## Teaching the Aotearoa histories curriculum in a culturally and environmentally sustaining integrated science and social studies programme

By Kārena Ngata, PPTA Regional Te Reo a Rohe and Rainbow Co'ordinator Kaiako Bay of Plenty.

Te Kura Taiao, the education branch of Rotorua-based Ngā Uri o Maui Trust, and Rautāwhiri (Rotorua Girls' High School) entered into a partnership last year to collaborate, iteratively develop and cooperatively deliver a two-year pilot programme that reflects an integration of the Te Ao Tangata (including the ANZH) and Science curricula.

For an hour or so each week, Year 9 and 10 classes from RGHS work in the field with Te Kura Taiao Field Staff - certified and experienced instructors skilled in the provision of hands-on biosecurity (kararehe kino) mahi, including monitoring, trapping, investigative and exploratory activities. Their learning is delivered through both mātauranga Māori and western science lenses, as part of the ecological restoration project at Paepaehakumanu Motutara and Te Arikiroa (aka The Sanitorium Reserve). Students have also learned about the histories of the area from respected Kaiurungi Mātauranga - Education Lead at Te Whare Taonga o Te Arawa - Taupopoki George McLeod. Field trip activities are then backed up by contextualised inquiry learning in class.

"Our kaupapa is to learn about the area's history while we engage in place-based, experiential learning about Kaitiakitanga, particularly biosecurity, bio-diversity, conservation and sustainability" says Project Collaborator Whaea Kārena Ngata. "Part of our learning about how waste contaminates an ecological system is learning about how we as tangata whakapapa back to Papatūānuku, Ranginui and their tamariki - Ngā Atua o Te Ao Tūroa. This understanding of our connection and obligations to Te Taiao informs our way of being when we are in the reserve, which means ākonga are also taught to observe tikanga practices in the field". Whaea Ngata explains, "engaging in regular rubbish clean-ups was not initially everyone's idea of a great time, but as their understanding of the impact of rubbish on Te Taiao developed, ākonga have found that taking our learning from being just an intellectual exercise and turning it into positive action, is rewarding. Understanding the amount and type of rubbish in the reserve will help ākonga develop appropriate social and environmental justice responses to support waste reduction".

One of the most popular kaiako involved in the programme is Te Kura Taiao Field Operator Stu Herewini's Conservation kurī, Whenua. Ākonga are learning about the important role Conservation Dogs can play in supporting conservation work, from locating threatened species to performing pest surveillance checks. Whaea Ngata says "Managing plant and animal pests is a big part of the ecological restoration project at Te Arikiroa. As our students have learned, there are a variety of taonga species living in the reserve, some of which are endemic to the area and endangered. Once we better understand what threats and challenges these taonga face, we can then identify strategies to mitigate those threats and contribute to ensuring that these taonga exist for future generations."

Whaea Ngata acknowledges that "this programme is made possible by our partnership with Ngā Uri o Maui Trust's Education Branch, Te Kura Taiao, with funding from the Bay of Plenty Regional Council and Rotorua Energy Charitable Trust. We are fortunate that Rautāwhiri provide weekly transport to our field locations".

Manaaki Mauri uses the <u>NZHTA/ASSEN He Pā Harakeke framework</u> to plan a culturally sustaining socio-ecological approach to teaching and learning and is guided by <u>Āta Haere</u> - a locally developed guide for Ākonga and Kaiako engaging with Taonga Tuku Iho.

Te Kura Taiao and Rautāwhiri wish to acknowledge the local community experts who have supported the Manaaki Mauri programme so far, particularly Keeley Grantham and Amohia Peka from Te Arawa Lakes Trust, Te Rua Wallace from Para Kore, Meghan Cooper at Rotorua District Council, George Taupopoki McLeod from Rotorua Museum, and Annette Binnie from St. John's Ambulance. We also wish to acknowledge our equipment sponsors - <u>Diverse Distributors</u> and the inspirational mahi of Te Taumata o Ngāti Whakaue who have provided valuable teaching resources to support us in normalising Te Reo Māori me ōna tikanga in our mahi via their highly valued and popular Te Ahu o Te Reo programme.

Enquiries about Manaaki Mauri are welcome.

Please contact RGHS project leads on the emails below for more information and with any queries.

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Na to rourou, na taku rourou, ka ora ai te iwi