



Equity and Veterinary Education in Aotearoa New Zealand

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Abstract

This short commentary article considers veterinary education as a specific type of science professional education that is impacted by lack of participation of Māori and Pacific students in senior secondary science education. The veterinary profession in Aotearoa New Zealand faces a difficult challenge to overcome the severe under-representation of practising Māori and Pacific veterinarians. At the only veterinary school in the country, the first Māori professor of veterinary education is leading the VetMAP programme, which has been established to recruit and support more Māori and Pacific veterinary students. A related question involves addressing the monocultural nature of veterinary education, so key Māori concepts of whakapapa, kaitiakitanga and manaakitanga are discussed for their potential usefulness.

Keywords Kaitiakitanga · Manaakitanga · Māori/Pacific equity · Veterinary education · Whakapapa

Introduction

The veterinary profession is a prominent animal-centred science sector in Aotearoa New Zealand, given the national popularity of companion animals (Gates et al., 2019) and the economic significance of pastoral farming, especially of cattle and sheep, which is the dominant land use and generates over half the country's earnings (Caradus et al., 2023). Becoming a veterinarian is an important example of a science-

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related career that students prepare to enter by attaining science school qualifications. This commentary article capitalises on two interviews with Professor Eloise Jillings, Professor of Veterinary Education, completed during research for classroom resources on Māori knowledge of animal ethics (Science Learning Hub, 2024b), and examines the veterinary sector as a specific example of the impact of severe inequity in senior school science education for Māori and Pacific peoples (McKinley, 2008). All vets in New Zealand are educated at the School of Veterinary Science, Massey University, located in Palmerston North—the ‘Vet School.’ Thus, the whole national veterinary profession is impacted by what happens there.

This article starts from the principle that Aotearoa New Zealand as a country would benefit from better representation of its population in sectors like veterinary science and animal health. Senior school qualifications have long been recognised as a ‘chokepoint’ preventing Māori and Pacific entering the professions (Madjar et al., 2009, p. 19) and subject science is the ‘worst-case scenario’ for the disparity in senior school qualifications (Stewart, 2023). Only 2% of vets in New Zealand identify as Māori, despite making up 17% of the national population, and fewer than 0.5% of vets identify as Indigenous Pacific, who make up 9% of the national population. It is safe to assume that this inequity is longstanding, and difficult to overstate the challenge of widening access to the veterinary profession (Jillings et al., 2021). Similar patterns of Māori and Pacific inequity are found in medicine, science research, etc. (McAllister et al., 2019, 2022).

For example, the Māori and Pacific Admissions Scheme (MAPAS) has operated for over 50 years at the University of Auckland School of Medicine in response to the need to increase the numbers of Māori and Pacific doctors (University of Auckland, 2026). Yet recent research shows barriers still present for Māori and Pacific medical students (Crampton et al., 2023). The proportion of Māori doctors in New Zealand has increased from 2.3% in 2000 to 4.7% in 2023—still well below the proportion of Māori in the population. The proportion of Pacific doctors has slowly increased to 2.2% of all doctors, but again is still well below the proportion of Pacific people in the national population of New Zealand.

The VetMAP Programme

The VetMAP programme is a groundbreaking cohort pathway in the Vet School for Māori and Indigenous Pacific students (Massey University, 2025), taking inspiration from MAPAS. Pacific students in New Zealand have similar experiences as Māori students in school and society, and extending the programme to include Indigenous Pacific as well as Māori increases the number of students enrolled on the programme. Pacific students are generally comfortable with the inclusion of Māori language and concepts in education. The primary focus of VetMAP is on producing more Māori and Pacific vets, and central to that aim is helping Māori and Pacific students to feel as if they belong at Vet School. In this regard, it is important to address the monoculturalism that has traditionally operated at the Vet School, so another aspect of equity concerns the inclusion of more diverse cultures in veterinary education.

VetMAP is led by Professor Eloise Jillings, the first Māori professor of veterinary education, who features in recent classroom resources about Māori knowledge of animals and animal ethics (Science Learning Hub, 2024c). The VetMAP programme is supported by a full-time manager of daily operations and a dedicated room where the students can support each other to create and maintain a sense of belonging that is critical for their success. VetMAP students are a mix of school leavers and those who have pursued other training and careers and are returning to study.

Veterinary student selection is the gatekeeper to veterinary education and hence the profession. There is a low rate of attrition of students once they have been accepted to Vet School, which underlines the importance of student selection for widening access to the veterinary profession (Jillings, 2017). VetMAP students are selected under the same criteria and must pass all the same assessments as any other veterinary student to graduate. Nevertheless, fallacies still linger about VetMAP students being ‘lesser than’ other veterinary students.

According to Jillings, feedback from the VetMAP students suggests that while no easier in academic terms, it feels better to them to work among whānau on a programme where being Māori or Pacific is normalised and seen as a strength, not a weakness. VetMAP recognises and values each student for who they are, and focuses on providing holistic support, cultural, academic and personal, as needed by each student to fulfill their potential. For students who may not be strongly connected to their ancestral cultures, VetMAP allows them to discover their cultural identity as Māori or Pacific, and work out what it means to them. For example, sometimes potential Māori students are unsure whether they are ‘Māori enough’ to apply for the VetMAP pathway, but to identify as Māori and to want to become a veterinarian is all that is required. As Jillings explains:

You don’t need to kōrero Māori since you were a child, you don’t need to participate in kapa haka. You do need to be committed to your identity as Māori. If you’re committed to that, then we can help you move on that journey. We can also help support your aspirations of becoming a veterinarian. (Science Learning Hub, 2024a)

Jillings knows from personal experience what it means to be on a journey to reconnect with one’s Māori identity. She traces her whakapapa to the whenua and iwi of Pare Hauraki (Coromandel Peninsula) where her grandmother, a native speaker of te reo Māori, lived close to her marae of Mātai Whetu, near Thames. In those times Māori people were strongly discouraged from passing on their language or culture to their children, so her mother was not raised knowing te reo or tikanga Māori. Like many others who apply to study veterinary science, Jillings wanted to be a vet for as long as she can remember. Born in Aotearoa New Zealand as the youngest of seven children in a family with a Māori mother and Canadian father, she was seven when the family moved to Canada, where she finished her schooling and started university. After finding out that she could apply more directly to veterinary studies in New Zealand than in Canada, she came back in 1996 and enrolled at the Vet School, where she has progressed to become Professor of Veterinary Education.

Jillings's (2021) doctoral study investigated systemic inequity faced by Māori in the veterinary profession. Quantitative analysis of selection data for the Vet School between 2003 and 2019 showed that Māori applicants were being accepted at one-third the rate of non-Māori applicants, before the implementation of a Te Tiriti selection process. In her role as VetMAP leader, Jillings takes a prominent role in marketing and recruitment for the Vet School, as well as other initiatives to increase diversity and inclusiveness in the school and introduce Māori language and knowledge.

Further reflecting a shift away from a monocultural learning environment, a Māori name has been bestowed on the school: Tāwharau Ora. On behalf of the Vet School, Jillings undertook a process of consultation with Māori advisors. The word 'tāwharau' means shelter and 'ora' means life and health, so this name refers to providing a shelter of wellbeing for both animals and people. The process also included the creation of a pou whakairo (carved pole) of the same name, which stands at the school's front entrance. The Vet School is on its own journey towards reflecting the mana of that name in everything they do. This work requires shifting engrained dominant norms of theory and practice. In addition to these visible and structural initiatives, there is interest in introducing Māori knowledge and values into the veterinary education programmes of the school, as explained in more detail in the following section.

Māori Knowledge for Veterinary Education

Māori understandings of the natural world including animals were based on close observations that over time built up an extensive empirical knowledge base, which was underpinned by traditional nature narratives and philosophical concepts. Taken together, these traditional narratives and concepts perform the same function for Māori knowledge as scientific theory for science knowledge (Stewart, 2021).

Everything in the Māori world is defined by whakapapa in the sense of ancestral genealogies linking humanity to all other elements of nature, since all life is held to descend from ngā atua—the primordial supernatural forces or 'Māori gods.' Two key concepts based on whakapapa have been adopted whole into New Zealand English since no equivalent exists in the English language: tapu, to mean prohibited by custom, and mana, to mean personal power or prestige. The traditional Māori meaning of tapu is better expressed as 'in the presence of ngā atua' and the traditional Māori meaning of mana refers to a person's ability to keep those primordial forces in balance—to 'find favour with ngā atua' (Salmond, 1978, 1985). The following paragraph explains the concept of 'ngā atua' according to the nature narratives of Rangi and Papa and their children, which are widely known throughout Aotearoa New Zealand. Readers unfamiliar with these stories of ngā atua can refer to a simple online diagram labelled 'Papatūānuku's children' (Te Ara - The Encyclopedia of New Zealand, 2025).

Ngā Atua Māori: The two parental deities are the sky father Rangi (Ranginui) and earth mother Papa (Papatūānuku). Their many children deities include: Tūmatauenga, Tāwhirimātea, Tāne-Mahuta, Tangaroa, Rongomātāne, Haumiatiketike. These deities or atua are sometimes called the 'departmental gods' because they are the kaitiaki or spiritual protectors of various natural domains or departments: Tāwhirimātea of

the winds and weather, Tangaroa of the sea and its inhabitants. Haumiatiketike is the god of wild foods and Rongomātāne is the god of cultivated food, especially kūmara, a type of edible tuber or sweet potato. Tūmatauenga is god of war, and Tānemahuta (also known as Tāne or Tāne-nui-a-Rangi) is the ancestor of mankind and all the trees, birds, insects and other land animals and plants. It was Tāne who managed to separate their parents in the first place, to end their millennia-long tight embrace, with all their children crouched in the dark between them, and allow the light of day to enter the world. Tāne planted the trees of the forest, and filled them with the birds and other living things. Tāne cloaked his father Ranginui with the night sky, adorned it with the stars, and begat humanity with Hineahuone, the primordial female ancestor god, who he fashioned from clay. Tāne ascended to the heavens and returned with the three baskets of knowledge for humankind.

Whakapapa not only explains the world and its origins but also provides an ethical framework to guide right action and human behaviour, based on notions of kinship within the world. All other Māori concepts build on whakapapa as the central explanatory principle.

Two Māori concepts that Jillings finds useful in her work leading VetMAP and Tāwharau Ora are manaakitanga and kaitiakitanga. Both of these terms have been important in recent efforts to incorporate Māori knowledge into contemporary social and intellectual systems and structures. These two words are ‘elaborated’ since both are built up from smaller words. Both end in -tanga, which means the quality or nominalisation of what precedes it. This produces manaaki-tanga, the quality of manaaki, or good hosting and caring for people; and kaitiaki-tanga, the quality of being kaitiaki, manager or guardian of a natural resource, feature or location.

Mana is one of the central concepts of Māori philosophy, meaning the ability to keep the forces of creation in balance, and aki is encourage. Kai- as a prefix means the person who carries out an action, in this case tiaki, which means to look after and care for something. These explanations point back to whakapapa as the central concept and principle.

Manaakitanga for Veterinary Education

Manaakitanga is the quality or essence of manaaki, which means to be a good host and work well with people. So manaakitanga does mean ‘hospitality’ in one sense, but it has been reduced and equated to the modern meaning of this word to include it in the hospitality industry.

Manaaki combines two smaller words, mana + aki. Mana is a key Māori concept, mostly understood to mean personal prestige, and ‘aki’ means to encourage. Manaaki refers to practices that uphold mana. In the sense of caring for people and uplifting their mana, manaakitanga underpins a great deal of academic work in the Vet School. Manaakitanga includes teaching students about the responsibilities they will have for the care of their animal patients in their future roles as veterinarians, and caring for their human clients such as pet owners, farmers, etc. Manaakitanga provides a useful lens on Jillings’s work as an advocate and leader of purposefully opening veterinary education to include Māori people and knowledge. She explains:

My hopes are that in 5–10 years we will be putting out graduates who have a much higher level of cultural humility, cultural awareness and cultural safety. In my role working with Māori and Indigenous Pacific veterinary students, manaakitanga means ensuring we're thinking about them more holistically, and wrapping a korowai of culture around everything we do with them.

A more authentic traditional understanding of manaaki extends its application to any form of thinking or action that enhances the mana of the situation. In this sense, taking responsibility for oneself, acting with integrity, treating others with due respect for their mana and caring for the non-human elements of nature are all examples of manaakitanga (Stewart, 2021, p. 92). Manaakitanga practises respect for animals based on whakapapa, showing robust Māori logic for ethical and humane treatment of animals.

Kaitiakitanga for Veterinary Education

Kaitiakitanga is a key Māori concept in environmental scholarship and education that has risen to prominence in recent decades (Beverland, 2022) as part of the turn to 'Indigenous wisdom' to overcome the ecological crises facing humanity. Kaitiakitanga is a Māori version of the concept of resource management (Kawharu, 2000) and is also associated with Māori ideas of conservation (Roberts et al., 1995). In defining kaitiakitanga, and why it does *not* mean 'stewardship' (i.e. guarding someone else's property) as stated in the Resource Management Act (1991), Māori Marsden and Te Aroha Henare explain:

All natural resources, all life was birthed from Mother Earth. Thus the resources of the earth did not belong to man but rather, man belonged to the earth. Man as well as animal, bird, fish could harvest the bounty of mother earth's resources but they did not own them. Man had but 'user rights.' (Marsden & Henare, 2003, p. 67).

In contemporary usage, iwi and hapū are referred to as kaitiaki of their ancestral homelands (Selby et al., 2010) but in traditional Māori language, as explained above, the kaitiaki refer to ngā atua, the 'spiritual sons and daughters of Rangi and Papa' (Marsden & Henare, 2003, p. 67). Kaitiaki also refers to the intermediaries of ngā atua, often taking the form of animals, which appear to specific people for specific reasons, such as warning of impending danger (Stewart, 2024). Some iwi use the term 'mana' instead of kaitiaki for these spiritual guardians, including Ngāti Wai at Whāngarū in Te Taitokerau Northland, where family mana or kaitiaki include whai (stingray), mangō (shark), kurī (dog), kawau (shag) and rūrū (morepork) (Schwimmer, 1963).

Kaitiakitanga therefore calls to whakapapa and the webs of connection between people, animals and places. Kaitiakitanga involves looking after our kin in the world of nature and taking seriously the idea of kinship through whakapapa to every other species on earth, especially those animals found in our homelands. Kaitiakitanga in

veterinary work refers to guardianship and care for animals extended to include the non-native species that make up most of a vet's work, namely companion and agricultural animals.

Conclusion

Whakapapa is the cornerstone concept of Māori philosophy: it explains the natural world and how it came to be, and provides a simple, robust ethical framework for right action in the social and natural worlds. Kaitiakitanga calls to whakapapa, and the ethics of guardianship and care for all animal patients that is at the heart of veterinary practice. Manaakitanga or generosity and looking after others is an underpinning principle in any work with people. Manaakitanga is reflected in the equity initiatives the Vet School is using to support Māori and Indigenous Pacific vet students, and to the responsibilities of future vets to care, not only for their animal patients, but also for their patients' human guardians. This article has considered veterinary education as a special case of science professional education in Aotearoa New Zealand, and the work of Professor Jillings in leading groundbreaking equity initiatives to increase the number of Māori and Indigenous Pacific students studying veterinary science. Jillings sends a message to "any rangatahi out there, yes, there may not be a lot of Māori veterinarians right now, but the only way that changes is through you" (Science Learning Hub, 2024a). This work is not only difficult but also slow, requiring longterm committed effort. It will need to continue for many years before any observable results can be anticipated.

Glossary of Māori words

Māori	English
Aki	To encourage
Aotearoa	New Zealand (lit. 'long white cloud')
Hapū	Smaller kin or tribal group
Iwi	Larger kin or tribal group
Kai	When prefixed before a verb, the person who does that action
Kaitiaki	Guardian or manager of a natural resource or feature
Kaitiakitanga	(Spiritual) guardianship
Kapa haka	Māori performing arts, culture group
Kōrero	To speak
korowai	Cloak, metaphorical protection
Mahi	Work
Mana	Personal power or prestige, able to keep primal forces balanced
Manaakitanga	Generosity and hospitality, caring for others, upholding mana
Mātauranga	Knowledge, education
Ngā atua	The primordial forces ('gods')
Ora	Life and health

Māori	English
Rangatahi	Young person/youth
Rangatira	Leader, esteemed
Tapu	Forbidden or restricted by custom, in the presence of ngā atua
Tāwharau	Shelter
Te reo (Māori)	The (Māori) language
Te Tiriti (o Waitangi)	The Treaty (of Waitangi) signed in 1840 between iwi and the British Crown – founding document of New Zealand
Tiaki	To take care of
Tikanga (Māori)	Māori customs and ways of doing things
Whakapapa	Genealogical webs of relationship
Whānau	Extended family, in education used for group/community
Whenua	Land

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Declarations

Conflict of Interest The authors have nothing to declare in relation to any conflict of interest.

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