



# ON THE RIGHT TRACK

By Anna Dunlop

The third and final article in *VetScript's* veterinary education series explores more ways to ensure the sustainability of the veterinary profession and its education system, now and into the future.

**T**here's no doubt that the role of the veterinarian has evolved significantly since the Massey University School of Veterinary Science was founded in 1963. Increasing client expectations mean that: companion animal veterinarians are expected to be skilled not only in an increasing number of basic practical procedures but in some specialist medical and surgical treatments too; more and more government and industry veterinarians are needed to ensure food safety and public health; and production animal veterinarians must have an in-depth knowledge of farming systems when offering farm advisory services and preventive health plans.

This depth and breadth of knowledge expected of veterinarians can only continue to expand. Climate change will increase the complexity of biosecurity and transboundary disease preparedness; food insecurity will grow; and emerging scientific areas and industries (including animal welfare and behaviour, One Health, agritech such as animal monitoring technology and artificial intelligence, and sustainable aquaculture) will drive the need for further expertise.

So what does this mean for veterinary education? Through the past two articles and now this final third, the NZVA has endeavoured to find out.

The first article, *School's Out*, explored changes happening at Massey's veterinary school, such as the building of new facilities and the introduction of a new admissions process and curriculum, which aim to better prepare graduates for practice. The second, *Changing Lanes*, looked at ways in which the veterinary school, employers, the NZVA and the students themselves could better manage the difficult transition period from final-year study to clinical practice.



Both articles touched on the impossibility of resource-constrained veterinary schools to produce ‘omnicompetent’ graduates, and the impossibility for graduates themselves to be fully competent in all areas of veterinary practice.

“You get the sense that graduates are becoming like over-inflated balloons, with a thinner and thinner veneer of *knowledge* stretched over more and more *information* forced into them by an enthusiastic profession – and from time to time, a balloon ruptures” says Grant Guilford, NZVA Chair and co-author of *Rethinking Veterinary Education* (Scott Orr et al., 2023), a review of veterinary education that was commissioned by the Veterinary Schools of Australia and New Zealand.

So what can be done to address the challenges facing New Zealand’s veterinary profession and its education system? Among the 25 recommendations in *Rethinking Veterinary Education* is the concept of ‘tracking’, in which students follow courses of study along particular ‘tracks’. In doing so they can focus on their areas of interest and/or the species with which they intend to work in practice.

A study of US students (Walsh et al., 2009) found support for a curriculum in which they could concentrate in their final year on the species with which they intended to work after graduation. Other research conducted at the University of California, Davis, (Chigerwe et al., 2010) indicated that background experience before admission to veterinary school was the most significant factor in students choosing tracks – suggesting that pre-application experience, particularly for less popular species/ areas of interest, could be beneficial.

Utrecht University’s veterinary curriculum moved to a tracked model in 2001. Students undertake a four-year core curriculum, which delivers a broad, cross-species knowledge base, and a two-year

tracked curriculum in which students focus on a specific species or sector. The five tracks offered are companion animals/equine, food animals, veterinary public health, veterinary research and veterinary administration and management (van Beukelen, 2004). The degree is accredited by the American Veterinary Medical Association, and recognised by VCNZ.

*Rethinking Veterinary Education* proposes that the veterinary schools of Australasia expand the proportion of their curricula devoted to tracking to produce new graduates with high proficiency levels (including technical skills) in their chosen early-career paths.

Jon Huxley, Head of Massey's School of Veterinary Science, agrees and says tracking is a useful tool. "It makes perfect sense, for example if a student tells us they'll never go on a farm after graduation, why would we waste limited and

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precious resources (beyond meeting minimum training standards) to provide more advanced production animal training that they're never going to use?"

However, he says, tracking must be balanced with the mixed-practice nature of New Zealand's veterinary profession. "There are more mixed-practice roles in our job market than there are in nearly all other locations that I'm familiar with around the world. We need to be mindful that we currently don't have the degree of species specialisation that has developed in other locations."

Jon adds that the Australasian Veterinary Boards Council standards – with which the Massey veterinary school must comply – allow for tracking. "We're progressively making the move to tracking in the undergraduate curriculum. We still have to meet the accreditation requirements

for 'omnicompetence', but I think we'll move towards delivering the fundamentals, and then for the students who are focused on an area, we will concentrate our resources."

He says there doesn't seem to be an appetite for restricted licences to practice. "I don't think we'll ever move towards students graduating in single specialised areas," he says – a view that's supported by a 2014 UK survey (Crowther et al., 2014) that revealed strong support for partial tracking but not to the extent that restricted licences would be needed.

Jon also comments that Massey's veterinary school can cater to students with interests in more minor specialties. "We have the capacity to identify and create learning pathways for students keen to specialise in, for example, pigs, poultry or fish, particularly via individualised and focused extramural 'owns' study." He says it's also important to identify veterinarians who can mentor these students. "For example, we obviously can't offer a student an extensive fish curriculum, but we can pair them up with an expert in that area of the profession. These experts know that their specialism needs 'fresh blood', so they're usually very receptive to mentoring."

Another key issue highlighted in *Rethinking Veterinary Education* is the severe shortage of clinical veterinarians in rural practice. "The recruitment and retention crisis is particularly prevalent in rural areas," says Grant. "It's complex because it's partly the job – it's a more technical type of veterinary practice and there may be fewer advancement opportunities – but it's also about opportunities for families, such as schooling, as well as the rural lifestyle."

It's a situation that affects not only the livestock industry but also the country's biosecurity, animal welfare and food safety, as rural veterinarians have key frontline defence roles in disease detection, monitoring and surveillance.

The review suggests that "veterinary schools consider supplementing the mainstream admission process with an additional entry pathway targeting applications committed to rural or government veterinary practice." However, while Grant agrees that it may help if veterinary schools choose students from rural backgrounds who've demonstrated their ability to live, or interest in living, in rural communities and are interested in being rural veterinarians, he says it comes with its challenges. "The counterargument is that if they change their minds, they need to be able to move."

Grant adds that the recruitment and retention of new graduates to rural practice in New Zealand

has been helped by the Voluntary Bonding Scheme for Veterinarians. “It’s gone well and it’s very well structured,” he says.

The scheme, which is administered by the Ministry for Primary Industries, is open to recently graduated veterinarians who work with production animals and/or working dogs. Each participant qualifies for a grant of \$55,000 spread over five years, and since its inception in 2009 the scheme has supported 416 graduates to work in rural communities.

As part of a recent review of the scheme, the NZVA advocated (this time unsuccessfully) for an increase in the grant amount to match the participants’ increasing debt levels. “When you leave Massey veterinary school \$100,000 in debt, and the bonding scheme pays \$55,000 over five years, there’s still a big hole,” says NZVA CEO Kevin Bryant. “There’s a real opportunity to advocate for increasing the support, both in volume and in value.”

Then there’s the concept of apprenticeship – where students are employed in clinical practice while also undertaking distance learning under the supervision of senior veterinarians. The review recommends that veterinary schools and professional associations explore veterinary apprenticeship models, while highlighting the reservations, including cost and resource constraints. Jon agrees: “We should certainly explore the possibility of apprenticeships, but it’s all about finding the resources. They could be useful tools for career-change students, such as a highly capable veterinary nurse who has the capacity for a more challenging role.”

As discussed in the previous articles, the NZVA is working to address many of the issues affecting the recruitment and retention of veterinary graduates in New Zealand, particularly in relation to new graduate mentoring and sustainable veterinary practice business models. Other work done by the NZVA to address the problems (and subsequent recommendations) raised in *Rethinking Veterinary Education* includes: participating in the research for a plan to develop a network of veterinarians who can engage in biosecurity preparedness and response; and delivering a robust programme of CPD opportunities, including courses, in-person conferences, webinars, regional network meetings and workshops.

Last October, Kevin, along with the NZVA Veterinary Team, Cristin Dwyer and Sally Cory, met with Jon and Massey’s Academic Lead of Veterinary Education Jenny Weston to learn what the curriculum rollout means for the transition to practice, and to explore collaboration between the two organisations to help stakeholders comprehend and prepare for upcoming challenges.

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school to understand how we can support new graduates as they enter the workforce, be that through pastoral care, CPD and/or resource provision,” says Kevin. “We are also focusing on the likely expectations of employers and employees and how we work with the profession to ensure understanding of the difference between competence on graduation and proficiency at some point in the future.”

In his plenary at the NZVA centenary conference last year, Grant outlined the myriad factors that have conspired to create a crisis that is now affecting veterinary education in Australasia. These include the growing demand for veterinary services, the inadequate funding of veterinary schools, the deteriorating wellbeing of students and graduates, and some out-of-date veterinary business models.

This and the two other articles in *VetScript’s* veterinary education series have delved into some of these issues and explored their challenges and potential options for the future. It’s clear that we’re tackling a complex problem that can only be solved through collaboration involving Massey veterinary school, VCNZ, the NZVA and veterinary business owners and employers.

As Grant says: “It’s our problem, not Massey’s problem.” <sup>©</sup>

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