Utaina!

Te Wātaka | Programme

Friday 22 January 2021
Seminar rooms A & B, St David Complex, University of Otago.

Wā	Kaikōrero	Whakamārama
9.00	Taenga | Arrival	Tea and coffee
9.30	Mihi Whakatau | Welcome	
10.00	Paramanawa | Morning tea	
10.30	Kaikōrero Matua | Keynote Professor Angus Macfarlane	Wetekia kia rere: The potential for the Indigenization of science education
11.30	Steven Sexton & Helen Trevethan, College of Education | Te Kura Akau Taitoka	Te Reo Māori in Initial Teacher Education
12.00	Kai Tina | Lunch	
1.00	Melanie Sargent & Te Nia Matthews, Ministry of Education | Te Tāhuhu o te Mātauranga	Tau Mai te reo Māori and Ka Hikitia - Whakamaua te pae tata kia tina Whaia te pae tawhiti kia tata!
1.30	Tapeka Hakopa, Department of Anatomy | Te Tari Kikokiko	Mātai Tinana: Development and Implementation of a Te Reo Māori Anatomical Resource
2.00	Priscilla Wehi, Centre for Sustainability | Kā Rakahau o Te Ao Tūroa	Uplifting our tamariki in science: research examples in chemistry and ecology
2.30	Paramanawa | Afternoon tea	
3.00	Jordan Clarke, Department of Physics | Te Tari Hū-o-te-Kōhao	Te Ohu Rauemi Pūtaiao: Waka ama
3.30	Kōrerorero | Discussion	
4.45	Whakakapi | Closing	

Kaikōrero Matua | Keynote

Dr Angus Hikairo Macfarlane (Te Arawa) is Professor of Māori Research at the University of Canterbury (UC), Director of Te Rū Rangahau, the Māori Research Laboratory at UC, Co-Director of the UC Child Wellbeing Institute, and principal investigator on many national research entities, including Ngā Pae o te Māramatanga and three National Science Challenges. Avid about Indigenous advancement, he has pioneered several theoretical frameworks associated with culturally responsive approaches for researchers and professional practitioners working toward Mātauranga Māori having a ubiquitous and authentic presence. Professor Macfarlane's prolific publication portfolio and exemplary teaching abilities have earned him national and international standing in his field of scholarship.

Wetekia kia rere: The potential for the Indigenization of science education

Wetekia kia rere is an expression in the Māori language that refers to *unleashing potential*. This presentation discusses questions of power relevant to challenges recently identified regarding experiences of science education in New Zealand. The kōrero begins by summarising the Treaty relationship, considered the founding document that informs the framing of New Zealand's science curriculum guidelines. Next is an outline of some official New Zealand education strategies (mai i te ao tawhito ki te ao hōu) along with several policy guidelines relevant to the aspirations of Māori communities for a transformative science curriculum. Then some descriptions are offered of a pivotal shift occurring in our national research/education psyche in Aotearoa New Zealand whereby Indigenous epistemology is increasingly recognised as both valid and enriching. These contexts encourage the use (shift) of Māori epistemologies in a space where it has been often missing. However, this shift has not yet reached all parts of the Aotearoa New Zealand research/education communities uniformly, and proposes *He Awa Whiria* (Braided Rivers) as a process that crosses scientific and philosophical lines. The same *He Awa Whiria* process facilitates 'the science of the concrete' – in this regard, science educators will be served a selection of strategies. Four pou (cultural markers) are offered as supporting pillars for science education futures.
Keywords: Relevance > Balance of Power > Scaffolding

College of Education: Te Reo Māori in Initial Teacher Education
Presenters: Dr Steven Sexton & Dr Helen Trevethan, University of Otago College of Education | Te Kura Akau Taitoka

In 2017, the Teaching Council released *Our Code Our Standards.* All Initial Teacher Education (ITE) providers were required to seek reapproval for their ITE programmes by the start of the 2022 year. In 2019, The College of Education (UOCE) began the two-year process to redevelop our Bachelor Teaching (Early Childhood, Primary, and Te Pōkai Mātauranga o Te Ao Rua) and Master of Teaching and Learning (Early Childhood, Primary, and Secondary) ITE programmes to explicitly incorporate *Our Code Our Standards* from day one to the completion of their degree. As part of this redevelopment, the Te Tiriti o Waitangi partnership standard requires teachers in Aotearoa/New Zealand to demonstrate a commitment to tangata whenuatanga. This is partially demonstrated as teachers practice and develop the use of te reo and tikanga Māori. To support our student teachers, the UOCE will have all student teachers self-assess their te reo Māori upon the start of their ITE programme and again at the completion. This presentation will explore how our student teachers will be supported to meet Te Tiriti o Waitangi partnership standard in a supported environment.

Ministry of Education: Tau Mai te reo Māori and Ka Hikitia - Whakamaua te pae tata kia tina Whaia te pae tawhiti kia tata!
Presenters: Melanie Sargent (Kāi Tahu, Kāti Mamoe, Waitaha, Kāti Huirapa) & Te Nia Matthews (Ngāi Tuhoe, Ngāti Kahu), Ministry of Education | Te Tāhuhu o te Mātauranga

This presentation discusses the Ministry of Education strategies of Tau mai te reo and Ka Hikitia. Tau mai te reo and Ka Hikitia are twinned documents that should be read as a bundle. Tau mai te reo is the Ministry of Education's Māori Language in Education Strategy for all learners. Tau mai sets out the goals The Ministry of Education is seeking to achieve and provides a framework for coordinating our programmes and services that support Māori language in Māori medium and English medium education. Tau Mai Te Reo is part of the education sector's contribution to the Maihi Karauna. The Maihi Karauna is the whole-of-government Māori Language Strategy setting out a vision for te reo Māori in the future and outlines what the Crown will do to support a strong, healthy, thriving Māori language in New Zealand.

Ka Hikitia is the Māori Education Strategy setting out the Ministry of Education's vision and goals for strengthening the education of Māori learners and the actions the Ministry of Education will undertake to achieve those goals.

Mātai Tinana: Development and Implementation of a Te Reo Māori Anatomical resource
Presenter: Tapeka Hakopa (Ngāti Tūwharetoa, Ngāti Kahungunu-ki-Wairarapa, Kāi Tahu), Department of Anatomy | Te Tari Kikokiko, University of Otago

Te reo Māori is the indigenous language of the Māori people of Aotearoa and is also one of two official languages of New Zealand, however, due to colonization te reo is now considered to be an endangered language. In the Department of Anatomy of the University of Otago, a lack of te reo incorporated in teaching materials has prompted an increase desire for more support. The development and implementation of a te reo anatomical resource focused on the akoranga (learning) and mōhiotanga (understanding) of the anatomy of the tinana in te reo Māori. The creation of a te reo Māori resource was used to explore whether it improved the comfort level of staff and students in incorporating te reo in their teaching and learning. Findings report that the use of a te reo Māori resource by staff and students increases comfort levels of using te reo Māori in an anatomical context. Furthermore, a resource like this may help individuals gain an appreciation for mātauranga Māori (Māori knowledge).

Uplifting our tamariki in science: research examples in chemistry and ecology
Presenter: Priscilla Wehi, Centre for Sustainability | Kā Rakahau o Te Ao Tūroa, University of Otago

Tamariki Māori may not engage with science at school if they do not see science as interesting or relevant to them. Here, I will highlight examples of research that incorporate Māori interests, ideas and mātauranga while also teaching tamariki about the science of chemistry and ecology.

Te Ohu Rauemi Pūtaiao: Waka ama
Presenter: Jordan Clarke (Ngāi Tahu, Te Atiawa), Department of Physics | Te Tari Hū-o-te-Kōhao, University of Otago

Some years ago, teachers from Whare Kura visited the Department of Physics as part of Otago University Advanced School Science Academy (OUASSA) and mentioned the lack of resources for teaching physics and other sciences in te reo Māori. This led to discussions with other academics from the University of Otago about creating physics resources written in te reo Māori and informed by te ao Māori.

Meetings with secondary teachers attending the OUASSA have continued and, at one of these meetings, Jinesh Joseph, a physics teacher at Te Kura Māori o Porirua, brought up a waka ama NCEA internal assessment he had produced. Like many science teachers at Kura, he is not fluent in te reo Māori and asked if we would be able to help to produce a Māori language version of the assessment. This presentation will focus on this waka ama resource and the collaborative process that led to the creation of a bilingual resource.

Kōrerorero

A discussion focused session where participants can share their experience and ideas to identify ways to make science more accessible and appealing to those with Māori as their first language.