the exploration of new delivery models that may enable students to undertake studies while working in industry (e.g. a combination of distance/online courses and block-mode delivery on campus).

We also anticipate the introduction of a new Bachelor of Animal Science degree in 2010; this qualification will bring strength in genetics, animal breeding and animal welfare, disciplines that build on our research strength in these areas. We are also strengthening pathways to postgraduate studies (research or professional development options) in close collaboration with industry, ensuring strong alignment with the needs of the sector.

Another initiative is the development of articulation programmes with other tertiary organisations aiming to offer degree-level pathways for students who commence study in the regions. To ensure that we grow our provision to support the primary industries, marketing campaigns during 2018 will promote the BAgrSci and BHortSci as well as other qualifications relevant to the primary sector.

Massey is also working to enhance its qualifications in agribusiness, particularly at the postgraduate level. Agribusiness is an important component of our contribution to the primary sector and it is cross-disciplinary, bridging science and business, which is vital for industry.

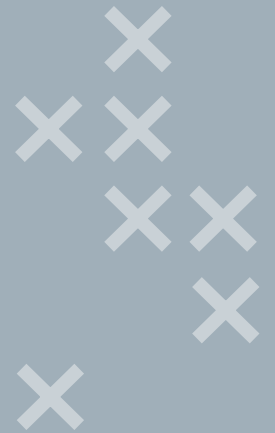
Massey understands that technology is playing an important part in the primary industries and, as a result, it is working on further aligning our engineering programmes, including food technology. This is to ensure that our focus is on supporting the bio-economy through technology, which comprises the entire value chain of our primary industries, from agricultural production systems to food processing, food engineering, automation and distribution. Massey is also working to strengthen consumer and sensory science.

In 2018, a School of Agriculture and Environment and a School of Veterinary Science were established in the College of Sciences, superseding the Institute of Agriculture and Environment and the Institute of Veterinary, Animal and Biomedical Sciences, respectively. This reorganisation resulted in a transfer of animal science in the School of Agriculture and Environment to strengthen a focus on New Zealand's key strategic advantage in animal production: pasture-based systems.



5. OUTCOMES AND MEASURES

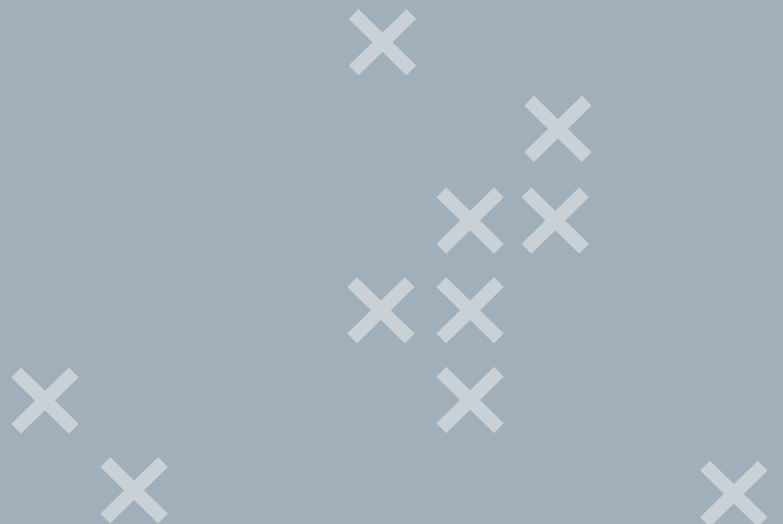
Massey University is committed to improving its performance in all EPIs. Our Educational Performance Indicator Commitment template for the next three years is attached to this plan. In addition to the template, Massey is proposing additional measures and targets in the Draft Statement of Service Performance, which is described in Section 7 of this Investment Plan.



PAST PERFORMANCE

In 2017, the first year of the previous Investment Plan, Massey consumed all of its Student Achievement Component (SAC) allocation (\$150,434,581) and met the SAC EFTS target (agreed on 14,854, delivered 15,051).

Massey also made commitments to the TEC in the previous Investment Plan through the EPI template. Only results for 2017 are available in relation to the commitments. The table below demonstrates the achievement or non-achievement of these commitments. For qualification completions and student retention, the targets were set under the old methodology and the results are presented in the new methodology (cohort based and first year retention). Therefore no comment is provided on achievement or no achievement, because the targets and the results are not comparable.



EDUCATIONAL PERFORMANCE COMMITMENTS – 2017

Indicator	Age	Ethnicity	Register levels	2017 Commitments	2017 Actuals	Comments
Course completion	All	All	L04 plus	82.7%	82.6%	Close to achieving
Course completion	All	All	L08 plus	90.5%	91.1%	Achieved
Course completion	All	Māori	L04 plus	72.5%	73.9%	Achieved
Course completion	All	Māori	L08 plus	87.5%	87.6%	Achieved
Course completion	All	Pacific	L04 plus	59.0%	62.1%	Achieved
Course completion	All	Pacific	L08 plus	77.5%	80.8%	Achieved
Course completion	Under 25	All	L04 plus	84.0%	84.0%	Achieved
Course completion	Under 25	All	L08 plus	93.0%	92.6%	Close to achieving
Qualification completion	All	All	L04 plus	70.0%	44.4%	Not comparable
Qualification completion	All	All	L08 plus	82.0%	62.3%	Not comparable
Qualification completion	All	Māori	L04 plus	62.0%	33.8%	Not comparable
Qualification completion	All	Māori	L08 plus	72.0%	52.7%	Not comparable
Qualification completion	All	Pacific	L04 plus	36.5%	26.4%	Not comparable
Qualification completion	All	Pacific	L08 plus	36.5%	48.9%	Not comparable
Qualification completion	Under 25	All	L04 plus	70.0%	49.7%	Not comparable
Qualification completion	Under 25	All	L08 plus	72.0%	66.5%	Not comparable
Student retention	All	All	L03 plus	72.0%	67.7%	Not comparable
Student retention	All	Māori	L03 plus	63.0%	58.9%	Not comparable
Student retention	All	Pacific	L03 plus	63.0%	59.4%	Not comparable
Participation	All	Māori	L04 plus	12.1%	11.9%	Close to achieving
Participation	All	Māori	L08 plus	2.7%	8.9%	Achieved
Participation	All	Pacific	L04 plus	4.8%	5.2%	Achieved
Participation	All	Pacific	L08 plus	0.9%	3.6%	Achieved
Participation	Under 25	All	L04 plus	57.5%	57.7%	Achieved
Participation	Under 25	All	L08 plus	14.5%	13.5%	Not achieved
International	All	All	All	2838	3049	Achieved
Research	All	All	All	\$55,000,000	\$65,000,000	Achieved
Research	All	All	All	360	385	Achieved

Source: Nga Kete

Massey is also working to reduce the amount of low-performing provision, defined by the TEC as the amount of provision delivered through papers that have completion rates of under 60 per cent.

Through the work of the Academic Committee, which focuses on ensuring the quality and range of our academic offer, and through the Teaching and Learning Committee (responsible for providing leadership to and coordination of pedagogical best practice), our attention is focused on those courses where students are not succeeding. Low-performing-provision courses are particularly in our line of sight, as are those courses where 'at-risk' students are overly represented. We are focused on supporting Māori and Pacific students, mature-age students, part-time learners and those who may have had little preparation for university study. The university community is this year developing a new Learning and Teaching Strategy. This will be an important step in clearly articulating our learning and teaching approach and key principles and expectations around teaching and assessment.

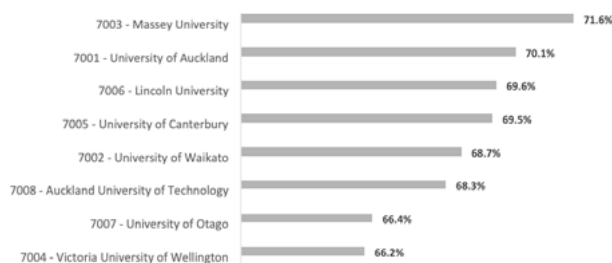
Massey continues to work with other tertiary education organisations in the wider tertiary education system. This includes enabling smooth transitions from institutes of technology and polytechnics (ITPs) to university through credit recognition and recognition of prior learning. Given its national reach, Massey has close relationships with the ITP sector throughout New Zealand, and with industry training organisations. Massey works alongside these organisations to better serve the various industries and communities of interest with which we work. Collaboration is commonplace with other tertiary education organisations and universities, in research and in education provision. Examples include work with NorthTech and Taratahi Agricultural Training Centre, and close relationships with regional providers and economic development agencies, particularly in central New Zealand from Taranaki to Poverty Bay and Wairarapa and Wellington, and in relation to regional international education strategies.

Massey has signaled its intention to continue to grow enrolments at its Auckland campus. The University's strategy is to grow in line with growth in the general and school population in the areas surrounding the University's campus at Albany. This strategy is continuing. Since the last Investment Plan period, Massey has sold part of its campus in Auckland and is investing in the development of new facilities. The first of these new teaching and staff facilities is scheduled for completion at the end of 2019, and the second by 2023. This will enable staff and students to transfer from the Ōteihā Rohe site, provide for the growth in student numbers expected during this period, and provide new facilities and student learning spaces that will meet the future requirements of Massey and its students.

POST-STUDY OUTCOMES

Massey is committed to providing all of our learners with exceptional and distinctive learning experiences that will equip them with the skills and knowledge, as well as critical thinking and leadership skills that they will need to participate in their communities as global and local citizens. We want our students to achieve their lifelong goals and acquire skills and knowledge to develop and attain good careers throughout their lives.

Our latest Post-study outcomes data for the period of 2014-15, extracted from Ngā Kete, demonstrates that Massey is well positioned to deliver on this outcome. The table below compares Massey University's results to the results of other New Zealand universities.



Source: Post-study outcomes data, Ngā Kete, for 2014-15

When the data is split by ethnicity and gender, as well as programme level, Massey achieved results above the university sector median in all categories, with the exception of Pacific for the period of 2014-15.

	Massey University		University sector	
	2012-13	2014-15	2012-13	2014-15
Māori employed	72.8%	71.0%	70.3%	70.2%
Pacific employed	68.8%	58.4%	64.9%	61.1%
Non-Māori, non-Pacific	68.5%	71.7%	67.7%	69.1%
Female employed	68.6%	72.3%	68.2%	70.4%
Male employed	69.3%	70.0%	67.0%	66.7%
Levels 4-7 employed	62.8%	49.9%	50.0%	39.6%
Levels 8-10 employed	69.6%	73.6%	69.1%	71.2%

Source: Ngā Kete

Massey is not offering in the following areas: Levels 4-7 in tourism studies, sports (coaching, playing, officiating and instructing), beauty therapy, graphic arts and design studies, fine arts, and text and information processing.

With regard to Level 7 (i.e. degree level) in psychology, graphic arts and design studies, human movement and sports science, and political science, we offer the following comments.

An analysis of Massey University's provision for the identified areas with low post-study employment outcomes demonstrates that for non-degree (Levels 4-7) and degree (Level 7), the University already has low and declining overall levels of provision for the areas listed above.

In 2017, for instance, these areas represented eight EFTS for non-degree- and only 821 at degree-level study.

While there is no available post-study outcome data by the New Zealand Standard Classification of Education (NZSCED), overall the University shows post-study outcomes that are significantly higher than the University sector's for non-degree (49.9 per cent employed vs sector 39.6 per cent in 2014-15) and higher than the sector for degree level (73.6 per cent employed vs 71.2 per cent for the sector).

QUALITY ASSURANCE REVIEW

All New Zealand universities are subject to an academic audit by AQA. AQA encompasses both academic quality assurance and academic quality enhancement with the aim of ensuring quality in New Zealand university education.

The Cycle 5 audit framework focuses on academic activities related to teaching and learning and student support:

- Leadership and Management of Teaching and Learning;
- Student Profile: Access, Transition and Admission Processes;
- Curriculum and Assessment;
- Student Engagement and Achievement;
- Student Feedback and Support;
- Teaching Quality; and
- Supervision of Research Students.

The academic audit report was released in February 2014 and contained four commendations, six affirmations and 17 recommendations.

Commendations recognise areas of excellent practice with demonstrable good outcomes. Massey University received commendations for our library service, emergency management provisions, extensive range of learning support services and teaching awards framework.

Affirmations are validations by the audit panel that the University had identified itself where improvements were required, action has been undertaken and the panel considers the action will be effective when completed. The University was pleased to receive recognition from the audit panel of the considerable development and good work done in these areas.

The 17 recommendations in the audit report were all in areas identified by the University prior to the audit attesting to the effectiveness of the continual quality improvement and enhancement process the University practices. Activities and projects have begun for all of the recommendations and significant progress has been made on a number of them. Some activities to address the recommendations, such as grading practices, have been completed and benefits are now being realised. A few recommendations require long-term planning and activities that encompass a wide cross-section of the University. Areas such as benchmarking and equivalence, given the multi-campus nature of Massey University, are expected to take some time to complete. Monitoring of shared services and the Academic Standing model are ongoing activities that may evolve over time.

The academic audit is a snapshot of the University at a particular moment in time, looking at policies, processes and practices in place at that time. Universities evolve and student needs, strategic priorities and market influences all affect how the University operates and the services that are required and provided. Massey University welcomes academic audits as an opportunity to reflect on where we are, where we are going and how we will get there.

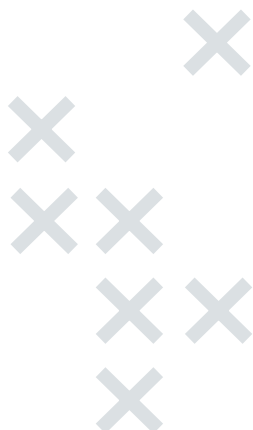
OTHER MARKERS OF QUALITY OF PROVISION

INTERNATIONAL ACCREDITATIONS

Massey Business School maintained its prestigious AACSB (Association to Advance Collegiate Schools of Business) accreditation, a hallmark of excellence achieved by less than 5 per cent of the world's business programmes. The school received particularly high praise for its levels of engagement and innovation through initiatives such as its annual Research Translation Competition, which challenges academics to make their research more accessible, and the Auckland Knowledge Exchange Hub, which provides research-led solutions to public and private organisations. Consumer Insights Limited, the Massey University spin-off company that provides market research services to regional businesses, and New Zealand's first university share-trading room were also singled out for commendation.

The School of Accountancy successfully received Accounting Accreditation by AACSB, the world's largest and longest-standing accounting accrediting agency. It is one of only three in Australia and New Zealand, and one of only 10 in the Asia-Pacific region, to be accredited by AACSB.

The US-based Accrediting Council on Education in Journalism and Mass Communication awarded full accreditation to Massey's communication programmes, noting the School of Communication, Journalism and Marketing's strong leadership, large research output, good connections with industry and commitment to constant improvement. Massey is only the seventh institution outside the US and the first in the Asia-Pacific region to have its programmes recognised in this way. Also, Massey's Bachelor of Communication is the only three-year degree to receive accreditation in the more than 100-year history of the council.



RANKINGS AND RATINGS

The School of Design was named the number one ranked design school in the Asia-Pacific by the global design award agency Red Dot. The school also surpassed previous records by achieving 12 prestigious Red Dot: Design Concept awards in 2017: three 'Best of the Best' awards, seven Red Dot awards, and two honourable mentions. One of the most sought-after quality marks for good design, this international recognition of staff research and student work confirms Ngā Pae Māhutonga as a design leader within the Asia-Pacific region. A study of the economic contribution of design to the economy, launched by DesignCo, a New Zealand design consortium, showed it contributes over \$10 billion – or 4.2 per cent of GDP. The study and the importance of recognition like Red Dot Awards highlight the rise and rise of design, using a 21st-century understanding of what design is.

Reputation growth is fundamental to the success of Massey as a world-class, research-led university. We have developed He Waihangā Ake ite Whare Rangahau – Building a Research Powerhouse 2018-2022, our new University strategy for achieving increased performance in international research rankings. In QS World University Rankings 2018 Massey University was ranked 332; this puts the University in the top 1.2 per cent in the world.

In the latest (2018) QS World University Rankings by subject area Massey has done very well, with 21 subjects ranked and in all five faculty area rankings. In summary, Massey was in the top 100 for four subjects: agriculture, veterinary sciences, arts and design, and development studies. Agriculture is now our most highly ranked subject at 22 (up five positions from 2017), followed by veterinary science at 23 (unchanged from 2017). The table below shows all subject and faculty area rankings for 2017 and 2018 and the movement from 2017 to 2018.



Subject/Faculty area	2017	2018	Movement
Arts and Humanities	319=	315=	Up 4 positions
Architecture	not ranked	151-200	New
Art and Design	51-100	51-100	Unchanged
Engineering and Technology	371	371	Unchanged
Computer Science and Info Systems	351-400	251-300	2 bands up
Engineering – Chemical	201-250	151-200	1 band up
Engineering – Electrical and Electronic	351-400	301-350	1 band up
Life Sciences and Medicine	295	288=	Up 7 positions
Agriculture and Forestry	27	22=	Up 5 positions
Biological Sciences	251-300	201-250	1 band up
Psychology	201-250	201-250	Unchanged
Veterinary Science	23	23	Unchanged
Natural Sciences	401-450	401-450	Unchanged
Chemistry	451-500	401-450	1 band up
Environmental Sciences	201-250	151-200	1 band up
Mathematics	251-300	201-250	1 band up
Physics	Not ranked	451-500	New
Social Sciences and Management	225	175	Up 50 positions
Accounting and Finance	101-150	101-150	Unchanged
Business and Management Studies	201-250	151-200	1 band up
Development Studies	51-100	51-100	Unchanged
Education	101-150	101-150	Unchanged
Economics and Econometrics	201-250	201-250	Unchanged
Law	not ranked	251-300	New
Sociology	201-250	201-250	Unchanged
Statistics and Operational Research	151-200	151-200	Unchanged

Shanghai Jiao Tong Global Ranking of Academic Subjects 2017 ranked two areas top 50; veterinary sciences 35th in the world, and food science and technology 45th in the world. It also placed Massey Business School's finance programme in the top 150 finance programmes globally, the highest place for a New Zealand university.



FIVE STAR PLUS STATUS WITH QS STARS RATING

Massey University was awarded a QS 'Five Star plus' rating for the first time in 2017.

The rating system provides universities with an overall score, as well as ratings in 11 sub-categories: teaching, research, employability, internationalisation, facilities, online/distance, innovation, arts and culture, inclusiveness, social responsibility, and discipline specialisation/accreditations. Massey received five stars for all categories in which it was assessed, as well as overall Five Star plus status.

The University received the maximum score for the employability sub-category, which evaluates reputation with employers, graduate employment rate, and career services support.

It also received the maximum score in the social responsibility sub-category.

It received maximum scores for overall student satisfaction and satisfaction with teaching, in the teaching sub-category.

In the facilities sub-category, it received full marks for infrastructure, library facilities, medical facilities and student societies.

Massey received five stars in the specialist criteria of veterinary science. At the time of the assessment, the University was ranked 23rd in the world for its veterinary science programme in the QS ranking.

In the internationalisation category, the University received full marks for international research collaboration, international faculty, international students, religious facilities and international diversity.

In New Zealand, only Massey and two other universities have Five Plus star ratings.

Since the launch of this service in 2010, the QS Intelligence Unit has rated more than 275 institutions in 45 countries. This was the third QS Stars audit for Massey, with the University's rating improving in each audit cycle.

The benchmarking measures the University against a set of standards that QS Stars has devised for the sector, rather than against other universities. QS Stars are an audit on the strengths and weaknesses of a university. The University provides QS with evidence across dozens of indicators, which is then verified and the University is given an overall score, as well as a score for each category. There is no limit to the number of universities that can achieve the highest score overall or in any category.



6. ADDITIONAL INFORMATION

While our strategy is still new to us, a great deal of progress has already been made towards realising our goals. Since the strategy was launched in 2017, we have started examining how our organisation functions and how best to prepare ourselves for a dynamic and uncertain future. This has involved: reviewing our academic and professional staff support; assessing the breadth and profile of our academic offer; giving careful consideration to our campus developments, both online and as 'bricks and mortar'; and putting a greater focus on enhancing our business processes.

Our aim throughout the new strategy is to ensure that Massey remains sustainable and known for supporting and enabling excellence. The strategy will serve as a roadmap in the coming years, ensuring that the University can continue to be a world-leading university connected to community and industry. We have made significant progress in improving our business and financial processes and have already begun investing in our IT systems in an effort to build efficiency and consistency across the business.

TRANSFORMING MASSEY

As a result of our new strategy, four transformational programmes have been developed as part of the SLT's strategic planning process, with a view to begin implementing them in 2018 and continuing work until 2020. These programmes focus on: digital transformation and curriculum pedagogy reform; student success and enterprise; transforming research; and a redesign of business processes, including ensuring that we are Tiriti-led.

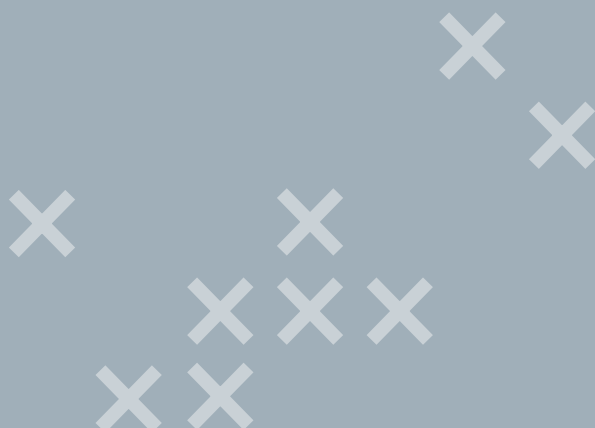
DIGITAL TRANSFORMATION AND CURRICULUM PEDAGOGY REFORM

This major strategic initiative is focused on creating and implementing a digital strategy that enables us to provide a first-class, digitally enhanced learning experience.

In a fast-changing world, it is imperative that every university consider digital strategy at the heart of its overall strategy. But in Massey's case, it is even more crucial. For more than 50 years Massey has been New Zealand's leading university distance-education provider.

Massey recognises its role in distance education and understands that the environment is changing. Increasingly, other universities in New Zealand and internationally, as well as non-university providers, are offering online courses that challenge our market share. However, it is not simply those students who do not wish to attend campus regularly who are demanding this online learning environment. All our students expect to have a high-quality online learning environment that supports their learning, whatever that is, including face-to-face experiences. This applies to their administrative interactions and their interactions with learning material and our teachers.

A digital strategy for the learning environment is needed and it is currently in development. Our SLT, working in collaboration with staff and students, is developing a one-year, three-year and five-year plan for enhancing digital learning and teaching that builds on, and is consistent with, the University's Learning and Teaching Strategy. In particular, the implementation plan will take into account where we can coordinate with current initiatives to enhance outcomes for our students. Additionally, it will also consider the University's current capabilities in digital learning and teaching and look to provide further resources where 'gaps' exist. The result will be the transformation of Massey's digital learning and teaching environment and offering.



Alongside this process, there are a number of initiatives that will be implemented immediately in 2018. These include: developing a set of high-level principles for digitally enabled learning and teaching at Massey; drafting minimum expectations of effective technology-enabled learning, including digital literacy competencies for staff and students; developing a central repository of best practice and a framework for sharing innovative and effective practice; establishing a framework by which communities of practice can be created; and identifying and agreeing on the resources most urgently needed.

STUDENT SUCCESS AND ENTERPRISE

Students are central to what we do at Massey and it is important that we provide our students with an outstanding experience and environment in which to learn. As a university, Massey works hard to constantly improve the quality of the learning environments we construct for students.

Our students and their families have placed their trust in us to provide them with a high-quality education with a reputation that will last the test of time. Alongside discipline-specific education, they will develop resilience, goal-setting and problem-solving skills, as well as learning how to work in a range of cultural settings with respect and through partnership. They will leave us able to think entrepreneurially and create opportunities in the new and changing ways of work. They will leave us as educated women and men, contributing to our mature democracy and able to reap the benefits economically and socially that a university degree provides. We know that our education transforms lives – not simply for the students but for their families and communities and the next generation. All of us, professional and academic alike, contribute to that outcome through the hard work that we do.

At Massey, we work with students as individuals to ensure their success at university and in their future careers. Every student is unique and we seek to understand their needs, both intellectual and material, so that we can support them to fulfil their aspirations.

The objectives of the student success work programme include:

- To improve the ‘whole of lifecycle’ student journey experience for all commencing and continuing students, regardless of location, mode of study or qualification;
- To provide a distinctive student experience for all students that is student-centric and ensures that the student experience is at the forefront of decision-making for the future, as well as current business-as-usual activities;
- To ensure that all student services are integrated effectively and delivered cohesively, and all service-delivery teams are working together effectively; and
- To develop and embed a distinctive Massey University service culture of high-quality, student-centric professional services throughout the University.

To achieve these objectives, we have identified two main work streams, the first of which seeks to ensure that we support students as they transition to student life and, at the other end of the student lifecycle, when they transition from university to employment. Part of our responsibility to students, alongside providing high-quality education, is to ensure that we provide them with the support they need to flourish in the academic world. While some students naturally adjust to university life, others do not. It is crucial that we support students in their first year in order to ensure that they continue with their studies and towards their goal of graduating.

There are already a number of support services and programmes operating at Massey, such as orientation and university skills programmes. We also recently launched the Strengths@Massey programme. The programme delivers an online talent assessment followed by a short series of face-to-face workshops designed to help students discover and engage their strengths for academic success and future employability. At the other end of the student journey, we need to ensure that when our students leave Massey they flourish in their employment. In 2017 students in four courses were able to participate in the trial of the Kahurei programme. In 2018, under the student success initiative, the trial will be extended.

Kahurei is a unique Massey University initiative to provide students with a holistic education that focuses on imparting transferable skills, knowledge and competencies. It aims to ensure that students develop the skills and attributes they need to enter the workforce on graduation and succeed as 21st-century citizens. Alongside their academic courses, students are encouraged to develop five characteristics: self-management/tū māia; information literacy/tū mātau; enterprise/tū hihiri, exercising leadership/tū rangatira; and global citizenship/tū te ao.

The second work stream under the initiative seeks to explore our current student academic advice and communication framework by undertaking an external review of these functions. Although this review may explore topics and issues that overlap the planned student management system implementation review, these are two separate reviews with differing objectives. A three-person panel that comprises a senior Massey University staff member, a professional staff manager from another New Zealand university and an academic staff manager from an international university, will be convened in late 2018 to conduct this review, which will include their undertaking site visits and interviews with stakeholders. The recommendations from the review will be considered, with the possibility that changes may be made in the future.

Our students will provide important input along each of these journeys.

TRANSFORMING RESEARCH

Research, alongside learning and teaching, is central to the mission and purpose of Massey University. The research pillar of the *Massey University Strategy 2018 – 2022* is supported by the Research Strategy: He Rautaki Rangahau 2018-2022 and He Waihanga Ake I te Whare Rangahau Building a Research Powerhouse Rankings Strategy 2018-2022.

A three-year programme of work started in 2018 and is guided by the following commitments:

- Developing and maintaining the high quality of our research and researchers;
- Being a leading institution in New Zealand for the recruitment, development and retention of researchers;
- Increasing research income and providing world-class infrastructure;
- Having active relationships with key partners nationally and globally to ensure mutual benefit and effective capacity- and capability-building;
- Developing, supporting and excelling in both the depth and breadth of our research; and
- Leading effective knowledge transfer, engagement and entrepreneurial activities to realise social, cultural, economic and environmental benefits.

We will focus on four projects in this first year, with further projects to be identified for years two and three.

- **Project 1:** Ensure investment in Massey's areas of distinctiveness and excellence;
- **Project 2:** Invest in and retain high-quality researchers;
- **Project 3:** Grow capacity and capability in Māori and Pacific research workforce; and
- **Project 4:** Increase both the value and the number of postgraduate scholarships.

The timeline for the execution of these projects has still to be developed, with some work having already commenced. These projects will be designed through a process of co-creation that involves collaborating with stakeholders. The process is ongoing and will enable the project specifics and timeline to be developed in time.

While this initiative has a three-year horizon, research and our researchers require certainty and sustainable research investment. Massey intends to give ongoing attention to driving and resourcing excellent performance in this area, and this will continue in different ways beyond this funding initiative.

REDESIGN OF BUSINESS PROCESSES

Policies, procedures and responsibility issues are all elements of service delivery. Service delivery issues often arise when there are processes and procedures in place that no longer meet the needs of those who use or access a service. The service could be slow, have too many or confusing points of approval, be unresponsive to complaints, or be subject to an overly authoritarian application of rules. Processes often develop lives of their own and a hierarchy of approval structures that end up driving the service experience, rather than the needs of the user, and are rarely evaluated as to whether they still meet the original need for them.

At its heart this initiative, called People-Informed Process Improvement, is about embedding a culture of excellence in service provision, with high levels of staff satisfaction with the business processes and services offered at Massey.

The SLT has devised a straightforward plan for the first phase of this project, which consists of two tactics.

Firstly, they wish to take one Massey process currently considered 'problematic' and co-create service delivery solutions. The project will initially be driven by the College of Creative Arts' Toi Āria: Design for Public Good research unit, which helps organisations to create and deliver people-centred policies and services. Toi Āria is at the forefront of the use of the humanist design philosophy in social policy and government. It has worked with national and local government teams on large multidisciplinary research projects that use a people-centred methodology to deliver positive social change. Toi Āria's projects are evidence based and iterative and provide a robust and qualitatively rich framework that decision-makers can use to ensure that their initiatives and policies meet the needs of the people of Aotearoa New Zealand.

In essence, Toi Āria will act as a facilitator to diagnose the service delivery and process problems, discover user needs, work collaboratively with users to generate ideas for improved services and processes, and prototype.

The overall aim of this stream is to develop a new framework for understanding user-focused service delivery and the importance of co-creating service improvement solutions with the people most affected by those services. While the initial project will focus on internal service provision, ultimately the goal is for a transformed organisational culture that ensures that Massey staff and students are delivered exceptional service experiences at all times.

Based on what it learned from the first case study, the University will initiate other service improvement projects. Toi Āria will provide recommendations for further approaches to managing service process improvement at Massey. These will include recommendations for a set of enterprise-wide service-level expectations to ensure that a culture of sustainable, user-focused, continual organisational improvement is embedded in the University's operating model.

FOCUS AREA – TAI TOKERAU NORTHLAND

Massey University is supporting the TEC's goals and expectations for providing the people of Tai Tokerau Northland with stronger pathways to the right tertiary qualifications by working with students, communities, local groups and local businesses.

Massey is building students' ambitions to participate and lead in our University, their communities and their nations. The University continues to enhance its presence in targeted regions, including Tai Tokerau Northland, to grow regional enrolments through the annual school visit programme. Within our Kia Mārama strategy we define Ngā Ara ki te Mārama – Pathways to Success. We are committed to Ngā Puāwaitanga – Comprehensive Outcomes for Students – and to the first stage in the student journey, Te Whakawhitinga – Transitions.

For Tai Tokerau Northland, the programme of engagement features 16 schools and includes:

- In January, 'Get It Sorted Whāngārei', an outreach event open to the community to assist with course planning and enrolments;

- In Term 1:
 - Overview visits to key schools in the region: Whāngarei Boys' High School, Whāngarei Girls' High School, Tauraroa Area School, Kamo High School, Huanui College, Okaihau College, Springbank School, Kerikeri High School, Bay of Islands College, Dargaville High School and Otamatea High School;
 - Whāngārei Information Evening;
 - Career Advisers Update Breakfast – Whāngārei;
 - Career Advisers Update Breakfast – Kerikeri;
 - Te Manu Taikō Whāngārei – hosting Years 12-13 rangatahi Māori from Whāngarei Boys' High School, Tikipunga High School and Broadwood Area School; and
 - Young Women in Leadership Phase 1 – hosting, at the Albany campus, students from Bream Bay College, Huanui College, Kerikeri High School, Northland College, Ruawai College and Whāngarei Girls' High School;
- In Term 2:
 - On-campus tours and information sessions for groups of students from Kaitaia College, Bay of Islands College, Kerikeri High School, Okaihau College and Springbank School;
 - Senior STEM and Health Day – hosting students from Whāngarei Boys' High School and Bream Bay College at the Albany campus; and
 - Global Summit – hosting students from Kamo High School and Whāngarei Girls' High School at the Albany campus;
- In Term 3:
 - Organising buses from Whāngārei to Auckland for the open day in August; and
 - Course planning visits to key schools in the region that have students interested in making applications;
- Ongoing:
 - Regular communication with key schools; and
 - One-to-ones with students interested in learning more about Massey – in the region/ on campus/via phone etc.

The programme includes support for initiatives aimed at building leadership (through the Young Women in Leadership initiative) and providing Māori pathways into science and health. The two-day Science for Hauora programme is focused on increasing the low number of Māori going into science and health careers. In 2017 the Senior STEM and Health Day enabled 150 Year 12-13 students from across the Auckland and Northland regions to explore health and science subjects and career opportunities through participation in interactive workshops on human nutrition and dietetics, nursing, exercise and sport science, and food technology.

In addition the Massey University Māori Accelerate Programme aims to help Māori secondary school students to become aware of the possibilities available and get ready to plan and prepare for tertiary study.

Our other Kia Mārama pathways to success involve Te Hautūtanga – strong Māori leadership; Ngā Pūtahitanga – integrated solutions; Ngā Hononga – sustainable partnerships; and Te Whakaritenga – managed implementation.

As example of our commitment in Tai Tokerau Northland, Massey is developing relationships with local employers and working to understand their needs. From 2019 Massey University's College of Health will begin work to develop a partnership model with key stakeholders in the region – Northland PHO, Northland District Health Board and Te Tai Tokerau. The partnership aims to increase health outcomes in the Northland area. The partners will work together to gain the best results with patients and whānau. While the partnership will be supported by academic rigour and research, its focus will be on working pragmatically with organisations and clinicians to bring practice benefits. Initiatives will be developed and evaluated based on evidence and incorporating learnings from other jurisdictions. Insights from design thinking and an agile approach will be used to make a difference early and enable issues to be identified quickly and changes to be made rapidly. It will use contemporary Māori leadership models to support active engagement with iwi for the benefit of all.

Massey is also working with schools and local groups in partnerships focused on Māori enterprise and entrepreneurship, financial literacy and research projects.

Massey Business School is exploring the establishment of a Māori Business Academy – which aims to work with local partners to target Years 11-13 in the Northland region, to encourage Māori participation and achievement at tertiary level in business, enterprise, entrepreneurship and leadership. Massey’s Māori Science Academy programme, Pūhoro, has been available since 2016 and continues to grow from strength to strength, being offered also through our Auckland campus from 2018 to complement the academy based in Palmerston North.

The centre has begun working with Northland Inc, Northland’s regional economic development agency, to deliver services to start-ups from the Tai Tokerau region. Since 2001, the centre business incubator and accelerator has been building the capabilities of new business owners by providing cutting-edge programmes, on-site professionals, experienced mentors and investors to New Zealand’s innovation ecosystem.

A research project, Te Manu ka Rere, is underway to help gain insights into the financial capabilities of Māori entrepreneurs in Auckland and Northland.

The research will explore a process for government, community, private sector organisations and educators to work together to implement an effective approach for equipping Māori entrepreneurs with tools and resources to make wise business decisions. This research addresses the need for some concrete data to guide targeted programmes that combine entrepreneurship and financial capability to inform future work.

The Westpac-Massey FinEd (Financial Education and Research) Centre arranges a financial literacy training programme for Northland whānau, funded by Māori Women’s Development Inc.

Research projects provide us with opportunities to develop relationships in the community and with potential future employers, as well as providing opportunities to further understand stakeholder needs.

A 2017 Massey research capacity report identified that Māori researchers at Massey University have affiliations with most of the iwi in New Zealand, but most connections are with iwi in the Manawatū region and Northland.



7. SPECIAL REQUIREMENTS FOR TERTIARY EDUCATION INSTITUTIONS

DRAFT FORECAST STATEMENT OF SERVICE PERFORMANCE INVESTMENT PLAN 2019-21

The Draft Forecast Statement of Service Performance provides a historical view of the KPIs and targets to be achieved as part of the Investment Plan 2019-2021. The KPIs that are bold in the tables below indicate they are compulsory measures agreed with the TEC as part of the EPI commitments.

NGĀ KETE O TE WĀNANGA | RESEARCH

INPUTS

Research funding and partnerships	2015	2016	2017	2019	2020	2021
	Actual	Actual	Actual	Target	Target	Target
External research income (\$m)	55	67	74	72	74	76
PBRF external research income (\$m)	52	62	65	64	65	66
Active international research partnerships (#)	201	211	227	225	230	235

OUTPUTS

Postgraduate students	2015	2016	2017	2019	2020	2021
	Actual	Actual	Indicative	Target	Target	Target
Research degree completions (#)	409	503	385	390	410	430
Postgraduate successful course completion (%)	91	90	88	90	90	90
Postgraduate satisfaction with overall research experience (%)	76	73	76	78	79	80

Entrepreneurship	2015	2016	2017	2019	2020	2021
	Actual	Actual	Actual	Target	Target	Target
New disclosures (#)	23	27	20	25	30	30
Licences/Deals executed (#)	3	2	0	3	5	5
Licensing revenue (\$000)	308	341	353	1525	1475	425

TE AKO | LEARNING AND TEACHING

INPUTS

Participation	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Total University EFTS	18,688	18,944	18,653	19,078	19,203	19,426
Total University SAC-eligible EFTS	15,345	15,546	15,051	15,051	15,051	15,152
International full-fee EFTS	2,816	2,961	3,106	3,527	3,652	3,774
Non-Māori, non-Pacific non-degree level (L04-07) (% SAC EFTS)	74.8	74.1	73.6	72.5	71.8	71.0
Māori non-degree level (L04-07) (% SAC EFTS)	15.1	17.7	16.2	16.5	16.7	17.0
Pacific non-degree level (L04-07) (% SAC EFTS)	11.0	9.4	10.7	11.0	11.5	12.0
Non-Māori, non-Pacific degree level (L07) (% SAC EFTS)	83.2	82.3	82.1	80.7	80.1	79.5
Māori degree level (L07) (% SAC EFTS)	12.4	13.1	13.0	13.3	13.6	14.0
Pacific degree level (L07) (% SAC EFTS)	5.1	5.4	5.6	6.0	6.3	6.5
Non-Māori, non-Pacific postgraduate level (L08-10) (% SAC EFTS)	88.5	88.2	87.9	86.8	86.3	85.8
Māori non-degree level (L08-10) (% SAC EFTS)	9.1	9.0	8.9	9.2	9.5	9.7
Pacific non-degree level (L08-10) (% SAC EFTS)	3.0	3.3	3.6	4.0	4.2	4.5



OUTPUTS

Retention/First year retention	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Non-Māori, non-Pacific students non-degree (L04-07)	44.4	20.0	80.0	75.0	75.0	75.0
Māori non-degree (L04-07)	-	100	-	75.0	75.0	75.0
Pacific non-degree (L04-07)	-	100	-	75.0	75.0	75.0
Non-Māori, non-Pacific students degree (L07)	66.8	68.3	68.0	68.5	68.5	69.0
Māori degree (L07)	53.6	58.3	57.7	62.0	63.0	64.0
Pacific degree (L07)	55.8	55.5	58.3	62.0	63.0	64.0
Successful course completion	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Non-Māori, non-Pacific students (L01-10)	84.4	84.7	85.1	85.8	86.2	86.7
Māori (L01-10)	71.7	71.7	73.9	75.0	78.0	81.0
Pacific (L01-10)	58.6	64.5	62.1	65.0	70.0	75.0
Māori internal	79.1	79.1	81.4	83.9	85.2	86.4
Māori distance	64.0	64.4	66.3	70.8	73.1	75.3
Pacific internal	68.5	73.6	69.7	73.6	75.6	77.6
Pacific distance	47.9	54.6	53.8	62.0	66.0	70.1
Satisfaction	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Overall student satisfaction with educational experience	82.0	83.0	80.5	82.0	83.0	84.0
Overall student satisfaction with services and facilities	82.0	83.0	78.9	82.0	83.0	84.0
Graduate outcomes (Massey's Graduate Destination survey)	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Overall student progression to employment (%)	89.0	88.0	89.0	90.0	90.0	90.0
Overall student engagement in further study (%)	28.0	29.0	29.0	30.0	30.0	30.0
Māori student progression to employment (%)	89.0	89.0	94.0	90.0	90.0	90.0
Māori student engagement in further study (%)	31.0	31.0	32.0	30.0	30.0	30.0
Pacific student progression to employment (%)	85.0	83.0	96.0	90.0	90.0	90.0
Pacific student engagement in further study (%)	35.0	42.0	34.0	30.0	30.0	30.0

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OUTPUTS

International	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Active international partnerships (#)	263	292	310	300	300	300
Students participating in inbound/outbound exchanges (Headcount)	68	93	76	84	92	101

Dissemination of knowledge	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
National print, radio and television media articles featuring comment by the University (#)	TBC	TBC	TBC	TBC	TBC	TBC
Non-peer-reviewed research outputs – oral presentations (#)	350	198	196	TBC	TBC	TBC

Sustainability	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Relevant measures to be reported as per delivery of Sustainability Framework and Carbon Management Plan in 2019.	TBC	TBC	TBC	TBC	TBC	TBC

Outreach	2015 Actual	2016 Actual	2017 Actual	2019 Target	2020 Target	2021 Target
Alumni in the database (#)	135,565	139,738	143,678	147,706	149,720	151,734
Alumni engaged (%)	24%	30%	30%	31%	32%	32%



CAPITAL INITIATIVES

INVESTMENT IN FACILITIES

Facility upgrades continued on all campuses and several new buildings were announced. These facilities add immensely to the quality of our students' experiences. The sale of the Ōteihā Rohe site in Auckland was finalised, enabling a \$120 million investment in our fastest-growing campus. The projects include a 9800-square-metre innovation hub to house staff and postgraduate students, teaching spaces, research laboratories and clinics. The innovation hub will commence in 2019 and take about three years to build.

At the Manawatū campus numerous building developments and refurbishments are continuing in the spaces occupied by staff of the Colleges of Business, Health, and Humanities and Social Sciences. The new administration building and Wildbase Hospital construction has been completed. Construction started in early 2018 on a \$45 million food science facility in partnership with AgResearch.

At Wellington the long-awaited marae rebuild is close to complete, and what will be a spectacular facility of benefit to the wider University community will open in the first part of 2018. The new music and creative media premises are also due to open in the first part of 2018. In 2019, occupancy of the New Zealand Dominion Museum building will return to Massey University according to an agreement between Massey University and the Ministry for Culture and Heritage; the building was completed in 1936 and was the national museum and art gallery until Te Papa opened in 1998. It is owned by Massey University in partnership with the Wellington Tenth Trust.

INVESTMENT IN ENTERPRISE-WIDE IT SYSTEMS

We continue to invest in our curriculum and student management system, setting the foundation for improved student success. After more than two years of work by a dedicated team, the new student management system went live in August 2017. The system, called SITS: Vision, is designed to be more student focused and efficient and consistent in managing academic processes.

The curriculum management system (CMS) is being prepared for rollout to the University community in mid-2018. The CMS has been in use by the Office of Academic Assurance since late 2017, and the validation and checking of all curriculum data is largely complete. The CMS supports the design and management of Massey's curriculum through:

- Providing greater visibility of the curriculum, including the relationship of courses to specialisations and qualifications;
- The creation, tracking and approval of academic proposals;
- Supporting curriculum management business processes
- Providing an approved source for the production of the Massey University Calendar; and
- Enhanced reporting of curriculum data to support the planning, management and review of courses, specialisations and qualifications.

The new CMS (an IT product by provider Akari Software) replaces several systems previously used at Massey to capture and store curriculum information – that is, all information about our courses and programmes. It will allow Massey to have a single source of approved curriculum data that will be available for all staff to view once it is fully rolled out. This will provide a number of benefits to all staff in terms of being able to see our academic offer clearly.

Once the new system has bedded down, further benefits will be achieved by rolling out additional functionalities. These include:

- Enhanced curriculum design through mapping of course learning outcomes to graduate attributes;
- Accreditation reporting and mapping to professional competencies; and
- The ability to store programme marketing material and publishing it to the web.

The introduction of the new CMS is within the governance structures of the SMSI Programme. Work is also underway to ensure that our academic processes are aligned with the new product.

8. FURTHER INFORMATION

Massey takes seriously our legislated role as a ‘critic and conscience’ of society and we remain committed to promoting evidence-based research alongside our teaching role. In 2017 we acknowledged our commitment to civic leadership by naming it as one of Massey University’s four foundational pillars in our new long-term strategic plan. As part of our commitment, the University worked towards implementing a purposeful, coordinated, pan-university strategy for and approach to external stakeholder engagement, spanning teaching and learning, research and enterprise, economic development, thought leadership and social responsibility.

In this vein, the University continued to advance its Environmental Sustainability Strategic Plan with the distribution of the draft plan to staff and students for consultation in 2017. More than 200 staff and students shared their views on the draft through individual submissions, ‘greening the campus’ staff and student meetings, college meetings focused on teaching, learning and research, and a video-linked meeting about what can be done by the University around carbon management.

One of the goals of the strategy is to produce innovative research that can generate transformative, sustainable solutions. For instance, the Lives and Afterlives of Plastic conference in 2017 was hosted entirely online by Massey University’s Political Ecology Research Centre during June and July. The conference showcased an innovative, sustainable approach to fostering global conversations and knowledge-sharing. The conference’s online model eliminated travel costs and had free registration, making it accessible to academics and students from institutions with limited or non-existent travel budgets for conferences. It had a minimal carbon footprint too. The conference explored a range of issues surrounding plastics, such as waste, toxicity and health, with contributors from disciplines ranging from marine biology and ecology to anthropology, cultural studies and art.

Our researchers continue to push disciplinary boundaries with our work: in food systems, food safety and food security; in climate change, resource development and environmental sustainability; in health and wellbeing; and in citizenship, design, art and commerce. Our ability to bring both Western and mātauranga Māori methodologies and approaches to these debates means we can offer a unique ‘New Zealand’ voice and perspective on global issues. An example of this was the United Nations Declaration on the Rights of Indigenous Peoples conference, co-hosted by Massey University’s Global Centre for Indigenous Leadership and the New Zealand Human Rights Commission. The two-day conference featured panel discussions on a range of declaration-related topics and issues, interactive workshops and a line-up of subject-matter-expert speakers and facilitators, with the aim of constructing a framework for positive Māori and indigenous peoples’ development.

Massey academics are frequent contributors to The Conversation, a worldwide media platform highlighting academic research of relevance to critical contemporary issues. In 2017, 17 articles were published by Massey academics, reaching nearly 600,000 readers. It is our expectation and ambition that Massey will continue to exercise its civic leadership role through the various formal and informal forums and media platforms.





MASSEY UNIVERSITY
INVESTMENT PLAN



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