

It's all change at Massey veterinary school, with a redeveloped campus, updated admissions policy and new curriculum. So what does this mean for the veterinary profession?



assey's School of Veterinary Science -Tāwharau Ora is going through something of a transformation - it's undertaking a \$160 million project to rebuild and renew its facilities. The project started in 2014 with Wildbase Hospital, the Veterinary Science Building administration hub, a new equine clinic and the redevelopment of the large animal teaching and small animal intensive care units. New student facilities and research laboratories, and an updated companion animal hospital are next on the agenda, with completion expected in 2025. What's perhaps more significant, though, is that the school is currently in the challenging process of rolling out a brand-new curriculum while also increasing its maximum class sizes to 125 for domestic students (up from 100) and 50 for international students (up from 25). That's a maximum class size of 175 students a year.

Jon Huxley, Head of Massey's School of Veterinary Science, says the school is reinventing itself. "These changes will return us to the front edge of veterinary education worldwide, and revolutionise how we operate."

The school's transformation has certainly come at a critical time for the profession - a fact that NZVA Chair Grant Guilford made abundantly clear at a recent conference in Wellington. "Veterinary education is at a crisis point in Australasia," he said.

Grant was one of a three-person panel commissioned by the Veterinary Schools of Australia and New Zealand (VSANZ) to review the profession's education in the region. The findings were published in Rethinking Veterinary Education in July, along with 25 recommendations for Australasia's veterinary schools, employers, regulators and professional associations.

According to Grant, the review was precipitated by a range of issues. "We knew that VSANZ as a group was concerned about the increasing reports of stress related to underfunding and the profession's very high expectations of graduate competency in all fields of veterinary science," he says. "We were also getting reports from some in the profession that they weren't being well served by veterinary schools because graduates weren't choosing their veterinary field. And then there was the worry about graduates' mental wellbeing and how well they were being cared for in their first few years of practice."

It's clear that the problems facing veterinary education and therefore the profession as a whole - are multifactorial, complex and primarily driven by the rapidly changing and ever-growing need for and expectations of veterinarians.





They can be seen in the increasing demand for large animal veterinarians to provide holistic farm advisory services and preventive animal health plans; the increasingly specialised equine practice; the high owner expectations of companion animal veterinarians; and the evolving roles of government and industry veterinarians in addressing food safety, public health, biosecurity and animal welfare.

"It's currently proposed that we produce an omnicompetent new graduate in all areas of veterinary science and it's an impossible task," says Grant. "It's beyond any one school to produce graduates who can do everything, and it's beyond the graduates to be fully competent in all areas," he says, noting that he believes the changes at Massey are a good step forward.

The university began reviewing its curriculum in early 2019, and based the new version on the competency-based veterinary education (CBVE) model, which was developed by an international group of veterinary educators. Then in 2021 the Australasian Veterinary Boards Council (AVBC) - one of the accreditors of the BVSc in New Zealand - reviewed and renewed its standards (the list of requirements with which the Massey veterinary school must comply) and implemented some substantial changes that will come into effect on 1 January 2024. The changes range from a shift towards risk-based evaluation and decisions to a greater emphasis on inclusivity, equity and diversity and a requirement for environmental sustainability to be a goal for veterinary clinical practice. Among the most significant changes is a greater focus on Day One Competencies - the knowledge, skills and abilities that veterinarians must possess on 'Day One' of practice.

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The competencies in the CVBE framework and the ones set by the new AVBC standards are almost identical: both are structured around Nine Domains of Competence (see figure 1), with 32 competencies sitting within the domains. The CBVE/ AVBC framework is outcomes-focused and involves assessment-led learning. According to Jenny Weston, Academic Lead of Veterinary Education at Massey, it will produce better-prepared graduates. "Previously, the curriculum focused on 'what do they know?'; now it's 'what can they do with what they know?"

Nicola Smith, Associate Academic Dean -Curriculum at Massey's School of Veterinary Science, is leading the rollout of the new curriculum (which is now in its first year) and says a great feature of the CBVE framework is its adaptability. "We can have sub-competencies within the 32 competencies that can be tailored to our local context, so we can give students a New Zealand flavour as we see fit."

As well as covering the core clinical and animalmanagement skills, the competency-based framework has a greater emphasis on 'non-technical skills', including communication, financial and practice management and professional identity.

"We worked on communication a lot in the previous curriculum; the difference in the new one is

that it will be better integrated," says Nicola. "That also goes for the assessment plan. We previously assessed everything separately, while the new curriculum deliberately finds connections and makes them explicit." She adds that the professionalism and financial and practice management aspects will be bigger changes. "We'll be incorporating more professional reasoning, especially in the clinical years, so that students can go into practice with a greater focus on providing solutions for clients and their animals. We've had excellent feedback from the profession on what students do and don't need to know about practice management, and we've taken that into account."

Another change implemented in the renewed AVBC accreditation standards is a requirement for at least 70% of clinical education (final year) to focus on first-opinion clinical practice. Jon Huxley says this is in response to the rise in specialism in veterinary schools. "In the past few decades veterinary teaching hospitals have become specialist led and quite focused on referral work," he says. "This is understandable as that's where all the expertise is, but it creates a disconnect between the cases seen as a student and those in commercial first-opinion practice."

He says the renewed focus on the more common clinical presentations seen in veterinary practice, while not universally accepted as the best model, should produce better outcomes, as "a larger proportion of the teaching has taken place in a setting that more closely aligns with where those students will be working after they graduate".

However, he knows that not everyone will be on board. "Some will argue that it's a dumbing down of the course, that it will become a technical course rather than a science course. They'll ask, 'Where are students going to be taught excellence and specialisation?'," he says. "It's a fine balance, but I believe it will deliver for the profession."

VCNZ CEO Iain McLachlan agrees. "Often we hear from employers that new graduates are technically very good and know everything, but they lack confidence," he says. "We hope that the CBVE-based curriculum will build that confidence while students are at veterinary school."

He advises that the curriculum changes are unlikely to have significant impacts on the way that veterinarians are registered in New Zealand. "Our registration system is flexible, so I don't think major changes will be needed," he says, adding that the same can be said for CPD. "We renewed our CPD system three or four years ago; now it's very open-ended and gives veterinarians opportunities to self-direct their learning. I think it fits in well with the new curriculum model."

In addition to undertaking the curriculum overhaul, Massey's School of Veterinary Science has made changes to its selection process in the past few years, with the aim of broadening the range of applicants and increasing its emphasis on equity, diversity and inclusion. This widening of the admissions process was one of the recommendations in Rethinking Veterinary Education, and Grant says it's a trend that's been developing for some time. "Most veterinary schools agree that selection purely based on academic excellence doesn't guarantee that the students will gain all the non-technical skills (teamwork, decision-making, delegation etc) that are required of a successful veterinary practitioner."

He adds that Massey is well advanced in this area, pointing to the wide range of non-academic indicators introduced to the selection process. They include the Casper programme, an online situational judgement

FIGURE 1. AVBC's nine Domains of Competence

| 1 | * | Clinical reasoning and decision-making |
|---|------------------|---|
| 2 | Ÿ. | Individual animal care and management |
| 3 | m ¹⁰⁰ | Animal population care and management |
| 4 | 8 | Public health |
| 5 | F. | Communication |
| 6 | شش | Collaboration |
| 7 | \$ | Professionalism and professional identity |
| 8 | 胍 | Financial and practice management |
| 9 | Q | Scholarship |

test that asks what users would do in tough situations and why, and multiple mini-interviews that assess candidates' non-technical skills, such as problemsolving, teamwork and critical thinking. Another recent change has made the grade point average (GPA) a bar that must be crossed, rather than something that contributes to a person being selected. Students must cross the GPA hurdle to demonstrate they have the academic acumen to succeed, but the veterinary school no longer puts a greater weight on people with higher GPAs. "Feedback from the teachers of the pre-selection semester is that there's a lot more collaboration among the students now that they're not competing for the highest grades," says Jenny.

The veterinary school is also focused on increasing the representation of Māori and Pasifika in the profession through VetMAP. Introduced in 2020, the VetMAP (veterinary Māori and Pacific students) equity pathway is open to domestic students who are of New Zealand Māori or indigenous Pacific descent applying to the BVSc. "VetMAP recognises that Māori and Pasifika are markedly underrepresented in the veterinary profession," says Eloise Jillings, Associate Academic Dean – Admission and Students and Director of VetMAP at Massey, "and how can we adequately serve society if we don't represent it?" She adds that VetMAP students still have to take the same assessments and meet the same minimum requirements as other applicants, but that the pathway aims to provide academic, cultural and pastoral support through the application process and during their years of study.

All in all, Jenny says, the extensive changes at Massey's veterinary school should eventually mean not just more graduates but more clinic-ready graduates who are competent and confident in

'Day One' of their jobs. However, she does want to highlight the extremely high calibre of the students produced by the 'old' curriculum. "In the past 10 years our veterinary graduates have consistently been ranked in the top 10 for employability in the QS World University Rankings," she says, and points out that the veterinary school can only do so much in preparing graduates for their careers. "We recognise that learning and skill development needs to continue after they graduate."

Jenny's comment makes an important point: the onus for addressing the issues facing veterinary education in New Zealand is not purely on our veterinary school. "There's this idea that universities can somehow prepare people to be bulletproof in practice," says veterinarian Rosie Allister, who's spent around 15 years researching veterinarian mental health. "However, while veterinary schools are much better at preparing students than they used to be, it hasn't improved mental health."

A growing body of evidence suggests that the transition from study to professional practice is a particularly difficult time during a veterinarian's career. A 2012 study found that the time of transition to practice from training was when veterinarians were most likely to develop suicidal thoughts (Platt et al., 2012b), while a systematic review in the same year indicated that psychological distress was most common among veterinarians under 35 years old (Platt et al., 2012a).

One of the most comprehensive investigations into the topic is Rosie's PhD thesis, the Veterinary





Transition Study, which she completed at the University of Edinburgh in 2019. The cohort study followed 35 veterinary students from their final year of university education to their second year in practice and focused specifically on their mental health, experiences of support and development of professional identity. Her findings were broad ranging (we'll go into them in more depth in the next article), but one in particular stands out.

"The participants who had the most problems with stress or mental health as newly qualified veterinarians were not the ones who had had mental health problems when they were students," she says. "In fact we found that where support at transition was good, people generally did well, even if they had a lot of adversity and mental health difficulties before and even really serious problems at veterinary school."

Grant agrees that graduates' experiences during the transition period are vitally important but differ significantly, with some graduates looked after very well by their employers and others faced with the sink-or-swim approach. "There was a huge discordance in the submissions we received during the review," he says. "We heard from some destroyed young people, who said they had entered our profession and been personally wrecked, their lives ruined. We also saw young people thriving and beautifully supported."

To that end, several of the recommendations made in *Rethinking Veterinary Education* aim to address support and mental health and wellbeing during the transition period. They include harmonising graduate mentoring programmes and encouraging professional associations to help employers improve veterinary business models so that they address factors such as recruitment, retention and wellbeing.

NZVA CEO Kevin Bryant says the organisation has identified 11 recommendations from the review that it thinks are most relevant to its professional members. "We recognise the crucial role the NZVA plays in supporting both employers and employees

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with workplace issues, and we actively engage in many initiatives to enhance recruitment, retention and wellbeing," says Kevin. "We will continue to develop these initiatives and work towards the other recommendations into 2024 and beyond."

What's very clear, says Grant, is that the challenges facing veterinary education are greater than those facing any one organisation.

"They are failures of the overall education ecosystem, and can only be solved if all stakeholders – veterinary schools, the wider universities in which they're nestled, the regulators, the employers and the professional associations – contribute to positive change via their various mandates. It's our problem, not Massey's problem."

Look out for the next article in our veterinary education series in the December/January issue of VetScript. (9)

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