





Lessons from early career wähine kairangahau Māori working in DRR in Aotearoa

L.H. Kaiser, K-L Thomas & E Campbell Te Hiranga Rū Annual Meeting, Whakatū 10 December 2020



















Representation of Māori women in earthquake and seismic research

- Physical sciences & engineering tertiary fields graduating lowest numbers of Māori students
- 2% Māori tertiary students complete science qualifications in 2018, 5% in engineering (Education Counts 2019b)
- Little progress increasing representation of Māori in the academic workforce (McAllister et al. 2019)
- 2% of female Māori tertiary students were completing physical science degrees in 2018 and 3% engineering (McAllister et al. 2019)
- We and our institutions need to do more work to include Māori knowledge, people and resources in our work & increase diversity in seismic/DRR academia.

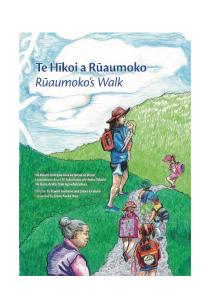
Wahine tapuhi ō te Parawhenua Mea kia mataara

- Three Aotearoa (NZ) case study projects:
 - Te Hīkoi a Rūaumoko- Digitising a bilingual pukapuka (book) based on Ngāti Kahungunu iwi (tribe) pūrākau (stories) around earthquake warnings and preparedness (Emily Campbell)
 - Kura e Tai Āniwhaniwha- Bicultural approach to increasing tsunami preparedness for kura ākonga (school students) in Hawke's Bay (Lucy Kaiser)
 - Reciprocal hui and community events on historic and contemporary tsunami risk in Wharekauri Rerekohu- the Chatham Islands (Kristie-Lee Thomas)

Te Hīkoi a Rūaumoko

(Digital bilingual ebook)







Acknowledgements:



















Objectives









Agree upon the kaupapa



Deliver a resource that is appropriate and accessible



Explore the utility of the resource

Resource attributes





Kura e Tai Āniwhaniwha

(Schools and Tsunami)

- To enhance community disaster preparedness need more effective engagement with indigenous epistemologies and greater inclusion of children's voices (United Nations Office for Disaster Risk Reduction, 2013)
- This project pilots two culturally appropriate educational outreach activity programmes for students enrolled at kura kaupapa Māori/Māori medium schools
- Objective: increase awareness and preparedness for regional seismic hazards for Māori students in the Hawke's Bay and Wellington regions.
- Research activities were collaboratively designed with Māori knowledge and cultural frameworks









RESILIENCE TO NATURE'S CHALLENGES Kia manawaroa – Ngā Ākina o Te Ao Tūroa









- MSc thesis 2017 community-based participatory tsunami impact assessment weaving together Mātauranga Māori, local knowledge and scientific knowledge.
- Needed to return after completion to reciprocate and return the new knowledge we created together
- Memorial Event for Anniversary
 - 2018, 150th anniversary of 1868 Arica tsunami opportunity to continue conversations & reciprocity
 through co-organising a memorial event with iwi and
 Civil Defence.
 - Event abided by local tikanga and kawa
 - Resources co-developed and shared, event well attended and covered widely in the media









Reciprocal Hui

- Hui, co-designed with Ngāti Mutunga o Wharekauri Iwi Trust
- Hikoi to visit wahi tapu (sacred sites), karakia by kaumatua, story-telling, kai (sharing a meal) at the marae, followed by korero about tsunami impacts and planning.
- Lots of discussion throughout the day, positive feedback and suggestions for community-led action.







Collective Experiences

- Maintaining a Te Ao Māori or bicultural lens
- Adaptive and flexible engagement
- Ethics of reciprocity
- Academic and cultural support

MAINTAINING A TE AO MĀORI OR BICULTURAL LENS

Te Ao Māori and Academia can be bifurcating worlds with entirely different processes, kawa, tikanga and expectations that do not always harmoniously co-exist. The communities we engage with are culturally complex, so it is important to abide by local tikanga and kawa which may draw from Te Ao Maori, European or multi-cultural heritage and approaches.



Engagement activities need to be adaptive and flexible to suit community needs and priorities. Timing and repetition of engagement following completion should also be considered (including Masters and PhD thesis timeframes). It is also critical to incorporate people with mana (authority/influence) such as kaumatua (respected elders) as key drivers within the research.



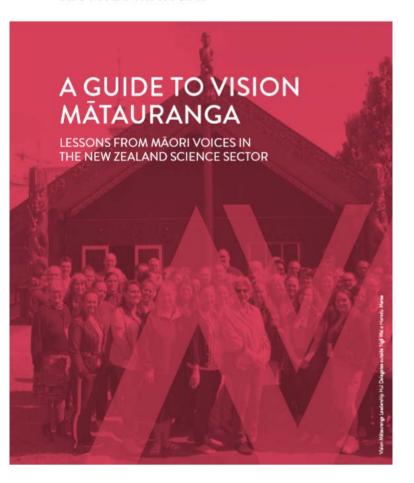
Novel approaches are required which support the koha (gift) of knowledge between scientists, Māori, emergency management agencies and multicultural communities to increase resilience for Māori communities and build capacity. As more VM research projects arise across STEAM we (all researchers) need to be mindful of the limited capacity and busy schedules of iwi and community partners.



Emerging researchers, students require appropriate cultural support from experienced academics or cultural advisors who have navigated Māori research and pressures. A network of Māori and Indigenous researchers to support each other, exchange ideas, and share themes and practices may eleviate some of the pedagogical and mentoring load of senior Indigenous researchers/advisors.



RAUIKA MĀNGAI



"When you are first in an area, you often don't have a person to guide you, especially in the area of science. People can tell you how to do science, but they can't tell you how to be Māori in science."

"It's not our responsibility to educate non-Māori in this space. It's exhausting, it's tiring, so I'm really trying to stay in my own lane now."

"I was in a system that I'm feeling frustrated with, feeling isolated, I haven't saved anything, and I'm really angry about it."

"It hurts now sometimes when I'm asked to review something and I think it's because I'm a scientist, but they say, 'Oh no, we just want you to look at the cultural.'

INTEGRATE

Te Ao Māori across school and university teaching and curricula

CREATE

nurturing environments that are co-designed by Māori staff



PRACTICE

tuakana/teina
academic mentoring
systems supported
with time and
resources

FORM

Māori research support groups across institutions (universities, CRIs, private orgs) and disciplines

RESOURCE

emerging Māori researchers and community members to participate in workshops and conferences

EMPLOY

certified Te Reo Māori translators and Māori cultural advisors

SHARE

best practice
with international
networks of Indigenous
practitioners,
researchers and
educators



Ngā mihi nui! Thank you!

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Waiata

Tōku reo tōku ohooho māpihi maurea whakakai marihi Nei ra te kaupapa ko te reo Māori e He taonga tuku iho no nga tīpuna He pare kawakawa he mea hirahira e Tōku reo tōku ohooho māpihi maurea whakakai marihi

Korerotia te reo I ngā wa katoa Kia kore e rite ki te moa Mana tangata mana motuhake

Tōku reo tōku ohooho māpihi maurea whakakai marihi Tōku reo tōku ohooho māpihi maurea whakakai marihi