

UNZ BRIEFING TO THE INCOMING MINISTER

Universities New Zealand is pleased to welcome you back as our Minister of Education.

This briefing paper provides an overview of the key problems, challenges, and opportunities facing the university sector. We look forward to continuing to address them with you.

As you know, the Vice-Chancellors take it in turns to chair Universities New Zealand. Derek McCormack of Auckland University of Technology is chair of Universities New Zealand until the end of 2020 and Professor Jan Thomas of Massey University will be chair for 2021 and 2022.

If you would like additional information on any matter in this briefing paper, please contact Chris Whelan, Chief Executive of Universities New Zealand – chris.whelan@universitiesnz.ac.nz, 04-381-8500, 027-242-5886

Overview of the university sector

New Zealand has a relatively strong and effective university system that, by any measure, performs well in international terms. A range of key statistics is included as **Attachment 8**.

Before the 1960s, New Zealand universities were small, socially and culturally isolated finishing schools for an upper middle-class elite.

Post-World War 2 reforms began the process of opening up universities and increasing their relevance and contribution. This was accelerated under the Fourth Labour Government of the 1980s.

In 1900, 0.1% (one tenth of one percent) of the population was enrolled at university. In 1950, this had risen to 0.6%. Today, in 2020, it is 3.4%. In 1991 – 8.3% of the working age population had a degree. By 2015 this was 29.8% and around 33% of young people are now starting university within a few years of leaving school.

In 2020, universities are large, complex organisations — closely connected to, underpinning and enhancing most aspects of culture, society and the economy. They continue to evolve in line with the developing needs and expectations of New Zealand and its peoples across a range of overlapping and complementary areas.

Universities:

- are a key source of the **human capital that will drive New Zealand socially, culturally, and economically in future**. In Census 1996, 33% of jobs had titles that, if advertised today, would probably require applicants to have a degree to get a serious look-in. By Census 2018, that had risen to 55%—reflecting New Zealand’s continuing evolution as a knowledge economy. As a nation of mainly small to medium-sized enterprises based on services and knowledge, universities produce the ideas and the people that will drive innovation, productivity, wellbeing and prosperity for Aotearoa New Zealand. In 2017 Deloitte Access Economics estimated that New Zealand workforce productivity was 3-6% higher due to university graduates across the economy. Universities contribute far more than teaching and research – they actively contribute

to entire professions and communities – driving outcomes in areas such as health, wellbeing, and culture.

- are directly responsible for **25% of all research** carried out in New Zealand¹. Of that 25%, more than half (56%) is the basic research that ultimately underpins and informs more applied research. University research returns around \$5.10 for every dollar invested. The stock of knowledge generated by universities and adopted over time accounts for around 8.2 - 9.7% of GDP—or \$25.9 billion in 2017. Research investment by NZ universities between 1984 and 2015 is estimated to have increased real GDP by \$129 billion in 2017 dollars over the period.
- contribute to a more **equitable and prosperous society**. People who are university-educated are substantially more likely to volunteer, participate in community organisations, donate, be more interested and engaged in democratic processes, trust others, be more open-minded and tolerant. They are also more likely to promote these values to others and to imbue them in their own children. Their children are far more likely to end up well educated and employed. Notably, Māori and Pasifika who graduate from university enjoy the same employment and earnings benefits as non-Māori and Pasifika graduates.
- **drive economic activity** that creates jobs and enriches the communities in which they are located. The university sector accounts for around 25,800 jobs in the wider economy (around 1.2% of all people in employment). International students at New Zealand universities account for around \$1.25 billion of economic activity. University direct and indirect expenditure is an average of 2.4% of the GDP of the regions that house them. This rises to 10.6% when further induced activity is included. Staff and students contribute extensively to local economies as purchasers of accommodation, food, entertainment and other services. Universities themselves spent \$4.3 billion in 2019—the majority of which went into local economies in the form of salaries and locally procured goods and services.
- **are integrators**, bringing people and ideas together across communities, industries and sectors. Universities and their academic staff do research with and for a range of end users. All the professional disciplines work closely with professional bodies to inform practice and help maintain and grow the skills of practitioners in their fields.
- **contribute to understanding**. Academics play an active role in public discourse and understanding through their ‘critic and conscience’ function. Where an academic has expertise, they are expected to contribute to evidence-based debate and understanding where there is public interest. Universities are also repositories of knowledge, expertise, and capability. In the Covid-19 period, the sector provided extensive support to Government in designing and implementing the public health strategies that underpinned this country’s successful response. The sector was a source of testing and personal protection equipment. The sector also provided extensive public commentary to help the public understand public health options.
- **foster global connections**. As a small, geographically isolated nation, New Zealand needs a multi-cultural workforce that knows how to collaborate and trade globally. Our research and innovation system depends on our ability to connect and collaborate across borders. We have just 0.06% of the world’s researchers but we produce 1.4% of the world’s most highly cited research. Our cross-border collaborations have a 15 year NPV of \$2.46 for every dollar invested. University earnings from international students represent 1.68% of all of New Zealand’s exports.

¹ Of the remainder, 55% is done by business, and 20% by Government, including local government and the Crown Research Institute sector.

Each international student represents an average of \$243,000 of economic activity. International students who graduate continue to maintain a range of connections with this country— researching and trading with us in many cases or promoting us to others as a destination for education and tourism.

There is a lot more that universities can do – particularly in the Covid-19 recovery period. The sector can be a key source of reskilling and upskilling for those whose jobs and sectors have been impacted by the closing of the borders. We can be a key part of work to restart the economy – as a source of skills, knowledge, and insights for Government, industry, and communities.

New Zealand university operating context

Though you already know the university sector well, it is worth revisiting the operating context of the sector to put a number of challenges, and opportunities in context.

Universities are mainly differentiated from other tertiary education subsectors by their focus on research and research-led teaching.

In addition to doing 25% of this country’s research, nearly all of the remaining 75% is done by people who gained their research skills at a university.

Other subsectors are mainly focussed on research-informed teaching – teaching that references current research and knowledge. The university sector is focussed on research-led teaching – teaching that involves students in developing knowledge and growing the skills that make them innovative, problem-solving, productive contributors socially, culturally, and economically.

The sector materially advances knowledge – particularly the fundamental knowledge that other industries then take and develop through more applied research. A significant proportion of university infrastructure is dedicated to research – laboratories, and specialist research facilities. The vast majority of the university academic workforce is PhD qualified where, by comparison, only a small proportion have comparable qualifications in other sub-sectors.

New Zealand universities must balance a number of competing expectations around their role and mandate. These include:

- **Teaching** – providing a good learning experience for diverse student groups, which produces graduates ready for a wide range of careers and lives
- **Qualifications** – producing graduates with skills and knowledge required by employers and with qualifications that employers understand and value
- **Research** – producing high-quality research that has value economically, socially, and/or culturally
- **Service** – transferring knowledge and ideas to inform understanding, policy and practice across communities, government and business
- **Equity** – overcoming barriers that prevent some learners from being able to pursue or succeed at university study
- **Flow-through benefits** – supporting the economic, social, cultural and soft-power returns from international education.

And, to deliver on these, universities must also successfully foster the following:

- **Academic capability** – recruiting and retaining top teachers and researchers, many of whom can work anywhere in the world and who will work only for institutions that do both research and teaching and that conform to broad international norms for what is and isn't a university
- **International reputation** – maintaining rankings and other indicators that both staff and students rely on to inform where they choose to work and/or study
- **Study/work experience** – ensuring that both students and staff enjoy positive, satisfying, supportive and safe study/work experiences.
- **Governance** – ensuring universities remain viable in the long term and are able to retain the staff and infrastructure that underpin all other goals and objectives.

All these requirements are interdependent, and universities must balance them with finite resources.

Historically university costs have risen slightly faster than university income from Government and non-Government sources. For example, over the 14 years from 2005 to 2019, on a per-capita student basis, Student Achievement Component funding increased by 47%, domestic student fees increased by 52%, and university operating costs increased by 67%.

Universities cannot fail in even one of these areas and must therefore operate in ways that deliver the greatest value possible to as many competing stakeholder needs as possible without compromising long term viability.

The sector normally budgets to generate a 2-3% annual surplus. This amount is seen as the prudent minimum necessary to cover typical cost increases in the next year. Over the past fifteen years, university operating costs have risen around 67% during a time when CPI rose just 34.3%. Salaries are the largest cost for the sector at 57% of total operating costs. Salaries increases over the past fifteen years have been exactly in line with salary increases across New Zealand – averaging a little under 2% on average per annum.

Priorities for the university sector

Universities New Zealand understands Government objectives for the sector. This briefing is focused on how to achieve these objectives in ways that ensure this country's university system remains viable and effective in the long term.

There are seven things we would like you to understand and/or to focus on to help us continue to evolve in ways that best serve New Zealand and New Zealanders. There is more detail on some of these areas in the attachments to this briefing.

1. Safely restarting international education at scale (Attachment 2)

The immediate challenges facing the university sector (and New Zealand) arise from Covid-19 and revenue lost because the borders are closed to international students. In 2020, the eight universities were budgeting for a net average surplus of \$115m (2.6%) on combined income of \$4.389 billion; 13.7% of that revenue (\$605m) was forecast to come from approximately 21,500 international students studying here in New Zealand.

We are delighted that your ministerial portfolio includes oversight for all aspects of the Covid-19 response and the border. We hope you can help us by prioritising restarting international education as quickly as is possible in ways that remove risk around reintroducing Covid-19 into our communities. There is more information in Attachment 2.

2. Potential for unfunded domestic student enrolments in 2021

We know that domestic student enrolments will be up next year and this is likely to offset some of the revenue lost from international education – noting that every two additional domestic students approximately replaces the lost revenue from each international student.

The sector thanks you for the Budget 2020 decision to increase SAC funding to support a forecast 10% increase in enrolments for 2021.

At this point in time (6 November 2020) universities are reporting application rates that are averaging 15%-20% higher than normal. The lowest reported increase in applications is just 10% and the highest 35%.

Not all applications will translate into actual enrolments. For example, some students will have applied to more than one university to see if they can get into competitive entry programmes like law, engineering, and medicine. However, there is a reasonable chance that actual applications to enrol will exceed the 10% allowed.

We ask that you discuss options with the Tertiary Education Commission so there is a plan in the event that actual enrolments exceed available SAC funded places.

3. The current model for international education will remain the best model for the foreseeable future (Attachment 3)

We do not have confidence in aspects of the current International Education Recovery Strategy. We do not see significant international student demand for distance education and do not see distance education ever generating the same benefits for New Zealand as traditional in-person education. The international education model is not broken, and its benefits significantly outweigh actual or potential risks of alternative models in the longer term. There is more information on this in Attachment 3.

4. Equitable outcomes for priority student groups (Attachment 4)

We share your Government's Te Tiriti commitment to working with Māori in good faith to achieve better outcomes for Māori.

We are also more generally committed to achieving more equitable outcomes for other priority student groups – including Pasifika and students with disabilities. Universities can do much to increase numbers of these students getting to university and succeeding there. It will require additional resourcing and collaboration between Government, schools and the university sector, but if we can accomplish this, parity between Māori, Pasifika and other students in participation and graduation rates is entirely achievable.

5. Student success in the Covid period (Attachment 5)

A significant proportion of students depend on part time work to cover living costs while studying. Most of these jobs are in retail and hospitality – sectors disproportionately impacted by Covid-19.

We are seeing noticeably higher levels of hardship and mental distress as greater numbers of students are struggling to survive financially over this period.

We recommend that additional hardship funding be made available for universities to be able to provide targeted support where students are able to demonstrate genuine need.

6. Student wellbeing and pastoral care

New Zealand universities share your goals of maintaining the wellbeing of students and ensuring, so far as possible, that students have a positive experience that supports their education achievement.

Universities are all committed to being:

- safe, tolerant, inclusive learning environments for all students
- producing resilient, capable graduates.
- reducing incidence of harm (mental, sexual, physical, etc) and mitigating the effects where complete prevention is impractical.

However, universities are primarily institutions of teaching and research—not health providers. Any additional requirements imposed on them requires funding to be diverted from teaching and research. Any additional requirements push universities further into areas that more appropriately belong with other agencies and sectors.

We ask that you resist efforts to impose additional expectations on universities around wellbeing and pastoral care.

7. Maximising impact from research and innovation (Attachment 6)

University research drives significant long-term economic, social, and cultural value for New Zealand. Universities are keen to do more and, in particular, to reduce the time between new ideas and discoveries emerging and end-users adopting or adapting them. More can be done to foster mutually beneficial linkages between university researchers and end-users across Government and industry, and to ensure research better supports shared objectives around fostering wellbeing, prosperity, and more equitable outcomes for all New Zealand and its communities.

8. A higher education funding system that delivers better and more equitable outcomes for everyone (Attachment 7)

The current Student Achievement Component (SAC) funding system was introduced in 1991. Despite many adjustments in the ensuing thirty years, the basic model remains unchanged. In short, providers get the same funding per student per course regardless of quality, value-added, student background and needs, the location where teaching is delivered, and/or the mode of delivery (online, workplace-based, on-campus).

The model has the benefit of being simple and predictable, but it means, for example, providers can't mainstream models of delivery that might add significantly more value to students and employers but at a higher cost than current SAC funding rates allow for.

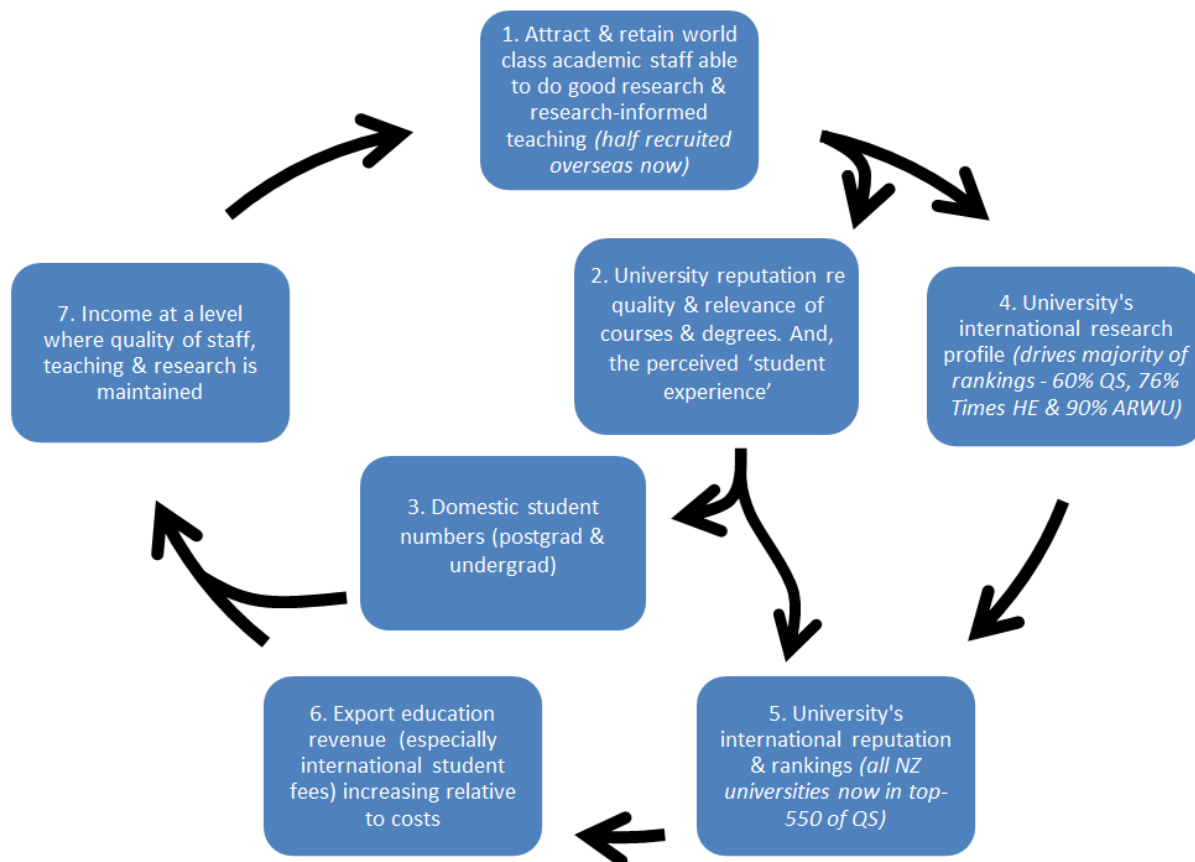
The funding system places particular challenges around providing Māori and Pasifika students with the level of support required to bring their academic achievement rates in line with European/Pākehā students. It also makes it impractical to mainstream work-integrated learning options for students in disciplines such as the sciences, commerce, law and the arts.

In 2019 we proposed a Higher Education Funding System review focused on a number of specific areas detailed in Attachment 7. As Minister, you agreed that a review should proceed in 2020 but this was abandoned in the Covid-19 period.

We recommend picking this up again in 2021 as a priority.

Attachment 1: High Level University Business Model

The high level business model that New Zealand universities necessarily follow is shown below.



This diagram demonstrates the requirement for continuous growth in [3] domestic and [6] international student number to fund [7] ongoing increases in the associated costs of [1] recruiting and retaining high quality academic staff, [4 & 5] maintaining and improving each university's reputation and positioning in international rankings and in [2] delivering a quality student experience on and off campus.

It should be noted that generation of research revenue does not feature strongly in this diagram and this is deliberate. Most research is funded on a cost-recovery basis and, relative to student tuition revenue, has much more limited impact on a university's ability to offset the impact of increasing costs. The focus is therefore [7] generating sufficient tuition fee revenue from [3] domestic and [6] international students to be able to maintain the quality of offerings (including learning & teaching) in other parts of the business model.

Attachment 2: Covid-19 and international students

The immediate challenges facing the university sector (and New Zealand) arise from Covid-19 and revenue lost because the borders are closed to international students.

In 2020, the eight universities were budgeting for a net average surplus of \$115m (2.6%) on combined income of \$4.389 billion; 13.7% of that revenue (\$605m) was forecast to come from approximately 21,500 international students studying here in New Zealand.

With the closing of borders for Covid-19, approximately 7,800 international students (37%) were unable to get to New Zealand. Around 5,200 of those 7,800 students are still enrolled and doing some study offshore, but around half of the 5,200 students are in programmes that require them to do work placements, and/or gain practical laboratory, workshop and/or studio experience, and/or carry out research in locations or with equipment that can only be accessed in New Zealand. These students will not be able to complete their studies until they can get here.

The 5,200 students stranded offshore are still enrolled, hoping they will be able to get to New Zealand. It is not clear how many will disenroll as time passes and so the financial impact on the sector in the current financial year (2020) remains difficult to estimate.

Simultaneously, the sector has lost income in other areas, as research activity has slowed (and income is being spread over a longer period) and as commercial activity and philanthropy has decreased.

The cumulative effect is a forecast \$300m fall in income in 2020.

If no international students arrive for semester 1 (February/March) 2021, this \$300m fall in income would become a \$500m fall in income in 2021.

The sector has mitigated 2020 losses to the point where most universities will come in near to breakeven with small surpluses or losses. This has been done through a number of mechanisms—applied differently by individual universities according to their particular circumstances. These include:

- salary freezes
- sinking-lid staffing policies
- cutting capital spend on buildings and equipment
- slowing maintenance
- general operating budget cuts
- borrowing
- restructuring.

Some of these options cannot be sustained for more than a year or two (deferring maintenance and capital spend). If others are sustained in the longer term they will materially affect quality or levels of activity in areas such as teaching, research, student experience, student pastoral care and international rankings.

The simplest and easiest way to address these matters is to support the work of the sector to identify ways of restarting international student flows in ways that meet every Government-mandated requirement around managed isolation and quarantine.

The sector believes it can do this and cover all associated costs without any requirement for taxpayer support. We have been working with officials from the education and health sectors to show how this could be done.

We ask that you consider their advice and take it to Cabinet if you are satisfied that planning adequately safeguards New Zealand from Covid-19.

Attachment 3: International Education Business Model

In June 2020, Cabinet endorsed an International Education Recovery Strategy that included the following two elements:

- Diversify in terms of both products offered and markets to improve financial sustainability of education providers and to reduce risk to the Crown. Leverage off Covid-related rapid and significant investment in digital delivery to enable providers to deliver offshore. Maximise the uptake of online delivery for students offshore.
- Look at in-study and post-study work rights so international students are not competing with New Zealanders for scarce employment. Ensure students can support themselves financially.

The university sector was not consulted on the Strategy. If we had been, our advice would have included the following:

International education is not broken

Universities are necessarily very focused on international connections for factors other than revenue generation. These factors include (a) research collaborations, (b) recruiting academic talent, and (c) developing multi-cultural competencies in domestic graduates. International students help New Zealand students and New Zealand businesses by giving market insights into their own countries. International students who graduate and return home are more likely to recommend New Zealand to other students, to return as tourists, to trade with us, to collaborate with our universities in research, and to generally remain friends and supporters of this country.

All evidence suggests that the traditional international education market has just been interrupted during the Covid-19 period. International students have mostly just deferred plans to study overseas or, where preferred destinations like Australia and New Zealand have closed borders, they have gone to other countries where borders are still open. International student enrolments at UK universities are up by 9%.

When New Zealand reopens its borders to international students, demand is likely to be higher than it was before - based on agent surveys and inquiries by prospective students.

It is important that New Zealand Government sends messages that it is working to restart international education when it can safely do so. This will help the many students waiting offshore and the agents providing advice to potential students as to where to study.

New Zealand universities support plans to diversify international education to reduce reliance on China. However, universities have been actively trying to grow postgraduate markets in India and undergraduate markets in Latin America for the past five years. Our experience in these regions shows that it takes decades to grow markets significantly.

Diversification should be about growing new markets in parallel with existing markets. We should not be looking to reduce demand from China until new markets are successfully operating at scale.

Demand for distance education

International student demand for distance education is low. Overseas governments and employers hold a long-standing prejudice against qualifications gained via distance learning—despite evidence that says that well-designed, well-supported distance education can be as effective as in-person, on-campus education.

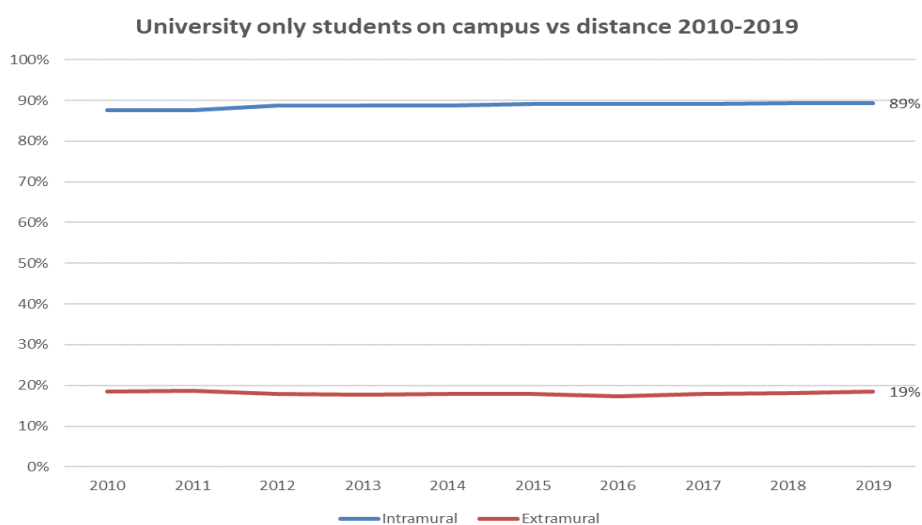
Also, for most international students a key objective in studying abroad is for them to be able to present themselves to employers as having lived and worked in an English-speaking country and

having gained an understanding how to do business in the international language of commerce. The qualification is only one part of what they look for when studying abroad.

A July 2020 survey² of 53,000 prospective international students supported this, finding:

1. only 20% were 'extremely interested', or 'very interested' in studying online as a consequence of Covid-19
2. around 65% were planning on deferring their study or were looking to study abroad in a different country
3. around 80% thought that studying online should affect tuition fees, with about a quarter thinking fees should be discounted by 50% or more, and around 35% thinking fees should be discounted by 30%-50%.

In New Zealand, despite significant advances in technology, there has been no change at all over the past decade in the proportion of students studying on campus versus via distance.³



We believe there will always be demand for distance education for a variety of reasons, but it will not be a preferred option for most students for the foreseeable future.

We also note that most of the value of international education to New Zealand comes from student attraction.

1. Each international student generates average revenue of \$33,000 annually for their university and they remain enrolled an average of 3.5 years—for \$115,000 revenue in total.
2. International education revenue subsidises other teaching and research while helping universities achieve economies of scale.
3. According to Education New Zealand-commissioned economic analysis, every dollar earned by a university from international education leads to another \$1.77 additional direct, indirect, and induced economic benefits. The average value of each international student that studies in a New Zealand university is therefore around \$320,000.
4. International students who graduate and return home are net promoters of New Zealand. They recommend it to other international students, they promote tourism, and they are more likely to trade with us, and carry out joint research with us.

² <https://info.qs.com/rs/335-VIN-535/images/How-COVID-19-%20Impacting-Prospective-International-Students-Across-Subject%20Areas.pdf>

³ Ministry of Education, Education counts, Tertiary statistics. Provider based enrolments 2010-2019 final, ENR.45 sheet. Data includes international students at Universities.

By contrast, the economic and non-economic value of students who do distance study with a New Zealand education provider is mostly limited to the fees that they pay.

We think that there will be demand for distance education in future, but it will not come close to the demand for the more traditional study-abroad model of international education.

Over-reliance on international education

We also challenge assertions in the International Education Recovery Strategy that suggest reliance on international education revenue creates undue risk for the Crown.

We agree there are scenarios where the Crown may need to step in to help universities bridge the short term implications of ‘black swan’ type events such as Covid-19. A similar event took place in 2004/2005 when the Chinese Government actively discouraged Chinese citizens from studying in New Zealand.

However, we believe that the short-term risks to the Crown are more than mitigated by the long-term economic returns from international education. This can be seen in the table showing university sector earnings and international student numbers each year since 2004.

Over the fifteen years shown, the sector has generated (indicatively) \$15 billion of economic activity before counting broader soft-power benefits.

Any potential requirement for Government to provide short-term support is unlikely ever to be more than a small proportion of that amount.

We suggest that any proposals to reduce reliance on earnings from international education are not based on the best long-term economic, diplomatic, social or cultural interests of this country.

Year	Tuition Fee Revenue \$m	International EFTS
2019	\$562.3	20,500
2018	\$509.2	19,436
2017	\$445.8	17,765
2016	\$402.4	16,339
2015	\$367.1	15,737
2014	\$340.0	15,168
2013	\$323.1	14,947
2012	\$307.5	14,739
2011	\$287.7	14,736
2010	\$278.0	14,863
2009	\$256.7	14,488
2008	\$246.5	14,459
2007	\$267.4	16,544
2006	\$301.6	19,945
2005	\$336.2	23,724
2004	\$328.4	24,162
TOTAL	\$5,559.9	
Total likely economic benefit	x 2.77 = \$15,400.8	

We also suggest that any move to diversify away from international education would either see a major reduction in the ability of the university sector to deliver both the quality and quantity of teaching, research, and student support currently available. Or, it would require a very different funding system.

Student work rights

We strongly advise against changes to work rights. The long-term reputational impact to New Zealand would exceed any short-term benefits to New Zealanders. The reasoning is broadly as follows:

1. The ability to get work experience makes New Zealand an attractive destination for international students—even though many students do not end up working while they study here. In the most

recently commissioned I-Graduate survey of 2017, work opportunities were an important factor in choosing New Zealand as a study destination for 77% of students.

2. Employers look for graduates who are work ready. This usually means applications from graduates with degree-relevant work experience are put ahead of those with general work experience who are, in turn, put ahead of graduates with no work experience. In this day and age, it is not appropriate for any graduate to enter the workforce without having had the opportunity to gain work experience.
3. International students who work while studying tend to end up working in sectors such as hospitality, retail and food where wages are low, work is casual or insecure, and where there is usually a shortage of New Zealanders wanting work.⁴
4. International students create many more permanent jobs for New Zealanders than they fill themselves.
5. The international education system is driven by principles of reciprocity. If New Zealand prevents international students from working while they study, there is significant potential that overseas Governments and agents will recommend that their citizens avoid New Zealand. It will adversely affect New Zealand's reputation as a welcoming, friendly place to study and the willingness of overseas universities to organise work experience for New Zealanders studying abroad.

We ask that you resist changes to international student work rights.

⁴ 37% of international students enrolled at universities in 2019 worked while they studied (about N=11,460) at anytime during 2019. (This is compared to 65% at IPTs and 54% at PTEs). On average, those who worked earned 9,640 NZD in 2019, which translates into 544 working hours on minimum wage during the year. This equates to about average of 10 hours per week. One third (32%) of those were employed in Accommodation and Food services, 18% in Education and Training (mostly as tutors, research assistants, etc in the universities where they were studying), 12% in retail, and 7.8 % in administrative and support services.

Attachment 4: Equitable outcomes for priority student groups – particularly Māori and Pasifika

New Zealand Universities Te Tiriti Obligations

New Zealand's eight universities are all autonomous Crown entities with obligations to work in accordance with the principles of Te Tiriti. They are all committed to working in good faith with Māori to achieve more equitable outcomes for Māori.

The eight university Vice-Chancellors want to meet their obligations and wish to do that in accordance with the Tiriti principle of working in partnership.

Te Kāhui Amokura is the Universities New Zealand committee whose role is to advance and promote the collective interests of New Zealand's universities to improve outcomes for Māori university students (tauirā), Māori university staff and Māori scholarship. Te Kāhui Amokura comprises the Deputy Vice-Chancellor Māori, Assistant Vice-Chancellor Māori or Pro-Vice Chancellor Māori from each university. Te Kāhui Amokura meets regularly with the Vice-Chancellors.

The Vice-Chancellors have recently held the first of a series of meetings with Te Kāhui Amokura in October to see what more can be done to gain agreement about obligations under te Tiriti and how they operate alongside the other obligations and expectations placed on universities.

The Vice-Chancellors are committed to working with the university sector's Māori leaders on finding agreement on these important issues.

Equitable outcomes for priority student groups

We share your Government's desire to achieve more equitable outcomes for priority student groups. We also share your goals of making NCEA more robust, consistent, inclusive and accessible.

Universities New Zealand worked with the Ministry of Education and Tertiary Education in 2018 and 2019 to better understand the barriers to achieving parity in education outcomes for Māori.

There were many findings, but key among them were:

- Māori are less likely to aspire to university—often because no one else in their family has gone to university.
- Māori are more likely to attend schools that lack specialist teachers and facilities for subjects such as the sciences and mathematics.
- At school, only 24% of Māori get University Entrance, compared with 55% of European Pākehā.
- Māori who get to university have a lower proportion of merit and excellence credits at NCEA and are more likely to have NCEA credits in subjects that provide less preparation for university studies—for example in disciplines such as theology and performance.
- Because Māori are less academically prepared for university, just 55% who start university get 85% of their first-year credits. This compares with 73% for European/Pākehā students.

Statistics are very similar for Pasifika students.

Universities receive \$320 of additional equity funding per Māori and Pasifika student to help with additional support requirements. This amount is wholly inadequate.

Universities can contribute significantly to help close all of these gaps. Universities can support curriculum delivery within schools and can provide access to specialist teaching and learning facilities. Universities could also work with Māori and Pasifika communities to create aspiration and

to support pathways to degree-level study. Finally, universities could provide additional targeted academic and pastoral support for Māori and Pasifika students during first year.

All of these require additional resourcing—with estimates ranging from \$10m annually to \$80m annually depending upon the speed and scale of change sought.

In addition to this work, Universities New Zealand through Te Kāhui Amokura worked collaboratively with the Ministry of Education Tertiary Policy Team and Tertiary Education Commission to look at new system level innovations to address the challenges raised through the achieving parity discussions. This work was overseen by Minister Kelvin Davis.

Both agencies have signalled their intention to continuing working on this programme of work and we would welcome the opportunity to take this work forward.

Attachment 5 - Student success in the Covid period

We know from Integrated Data Infrastructure (IDI) research that, in addition to borrowing an average of \$4,000 from StudyLink for living expenses, 60% of domestic students earn around \$7,000 through part time jobs while studying. Most work in part time casual jobs in sectors such as retail and hospitality – sectors that have been disproportionately impacted by Covid.

Many of these students have lost that income and, if they cannot cover rent or food, they cannot continue studying.

We also know that this pressure will fall disproportionately on Māori and Pasifika students from lower socio-economic backgrounds who typically cannot rely upon financial support from their families and who therefore are more reliant upon working while studying.

For all students, there is evidence of growing distress and mental health issues as students worry about their ability to cope and these issues will be exacerbated if they are forced to drop out of their studies to seek work in an economy with fewer jobs.

Even with student support packages announced to date, we are looking at students having to discontinue their studies, and this carries a significant opportunity cost:

- For the student: at best they are going to take another year to complete their studies. At worst they will not graduate at all. A university graduate typically earns another \$1.4m over their working life than someone with a school level qualification.
- For New Zealand: A university graduate typically pays another \$0.5m in taxes over their working life than someone with a school-level qualification. A university degree is one of the main mechanisms for social mobility in New Zealand with, for example, Māori or Pasifika graduates from lower socio-economic backgrounds enjoying exactly the same employment and earnings benefits as other university graduates.

In 2020, the Government provided additional student hardship funding that universities were able to allocate where students were able to demonstrate genuine hardship.

We strongly recommend that similar funding be continued for at least the next 18 months. We recommend that you ask your officials to work with the sector on designing a support package that would allow students to remain in study.

Attachment 6: Maximising impact from research and Innovation

University research generates significant returns for New Zealand socially, culturally, and economically. Universities generate around a quarter of all New Zealand's research activity. Economic analyses from agencies such as Deloitte and NZIER indicates:

- the sum contribution of university research over many decades accounts for around 8-10% of total GDP
- every \$100m invested in university research eventually increases GDP by around 1.8: \$3bn-\$4bn.

The university sector can see several opportunities to derive more value from university research and innovation. Some of the key opportunities are as follows:

- 1. Increase investment in the Performance-based Research Fund (PBRF).** Unlike most other Crown research funding, PBRF can be used in a range of ways to develop the infrastructure required for high-quality research and for developing new researchers and the future academic workforce. In particular, PBRF provides the funding that allows early career academics to gain the skills and experience that later allow them to successfully compete for other research funding.

We ask you to push back on any attempt to broaden out the focus of PBRF to include objectives such as equity or impact. Though both are worthy, they are better supported through dedicated equity funding and through all other Crown research funding that is allocated on the basis of both excellence and likely impact. PBRF serves New Zealand best by fostering the high quality research system that subsequently supports equity and impact objectives.

The recent review of PBRF recommended another \$100m of funding and we strongly endorse that. The case for a substantial increase in PBRF funding was also supported by Ministry of Education's (MoE) 2019 analysis of the PBRF,⁵ which showed that *"the increased number of staff...and the increased number of research degree completions has outpaced increases in PBRF funding"* (p 1).

- 2. Better use of academic research as an evidence base for Government policy development, implementation and evaluation.** This can be done by continuing to grow the network of Chief Science Advisors and Departmental Science Advisors and by fostering more engagement and knowledge transfer between government agencies and academia.

Mechanisms to enhance evidence-based policy making are currently being explored in a joint project between Universities New Zealand, Department of Prime Minister and Cabinet, the Prime Minister's Chief Science Advisor, and the Social Wellbeing Agency. We expect the findings of this project will be available in the second quarter of 2021.

- 3. Building research capability.** Capability building is the area in which universities can contribute most to the research system in the longer term. There are several ways in which capability building can be further enhanced and we would welcome the opportunity to develop these ideas further in collaboration with the Ministry of Business Innovation and Employment, MOE and the Tertiary Education Commission. These include:
 - a. building the industry research capability pipeline at the level of tertiary education** through fully funded internships, professional development courses for graduate research students (including micro-credentials) and industry-based PhDs
 - b. funding settings that encourage more PhDs to be done with and for industry, government or other end-users.** This would require funding that makes it possible for PhD students to spend time working with end-users to identify knowledge gaps and that would incentivise

⁵ Smart, W. (2019) Government funding for research-led teaching and research performance- an analysis of PBRF and research top-up funding allocations, Ministry of Education, New Zealand.

end-users to spend time supporting and co-supervising research. The potential benefits of this type of PhD include:

- i. PhD research that addresses real-world end-user problems and opportunities
 - ii. PhD graduates with practical industry knowledge that will make them more employable by that sector, or that provides them with connections they can continue to utilise as they pursue academic careers
 - iii. deeper linkages between universities and end-users (industry, government etc.) that are likely to continue after the PhD research has completed
 - iv. PhD graduates who are likely to continue generating relevant impactful knowledge in areas directly relevant to the New Zealand economy and society.
- c. **support for fully funded research career pathway positions for new and emerging researchers to help them during the post-doctoral period when it takes time to gain secure academic employment.** There was a significant need for this even before the impact of COVID-19 on early research careers. It is now imperative that further support for early career researchers is established, given that international travel has prevented the international exchange of researchers from 2020.
- d. **more research ‘connectors’ and ‘translators’** within research teams, research offices and tech transfer offices are needed who can ensure research portfolios have the maximum reach and the biggest possible impact on end-users
- e. **targeted funding to help the NZ research system address equity and diversity issues.** Targeted supplementary funding will help the substantial efforts universities are already taking to address these issues (e.g. the gender imbalance, the advancement of Māori and Pasifika), in addition to growing existing baseline funds (PBRF, Marsden Fund, Health Research Council funding and the Endeavour Fund).

In addition to these opportunities we can also see an emerging actual or potential threat to the research system.

MBIE is talking about trying to generate more value from Crown spend on research by reducing or removing funding for overhead costs. For institutions like universities and Crown Research Institutes where research is core-business, there is significant supporting infrastructure that needs to be funded on some basis to enable delivery of research. This supporting infrastructure includes libraries, shared ICT infrastructure, administrative support, and the capital cost of laboratories and research equipment. If universities and CRIs are not funded for these overhead costs there will necessarily be a reduction in both the quality and quantity of research that the sector can deliver.

We ask that you advocate against this.

Attachment 7a: Higher education funding system

In July 2019, Universities New Zealand wrote to the Ministry of Education proposing options to address issues and gaps in the current tertiary funding system (see attachment 7b). At a meeting with the Vice-Chancellors in December 2019, you indicated broad support for the sorts of options detailed in this letter and suggested they might be taken forward as a Higher Education Funding Review.

Plans to work up a terms of reference for the Higher Education Funding Review were disrupted by Covid-19.

The issues have not changed significantly since July 2019 and we recommend carrying out the Review in 2021.

We recommend a similar approach to that suggested above for a strategy around student wellbeing and pastoral care. We suggest the Review be run through the following arrangements:

1. a **steering group** of relevant Chief Executives and Deputy Secretaries of government agencies (primarily the Ministry of Education and Tertiary Education Commission) with the Vice-Chancellors group
2. several **working groups** to take forward key workstreams around:
 - a. Māori and Pasifika participation and progression rates
 - b. Work-integrated learning
 - c. SAC funding rate anomalies
 - d. Funding for strategically important delivery where costs and benefits exceed what can be covered by current SAC funding.

Working groups should comprise a mix of senior officials and university sector representatives from relevant UNZ committees: Te Kāhui Amokura (the Māori Deputy Vice-Chancellors), Komiti Pasifika (the Pasifika Deputy and Assistant Vice-Chancellors), Chief Financial Officers, Planning Directors, Deputy Vice-Chancellors Academic, and the Work-Integrated Learning Expert Working Group.

3. a small **programme coordination team** to oversee and coordinate the various workstreams for the Steering Group and prepare the Terms of Reference and programme plan. This team should include the Ministry of Education's Deputy Secretary, Graduate Achievement, Vocations and Careers, the Tertiary Education Commission's Deputy Chief Executive – Deliver, and Universities New Zealand's Chief Executive.

ATTACHMENT 7b

9 July 2019

Andy Jackson
Group Manager Tertiary Education
Ministry of Education



Via email: andy.jackson@education.govt.nz

Dear Andy

Re: Addressing issues and gaps within the current tertiary funding system

This letter follows on from the discussion at the Chief-Executives and Vice-Chancellors' Strategic Dialogue on 13 June. At that discussion, you indicated that the Ministry is looking for advice on aspects of the tertiary education funding system that the university sector sees as priorities or opportunities for change – with a view to workshopping some or all of these over the coming 12 months.

In addition, you are looking for more detailed advice now to help shape their thinking around funding changes taking place as a consequence of the RoVE review, and how some we might mirror the greater flexibility this is likely to provide in that sphere within the funding settings for universities.

This paper covers both areas with some background information to provide context for our advice.

Background

The Student Achievement Component (SAC) funding system works well in the main. It is relatively efficient to administer from both a Government and institutional perspective, provides reasonable predictability in funding levels, and has an overall approach that seeks (though imperfectly) to match funding with costs.

It is, in its general approach, equivalent to the core funding systems for higher education teaching used in many other jurisdictions.

The SAC funding system has been adjusted at various times through its history. This has included changes to reflect the introduction of PBRF, the movement of some subjects to new better funded cost categories, and adjusting funding levels within some cost categories.

However, many aspects of the SAC funding system remain broadly the same as when it was established in the early 1990s.

For example, while there have been a number of adjustments to funding for particular subjects over the last couple of decades (particularly the sciences and engineering), the funding rates for most subjects are based on the same assumptions, teaching models, and pedagogies that were in place when the EFTS system was set up some 30 years ago.

Where subjects required practicums back in 1991, their funding levels were set at a higher level than subjects that did not require them. Where subjects did not have practicums back in 1991 they were

not funded for them and generally remain unfunded for them today despite their increasing prevalence overseas and growing calls from employers for universities to improve the work readiness of graduates. Since, the 1990s universities have been able to use the flexibility allowed by bulk funding to use options such as internships and study abroad experiences to deliver a richer learning and teaching experience aimed at delivering more employable, work-ready, and work capable graduates. However, funding levels typically mean that these are rarely able to be made available to more than a small proportion of students in each qualification.

There have been funded initiatives, such as ICT Grad schools, to implement new models of teaching, but these have often been fraught with high transaction costs and onerous monitoring arrangements. Funding associated with these new initiatives has rarely covered most or all of the overhead cost, and has usually been on a fixed term basis (albeit, sometimes with the opportunity for rebidding).

Because of this, universities have tended to prefer to innovate and adopt new teaching practices from within core funding rather than new funding.

Areas that could be workshopped over the next 12 months

In general, the best thing that the Government can do to support universities is to maintain SAC as the main funding system for tertiary education and provide general rate increases to SAC. This ensures that universities can maintain quality while innovating in teaching to meet the changing needs of employers, new technologies and new pedagogies.

However, there are several practical changes that could be made where general funding increases really won't be sufficient to meet specific needs that affect entire subjects or a significant proportion of all students.

We suggest the following five areas could be usefully workshopped:

1. Māori and Pasifika participation and progression rates

UNZ has generated two discussion papers over the past year proposing ways of bringing Māori and Pasifika university participation and completion rates up to the same level as for other ethnic groups.

Reaching parity for participation rates would require extensive work back in the compulsory sector. By contrast parity in completion (graduation) rates for Māori and Pasifika that reach university should be possible by augmenting existing Equity funding with additional funding to support students who are identified as poorly prepared for degree level-study⁶. Additional funding would largely be used for (a) Foundation and Bridging programmes and (b) targeted first year academic support.

Based on current number of Māori and Pasifika students with Academic Preparedness Scores in the at-risk range, we estimate annual funding of \$12m-\$15m (on top of current Equity Funding) would be sufficient to achieve parity in this area.

2. Work-Integrated Learning (and Study Abroad)

Work-integrated Learning (WIL), Study Abroad, and Work Practicums Abroad are all known to improve the work-readiness, employability, and value of graduates to employers.

⁶ See the August 2018 UNZ Discussion Paper on Parity Targets for a definition of the Academic Preparedness Score as a key way of assessing this. In short, this score is calculated from a student's NCEA results weighted upwards for the number of credits with Excellence or Merit.

Some SAC Cost Categories already include funding for practicums, but the majority of qualifications sit in SAC Cost Categories that do not. Despite this, several universities have moved to offering work for-credit practicum options within some general degrees such as the Bachelor of Arts. However, funding for such components is one of the key factors that limits the extent to which these can be implemented as anything more than boutique options or integrated more fully into curriculum.

Universities New Zealand has a cross-sector Work-Integrated Learning working group. This group advises that there is significant international evidence as to what elements are needed to make WIL work best for students and employers. These elements are all needed for use individually or in combination depending upon the particular requirements of the qualification and the number of relevant WIL placement opportunities actually available within easy travelling distance to each university.

The elements are summarised below. Note that “Placement Costs” mean the costs incurred by a university organising a placement, providing training and support to work-place supervisors, providing pastoral support to students, overseeing assessment and feedback to the student, etc.

- Element 1: Up to 100% of the assessment of a typical undergraduate course should be able to come from a WIL placement with the university applying the associated SAC and tuition funding to Placement Costs and some campus-based learning to contextualise the WIL experience.
- Element 2: Universities should be able to receive SAC funding to cover Placement costs where WIL is a requirement of the programme which does not have academic credits attached.
- Element 3: A student should be able to pay additional costs for WIL through a student loan for International WIL experiences and/or whereby the WIL experience requires a student to leave their normal residence; this will apply when WIL is for academic credit or a requirement of an academic programme.
- Element 4: Where a student undertakes WIL as part of their academic programme, the work is relevant to the qualification and of real value to the employer, employers will be eligible for either; o A tax rebate, or o A grant to cover up to 200 hours of pay at the minimum wage rate.
- Element 5: Students who are eligible for an allowance while studying will be eligible to receive an allowance when undertaking unpaid WIL that contributes towards academic credit.
- Element 6: Immigration New Zealand to ensure Visa settings allow international students to participate in WIL – either paid, or unpaid, where it is for credit.

A future model could (and should) use existing reporting mechanisms as simple and cost-effective means of tracking, reporting, and reconciling students taking up this option.

3. SAC Funding Rates for some subjects

There are some academic programmes where a qualification leads to professional registration. For a number of these, the relevant body overseeing registrations has progressively imposed additional requirements as to the knowledge and experience a graduate must have before they can be registered. This has seen practicum requirements added to or increased but without any funding rate adjustments being made. Some of these programmes are also quite small on scale, often due to the constraining factor of practicum placements.

Amongst these areas, Government has already begun addressed issues around funding rates and places for Initial Teacher Education in Budget 2019. Work is also underway in respect of Clinical Psychology.

The other subjects that need review are;

- Social work – funding rate insufficient.

- Counselling – funding rate insufficient AND insufficient places.
- Educational psychology – funding rate insufficient AND insufficient places.

Government is probably the largest employer of graduates in these fields and the 2019 Wellbeing Budget is likely to place increased demand on both the numbers of graduates and their abilities.

4. Performance-Based Research Fund (PBRF)

The main international rankings that New Zealand universities focus on are Quacquarelli Symonds (QS) and Times Higher Education (THE). 60% of the QS ranking result comes from the actual and perceived quality of each university's research (40% for academic reputation, and 20% for citations per academic staff member)⁷. Research performance is an even-greater factor in THE – making up 76% of the ranking score.

International rankings directly drive a significant proportion of the \$1.127 billion in export earnings that Education NZ estimates universities generate for New Zealand. They also help with the other \$3 billion generated by other parts of this country's education system.

Rankings have several obvious benefits for universities and the country. They assist in recruiting high-quality academic staff to help maintain the overall quality of university teaching and research. They also attract international students who, among other things, pay fees that help maintain the overall quality of teaching and learning for domestic students while reducing the cost of their education to both students and taxpayers.

The Government funding stream that most directly and materially contributes to the quality (and reputation) of New Zealand universities and their rankings is PBRF.

PBRF funding has grown by 65% since 2011 (\$120m increase from \$186m). This has helped most universities hold their places in the rankings and even increase in some areas despite major competition internationally.

PBRF funds research that more directly benefits New Zealand through knowledge that has direct benefit culturally, socially, and economically. It also incentivises universities and their academics to focus on quality impactful research and this, in turn, drives each university's academic reputation and citation rates.

One of the best things the Government can do to help universities help New Zealand and New Zealanders is to continue to grow the PBRF funding pool.

5. Funding for the humanities

Labour's 2017 election manifesto said: *"Labour will maintain a university system that offers broad-based programmes, including acknowledging the importance of humanities"*. Humanities programmes are mostly funded under SAC Cost Category A.

In 2020 funding for SAC Cost Category A will rise to \$6,408 per EFTS. Ten years earlier, in 2011, the funding was \$6014 per EFTS. This \$406 increase equates to a 6.6% increase, over a period when the CPI has risen by 13.8%, with the shortfall between the rate increase and CPI due largely to a five year period (2013-2017) when humanities funding rates were not increased at all.

⁷Academic reputation is assessed through a survey where academics get to list which overseas universities they regard as being best in their particular discipline. Their answers tend to correlate highly with citation rates.

Over the past decade, humanities enrolments have also slipped across the universities, by close to 14%. As a result, and with limited international student interest in the humanities as a possible substitute for reducing domestic volumes, humanities faculties and departments have faced the double issue of reducing demand, and reducing funding per-student in real terms.

Employment and earnings outcomes for humanities graduates are generally very good, and many of the key attributes regarded as important for the changing future of work are especially well developed through humanities study. But this depends upon universities being able to provide them with a relevant curriculum and high-quality learning and teaching experience. This has become challenging under current funding settings.

Not only would there be benefit to students in looking at this area, but there would be an opportunity for Labour to take forward one area it has flagged as a priority.

Funding changes arising from the RoVE – detailed proposals

You will recall that the RoVE technical discussion document proposed introducing changes to the funding system to provide more flexibility for VET. The proposal was to allow *“funding for strategically important delivery that comes at higher costs (for example where more delivery is in remote regions or in areas with lower populations. This could be a per-learner top up or through a base grant.”*

You will also recall that the UNZ submission on RoVE supported this idea, but asked that it be extended to universities to (a) avoid creating distortions in the funding system and, (b) to address long-term issues caused in the margins by the relative inflexibility of the current SAC funding system.

We propose creating two new funding channels;

Funding Channel 1: University Strategic Delivery (SAC, Equity, Industry Training, Youth Guarantee, and Gateway) Rates

The university sector supports a fund that enables strategically important delivery that cannot reasonably be covered from existing funding streams such as SAC. However, we are keen to avoid key pitfalls typically associated with such funds in past such as their being overly bureaucratic with significant transaction and compliance costs, and/or prone to being cancelled at short notice, leaving universities unfunded or with ongoing liabilities⁸.

To avoid distortions in the tertiary education landscape vocational and higher education providers should be able to seek funding for similar types of activity using similar assessment criteria.

However, we recommend that funding be in separate pools for vocational education providers and higher education providers to ensure priorities in both sub-sectors can be met.

Some initial thoughts on how such a fund might work in practice are included as an attachment to this letter.

Initiative 2 - TEC provision of a ‘Strategic Innovation Supplement’ additional to each institution’s core SAC/PBRF/Equity allocation.

This would be set at a certain percentage of SAC allocation (e.g.1.0%) and available as of right (i.e. non-competitively allocated to institutions) subject to demonstrating its use for a project or set of projects which:

⁸ As has been seen most recently with Entrepreneurial Universities and ICT Graduate Schools.

1. Address TES and institutional strategic priorities.
2. Are not business as teaching activities or delivery that that directly attract SAC funding (and there might be some other exclusions).
3. Have light-touch but meaningful accountability.

Potentially Initiative 2 projects would include some the of industry-linked and remote delivery things envisaged by the RoVE document, but also some forms of outreach, etc. Initiative 2 projects might permit some piloting of options for a Bid under Initiative 1.

If you would like additional thinking or analysis on any of these funding options, please work with Chris Whelan at UNZ in the first instance. The university sector has a number of expert and ongoing working groups with extensive knowledge across areas such as Work-Integrated Learning, Māori and Pasifika achievement, and the design and delivery of effective funding and planning systems.

We look forward to working collaboratively with you on these and any other options that are taken forward.

Yours sincerely



Derek McCormack
Chair, Universities New Zealand

Cc: David Choat, Specialist Ministerial Advisor, via email: david.choat@parliament.govt.nz

Attachment – Detail for Possible University Strategic Delivery (SAC, Equity, Industry Training, Youth Guarantee, and Gateway) Funding

We recommend:

1. Making additional funding available that can be bid for to supplement existing funding to SAC, Industry Training, Youth Guarantee, and Gateway appropriations. Applications for funding would only be accepted where certain criteria were met, for example one might require;
 - a. Bids to be well aligned with Tertiary Education Strategy priorities – equity and access, work-integrated learning, and/or life-long learning.
 - b. The bid to be supported by a key stakeholder. Key stakeholders might be; regional economic development agencies, large employers, groups of employers, iwi, a ministry or Government agency.
 - c. Bids to be consistent with the purpose of the relevant existing appropriation. For example;
 - i. SAC bids – to be for a SAC funding rate higher than is currently allowable, but capped at a particular level (e.g. at double the current standard rate for the applicable subject area). This could be used for initiatives such as; 1. Workplace-delivered degree education (Qualifications at levels 7-10)
 - ii. Delivering qualifications in remote locations. ii. Youth Guarantee – this can be used to fund ongoing initiatives aimed at improving transitions to higher education. For example;
 - iii. Universities supporting high schools in delivery of specialist senior school STEM curriculum.
 - iv. Initiatives such as the Waikato Bus Service – providing rural students with a university experience.
 - v. Etc.
2. Funding would not be for capital costs.
3. Funding could be used to scale up existing initiatives that are (a) currently being subsidised by other funds such as SAC or Equity and that (b) cannot realistically be scaled up further under current funding levels.
4. Funding would be sought via a short-form business case of now more than 3-4 pages.
5. Funding would be granted on an open-ended basis but subject to periodic evaluation.
6. The CUAP Graduating Year Review process should be the default evaluation mechanism for initiatives involving academic programmes. This process is well understood, relatively light touch, but keeps universities focussed on delivering outcomes and on sharing good practice and learnings across the wider sector.
7. To keep compliance costs down, Investment Plan and general funding conditions associated with annual allocation are the preferred mechanisms for signalling intent and covering off key contractual arrangements.

Attachment 8 - The New Zealand university sector at a glance

Introduction	<ul style="list-style-type: none"> • New Zealand has eight universities—seven are ‘comprehensive universities’ meaning they provide a wide range of courses and subjects for students. • The number of universities in NZ is on a par with Australia, the UK and Canada—one university per 600,000 people. • Combined the universities had 138,190 equivalent full-time students (EFTS) enrolled in 2019. These EFTS were made up of 177,905 actual students.⁹ • All NZ universities were placed in the 2020 QS World Top 600 University Rankings. Four NZ universities were in the Times Higher Education rankings top 350 (all eight are in the top 600).¹⁰ • Individual NZ universities appear in the Top 50 university rankings for courses in Anthropology, Archaeology, Classics & Ancient History, English Language and Literature, Performing Arts, Philosophy, Engineering – Civil and Structural, Agriculture & Forestry, Anatomy & Physiology, Dentistry, Nursing, Pharmacy & Pharmacology, Veterinary Science, Geography, Education, Hospitality & Leisure Management, Law, Psychology, Sports-related subjects • There is at least one (and typically more) university ranked in the top 100 for all but five of the subjects ranked by QS. All subjects have at least one university in the top 150.¹¹
Economic impact	<ul style="list-style-type: none"> • Universities employed around 21,500 staff in 2018 (about 1.0% of New Zealand’s total labour force). The flow-on effect of university employment accounts for another 2,200 to 4,300 jobs in the wider economy.¹² • The university sector spent \$3.9 billion in 2018 on staff, capital and the purchase of goods and services while its direct contribution to GDP was \$2.9 billion (about 1 percent of GDP).¹³ • Universities make a significant contribution to the regions that house them; their contribution representing up to 6.3% of regional GDP counting university and student spending that contributes directly to regional GDP.¹⁴ For example, the University of Auckland and its student spending contributes to 2.4% of Auckland’s regional GDP. This is 6.3% for Otago University and its students.¹⁵ • International education generates at least \$1,025 million per year for New Zealand and New Zealand universities’ earnings from export education represent 1.2 percent of all New Zealand’s exports of goods and services.¹⁶ • There were 25,870 international EFTS at NZ universities in 2019¹⁷ with NZ having one of the highest proportion of international students in the world

⁹ Ministry of Education, Education Counts Statistics, Provider based enrolments and provider based equivalent full time enrolments (EFT.9 and ENR.31 tables)

¹⁰ From the Master Longitudinal QS & THE World Rankings spreadsheet

¹¹ From the Master Longitudinal QS & THE World Rankings spreadsheet – the 2020 results

¹² NZIER, Economic Impact of NZ’s Universities, 2020.

¹³ NZIER, Economic Impact of NZ’s Universities, 2020.

¹⁴ NZIER, Regional activity of universities, June 2020

¹⁵ NZIER, Regional activity of universities, June 2020

¹⁶ NZIER, Economic Impact of NZ’s Universities, 2020

¹⁷ Calculated by adding international student numbers reported in each of the eight universities audited annual reports. From the Master University Finances Spreadsheet.

	<p>(30% of all students at Bachelor’s level, 24% at short -cycle tertiary programmes).¹⁸</p> <ul style="list-style-type: none"> • International education generates at least \$1,025 million per year for New Zealand.¹⁹ <p><u>Research and the transfer of knowledge</u></p> <ul style="list-style-type: none"> • The stock of all knowledge generated by universities and adopted over time across the wider economy accounts for around 8.2% to 9.7% of GDP.²⁰ • A 10% increase in higher education research spending will eventually increase GDP by 1.75% to 1.84%.²¹ • Universities generate around a quarter (24.7%) of all research in NZ.²² • In 2019, universities spent about \$1.17 b on research.²³ • According to the most PBRF results (2018), 35% of the university sector’s active researchers are in STEM subjects.²⁴ • According to the 2018 PBRF results, 17% (N=1,077) of all university researchers (N=6,299) are emerging researchers, 42% were in STEM subjects.²⁵
Societal Impact	<p><u>Graduates and human capital</u>²⁶</p> <ul style="list-style-type: none"> • Graduates with Bachelor’s level qualifications earn about 52% more than people with a secondary school education. This rises to 87% for an honours level qualification, 86% for Masters and 129% for Doctorate degree level qualification. • New Zealand’s GDP is 3%-6% higher because of the impact that a university education has had on the productivity of the workforce with a university qualification (28% of the workforce in 2014). • In addition to being more productive themselves, graduates lift the productivity of other employees in their workplaces. This accounts for around 0.8% of GDP.²⁷ • Workers without a degree earn 1.6% to 1.9% more as a consequence of working with graduates.²⁸ • There are a range of other health, standard of living, wellbeing and intergenerational benefits that appear to accrue to graduates. These were

¹⁸ Education at a Glance 2018: OECD Indicators Table B4.1. EAG 2017 is based on 2017 first-time entrants numbers.

¹⁹ NZIER, Economic Impact of NZ’s Universities, 2020.

²⁰ NZIER, Economic Impact of NZ’s Universities, 2020.

²¹ NZIER, Economic Impact of NZ’s Universities, 2020.

²² Statistics NZ “Research and Development Survey: 2018”.

²³ This in the Master University Finances Spreadsheet – row 79.

²⁴ Used TEC definition of STEM subject from 2018 Evaluation report. STEM subjects were defined as Architecture, Design, Planning, Surveying; Agriculture and Other Applied Biological Sciences; Chemistry; Computer Science, Information Technology, Information Sciences; Earth Sciences; Ecology, Evolution and Behaviour; Engineering and Technology; Molecular, Cellular and Whole Organism Biology; Physics; Pure and Applied Mathematics; and Statistics.

²⁵ PBRF summary table, Universities New Zealand

²⁶ All figures under this sub-heading come from NZIER, Economic Impact of NZ’s Universities, 2016 unless otherwise stated.

²⁷ NZIER, Economic Impact of NZ’s Universities, 2020.

²⁸ NZIER, Economic Impact of NZ’s Universities, 2016.

	<p>not assessed in this study, but international research suggests the benefits to graduates are typically worth about double the graduate’s actual annual earnings.²⁹</p> <ul style="list-style-type: none"> • The number of adults (aged 25-64) with a Bachelor’s degree or higher rose from 8.3% in 1991 to 26% in 2018.³⁰; 61% of domestic school leavers enrol at tertiary providers in their first year after leaving, one third (32%) enrol into Bachelor degree or above qualifications.³¹ • 89.7% of all people who started degree (Level 7+) study during any of the years 2009-2013 did so at a university.³² • Bachelor degree graduate’s median weekly income is around 1.48 times greater than someone without a tertiary qualification by age 25-34 and this rises to 2.3 times greater by age 55-64.³³ • On average, fewer than 1% of degree-qualified graduates are on a benefit at any time during the ten years following graduation. This compares with an average of 6% for those with a Level 4 certificate level tertiary qualification, and 4% for those with a level 5-7 certificate or diploma level qualification.³⁴ • For graduates aged 30-39 at the time of the 2013 Census, 73% were in jobs that either needed a specific degree (doctor, teacher, etc) or for which a degree was highly useful (general manager, consultant, policy advisor, etc).³⁵ • According to the 2018 Census, PhDs earn an average yearly income of 29% more than Master’s graduates, who earn 3% more than Honours graduates, who earn 16% more than Bachelor’s graduates, who earn 17% more than Diploma graduates, who in turn earn 14% more than Certificate graduates and school leavers.³⁶ These averages vary significantly from individual to individual and between subjects. • In general, degree holders (level 7 and above) can expect to earn another \$1.37m over their working lives compared with people with only a high school qualification.³⁷ • New Zealand has some of the best qualification completion rates in the world. Only 19% of full-time students who start a Bachelor’s-level qualification at a university in New Zealand do not have a qualification within eight years. By comparison, non-completion rates at polytechnics/institutes of technology are 34% and 42% for Wānanga.³⁸ International comparisons are
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²⁹ For example, McMahon (2009) assesses benefits such as being able to live in nicer neighbourhoods, making better purchasing decisions, having better health, having healthier more successful children, etc as increasing annual income by 122%. Other studies, such as Wolfe & Haveman (2007) estimate benefits as being around 100% of annual income.

³⁰ Census 2018, IDI extract by Universities NZ

³¹ Ministry of Education, Education Counts, School leaver destinations indicators

³² Bespoke report from the Ministry of Education Ralf Engler – run in 2017. See spreadsheet ‘MASTER 2016 Five years after study destinations by ethnicity’.

³³ http://www.educationcounts.govt.nz/statistics/tertiary_education/life_after_study - Income and Earnings PSI.1

³⁴ http://www.educationcounts.govt.nz/statistics/tertiary-education/life_after_study, Earnings & Destinations, averages of the ten year ‘benefit’ figures.

³⁵ Universities NZ, Graduate Return on Investment Study – August 2020.

³⁶ Universities NZ, Graduate Return on Investment Study – August 2020.

³⁷ Universities NZ, Graduate Return on Investment Study – August 2020.

³⁸ Education Counts - https://www.educationcounts.govt.nz/statistics/tertiary-education/retention_and_achievement Workbook: 1-Direct_progression_Attrition_Completion_rates_Broad_levels, cells P140313,P145713,P151113.

	<p>problematic as different countries track completion rates over different time periods, but reported non-completion rates by theoretical duration plus three years by OECD are 14% in the UK, 21% in Australia, 20% in the US, and around 30% in South America.³⁹</p>
Efficient Sector	<ul style="list-style-type: none"> • The New Zealand university system is efficient by international standards. For 2015, using New Zealand dollars in 2015 \$NZ exchange rates, New Zealand produced its outputs for 85% of what it cost in Australia. That is Australian expenditure was \$31,068 per university EFTS compared with \$26,460 for New Zealand.⁴⁰ • New Zealand total expenditure on education institutions per EFTS is 96% of the OECD average.⁴¹ Despite this, all our universities are ranked in the top 2.6% of universities globally.⁴²

³⁹ OECD, Education at a glance 2019, B5.4 Indicator

⁴⁰ See row 22 on the worksheet 'Australian Uni Comparison' in the spreadsheet "MASTER University Finances" for references and calculations.

⁴¹ Table C1.1 in the 2019 OECD Education Indicators at a Glance. (All Tertiary)

⁴² Denominator of 19,400 comes from the International Association of Universities' Worldwide Database of Higher Education Institutions, Systems and Credentials? www.whed.net/home.php

Universities key statistics (Information from the 2019 Annual Reports)

Consolidated	Auckland	AUT	Waikato	Massey	VUW	Canterbury	Lincoln	Otago	TOTAL
Academic Staff	2,402	1,189	622	1,399	1,139	826	195	1,744	9,516
Other Staff	3,566	1,253	862	1,901	1,201	1,083	471	2,246	12,583
Total Staff	5,968	2,442	1,484	3,300	2,340	1,909	667	3,996	22,106
Total EFTS	34,521	20,531	10,603	18,835	17,861	14,891	2,633	18,915	138,790
Total Headcount	43,148	29,428	13,232	30,491	22,406	18,364	3,305	21,108	181,482
Domestic EFTS	28,779	16,528	8,264	15,287	15,814	13,022	1,475	17,163	116,332
International EFTS	5,742	4,003	2,339	3,306	2,047	1,869	1,158	1,752	22,216
Māori EFTS	2,381	1,768	1,931	1,931	1,813	1,219	145	2,128	11,385
Pasifika EFTS	2,862	2,986	585	864	959	443	51	926	9,091
Postgrad EFTS (incl hons)	8,464	4,006	2,022	5,500	3,342	3,270	733	3,490	30,827
Income \$m	Auckland	AUT	Waikato	Massey	VUW	Canterbury	Lincoln	Otago	TOTAL
Domestic student fees	\$149.7	\$78.6	\$39.7	\$97.8	\$73.2	\$71.2	\$6.4	\$89.0	\$605.5
Domestic fee free	\$34.7	\$20.2	\$9.3	\$14.9	\$21.1	\$18.3	\$2.1	\$28.5	\$149.1
International Full Fee	\$167.1	\$95.2	\$47.6	\$84.0	\$45.6	\$48.1	\$22.2	\$52.5	\$562.3
Student Fees	\$351.50	\$193.9	\$96.6	\$196.7	\$139.9	\$137.6	\$30.6	\$170.0	\$1,316.9
Govt SAC Funding (excl FF)	\$337.4	\$158.6	\$75.5	\$158.9	\$149.0	\$130.6	\$22.4	\$246.1	\$1,278.6
Govt PBRF Funding	\$93.3	\$19.9	\$15.4	\$39.0	\$35.5	\$28.4	\$10.2	\$62.2	\$303.9
Other Govt Funding	\$12.8	\$5.7	\$11.6	\$1.3	\$6.1	\$6.2	\$0.0	\$2.6	\$46.2
Research & contracts	\$269.2	\$17.1	\$34.3	\$83.4	\$64.5	\$40.1	\$31.8	\$137.9	\$678.4
Other Income	\$166.8	\$35.6	\$46.2	\$72.1	\$111.7	\$60.5	\$31.7	\$160.2	\$684.7
Total Income	\$1,230.97	\$430.8	\$279.6	\$551.4	\$506.7	\$403.3	\$126.9	\$779.1	\$4,308.7
Expenses \$m									
People Costs	\$668.9	\$247.9	\$147.1	\$319.4	\$266.4	\$193.6	\$63.2	\$429.1	\$2,335.6
Operating Costs	\$370.5	\$108.1	\$95.6	\$159.2	\$179.3	\$129.0	\$45.4	\$236.1	\$1,323.1
Deprn & Amortisation	\$144.2	\$53.0	\$28.6	\$61.6	\$51.7	\$55.3	\$9.7	\$70.4	\$474.5
Other expenses	\$0.0	\$4.6	\$0.2	\$2.1	\$3.6	\$4.3	\$1.2	\$0.6	\$16.7
Total Expenditure	\$1,183.60	\$413.6	\$271.3	\$542.4	\$501.0	\$382.3	\$119.5	\$736.2	\$4,149.9
Net surplus	\$47.37	\$17.2	\$8.2	\$9.0	\$5.6	\$21.0	\$7.4	\$42.9	\$158.7
	3.8%	4.0%	2.9%	1.6%	1.1%	5.2%	5.8%	5.5%	3.7%
Property, plant & equipment book value	\$3,645.5	\$975.9	\$618.2	\$1,191.6	\$974.8	\$1,426.5	\$196.2	\$2,016.3	\$11,044.9

Key financial and non-financial measures (From 2019 university annual reports)

- On average, 44.6% of university sector income comes from the Government and 30.6% from students.
- The remaining 24.8% comes from a range of sources, including research and investments.
- On average 13.1% of university sector income comes from full-fee paying international students.
- International students make up 16 % of all EFTS, but their fees represent 42.7% of all student fee income.

Income Line by Source (all 8 universities)	Total Income 2019 \$m	% of all Income
Fee Income from Students	\$1,316.93	30.6%
Income from Government (all sources)	\$1,921.17	44.6%
Other Income (Non student & non-Government)	\$1,070.61	24.8%
Total	\$4,308.71	100.0%