

KO TE HARURU O RUAUMOKO - WHAKAARA MAI I TE PŪEHU: STORIES OF TEACHING THROUGH THE 2011 CHRISTCHURCH EARTHQUAKES

Charmaine Tukua and Niki Hannan



Figure 1. An aerial photo showing the extent of Christchurch's Central Business District cleanout since 22 February 2011 Christchurch Earthquake (Image: Copyright Chris Hutching, 2012. Reproduced with permission).

TĪMATANGA - INTRODUCTION

The aim of this research was to investigate the responses of the Te Puna Wānaka Academic Staff, Christchurch Polytechnic Institute of Technology (CPIT), to the 2011 Christchurch earthquake, that related to teaching and learning, and Māori pedagogies. Te Puna Wānaka provides Māori-focused tertiary education including certificates and a degree in Bachelor of Language specialising in Te Reo Māori and Indigenous Studies.

On 22 February 2011, an earthquake with a magnitude of 7.1 struck the Ōtautahi region causing immediate devastation, particularly of the Central Business District (CBD) and the north-eastern areas. CPIT was located to the east of the CBD. CPIT was quickly evacuated, and the region was declared a state of emergency. People of Ōtautahi were hurt, homeless and in a state of shock. Electricity, plumbing, roading and services were no longer operational. Thousands of homes were no longer liveable. CPIT was closed for a couple of weeks while staff sorted their own lives and contemplated how to continue to provide education to their ākonga in a state of emergency.

Within two weeks, Te Puna Wānaka staff were able to relocate their ākonga to the Cashmere Club which is a working men's club in Beckenham. A van was made available to pick up ākonga and bring them to the club. There was a large dining room made available, and staff negotiated food being provided. This meant that teaching and learning could resume until it was deemed safe to return to the CPIT campus. In spite of the dire circumstances in 2011, ākonga continued to thrive and completed their studies.

Ten years later six academic staff of Te Puna Wānaka were interviewed about their experiences during the earthquakes and post-earthquake regarding Māori pedagogies and how these assisted kaiako and ākonga to find their own coping strategies and methods to enable learning in the time of crisis.

The importance of this research is the consideration of broader pedagogical implications of supporting teachers and learners post natural disasters from a Māori perspective.

AROTAKE I NGĀTUHINGA – REVIEW OF LITERATURE

Current research shows many other countries have lived in or experienced natural disasters. Recent research identified New Orleans, Samoa, and Japan¹ as places that experienced disasters just before the 2011 Christchurch earthquake or not long after. However, there is a major focus on New Orleans due to the publicity this disaster had and the lack of focus on, or caring for the people of New Orleans who were directly involved to this day. The literature provided some recalled personal stories from teachers and students as they re-told their individual experiences during and after the traumatic major event.²

In many of the articles relating to the tsunami in Samoa and the earthquake in Japan,³ a significant focus was how each country fared in getting their educational systems up and operating again and how school teachers and tertiary providers responded to teaching and learning issues regarding the use of technology.⁴

The educational focus of the studies reviewed looked mainly at how primary through to secondary schools responded in each of their sectors. The different studies showed that primary and secondary schools faced many challenges including dealing with broken infrastructure in their systems, lost and distraught staff and students, broken buildings and broken lives.⁵

In relation to the Christchurch earthquake, Thrupp⁶ discusses the accumulated social, psychological, and emotional toll that closures and mergers took on nearly 40 schools and their communities because of the implementation of the Education Renewal in Greater Christchurch policy.⁷ Thrupp spoke to school principals about their schools' experiences, highlighting the Ministry of Education's flawed school closure/merger process. Fletcher and Nicholas⁸ affirmed that in the context of natural disasters, school staff, students and their families rely on strategic leadership by school principals. Schools are positioned within communities. Consequently, principals not only have a role leading within the school, but they are also seen as community leaders, and their experiences and responses during and after the Christchurch earthquakes reflect this.⁹ However, while these research projects provide valuable insight into what schools experienced following the Christchurch earthquake, there was little, or no research related to how Māori pedagogies supported kaiako and ākonga.

Māori pedagogies

Rose Pere's¹⁰ Ako Theory is an important pedagogy Māori in education. Ako is considered a life-long process, starting from the womb, and found within all aspects of whānau living. The fundamentals of ako are to both teach and learn; it relates to both the learning and teaching processes, the ākonga as the student and the kaiako as the teacher. However, ako is also a way of life, a lifestyle. Whether ākonga are children or younger siblings and the kaiako parents or elders, the relationship is mutual and everyone is learning, at the same time and all together.

Whanaungatanga is a kaupapa Māori model, which is derived from the values and beliefs within Te Ao Māori. Pere¹¹ says that whanaungatanga deals with the practices that bond and strengthen the kinship ties of a whānau together. The commitment of aroha and manaaki is vital to whanaungatanga and the survival of what the group sees as important. The main aim is to build the group as a strong, self-sufficient unit. Bishop et al.¹² describe whanaungatanga in terms of groups of learners formed as if they are whānau (family), with rights and responsibilities, commitments, and obligations to one another. These concepts support the sense of collaboration and community. Tikanga (customs) are established through the teaching of values, for example aroha (love), awhi (helpfulness), manaaki (hospitality) and tiaki (guidance). In other words, whānau is the context where learning can take place effectively and mutually.

Pere also says that the mental, emotional, physical, and spiritual well-being of the group depends on how well both the kaiako and ākonga complement and support each other.¹³ Both tutor and students within the whānau are expected to come together in unison, even when separated physically, to safeguard against negative spiritual influences.

Pere also discusses and utilises the concept of 'tuakana/teina', which is described as the reciprocal teaching of 'older sibling and younger sibling.' This relationship is evident between grandparents and mokopuna, kaiako and ākonga, where everyone shares experience and learns from each other. Hemara's¹⁴ book further discusses tuakana/teina as being practised in many ways or instances where you pair those with knowledge alongside those still learning.

Mana whenua in the context of teaching/learning is a sense of belonging. Te Tari Puna Ora o Aotearoa (New Zealand Childcare Association) suggests ākonga and kaiako feel that they belong where there are connecting links with family and the wider community. Mana whenua is where students and tutors know they have a place, where they feel comfortable with routines, customs and so on, but where they know the limits and boundaries of acceptable behaviour:

The concept of mana tangata is that learning is equal, and it involves contributions from the ākonga and kaiako. It is where the students are affirmed as individuals, and they are encouraged to learn with and alongside others. The ākonga are encouraged to take responsibility for their own learning just as the kaiako does for the teaching and each contributes in their own way.

Te Whare Tapa Whā is a model for Māori health.¹⁵ However, the concepts can be applied to teaching and learning. *Taha Hinengaro (Mind / Mental)* refers to thoughts, feelings and actions that are important to health and learning in Te Ao Māori (the Māori world). *Taha Tinana (Body / Physical)* is about physical well-being, including the importance of sleep, good food, plenty of water, exercise, and our relationship with the environment. In terms of teaching, Taha Tinana is also about ensuring that the learning environment is safe and conducive to good learning practice. This concept also speaks of being actively involved in the learning. *Taha Wairua (Soul / Spiritual)* is considered to be the most essential requirement for healthy living. Wairua also builds on connections to the environment, between people, creative expression, and links to ancestral ways of being. *Taha whānau (Family)* is the importance of family relationships, a sense of identity and belonging, social interactions, interpersonal skills and being part of a team or community. In the teaching and learning context Taha Whānau is a concept that endorses that learning occurs when learners interact with each other, and with the kaiako.

RESEARCH METHODOLOGY

A Kaupapa Māori and narrative approach was taken, where academic staff, tutors and management from Te Puna Wānaka (Māori, Pasifika, Japanese Indigenous Studies Department) of Ara Institute of Canterbury Ltd (previously CPIT) were interviewed about their experiences prior to, during, and post the 2011 Christchurch earthquakes, specifically relating to their teaching and pedagogies being utilised 10 years later.

The aims of this research were to (1) investigate the Te Puna Wānaka Academic Staff responses to the 2011 Christchurch earthquake sequence, relating to teaching and learning in a Māori-focused tertiary education programme from a Māori perspective; and (2) consider the broader pedagogical implications of supporting learners and teachers' post-natural disasters 10 years later.

Accordingly, the following research questions were addressed:

- How did Te Puna Wānaka Academic staff respond to difficulties in the teaching environment arising from the 2011 Christchurch earthquake sequence?
- How did Māori pedagogies feature in and/or support Te Puna Wānaka Academic staff members' responses pertaining to teaching and learning post-earthquake?

Sub-questions

- What Māori pedagogies were utilised and why?
- How did Māori pedagogies assist during the earthquake?
- What does this say about Māori pedagogies, in terms of supporting learners and teachers post natural disasters?
- How can we be prepared if we experience a natural disaster like this in the future?

DATA COLLECTION AND ANALYSIS

Qualitative data was collected in the form of individual interviews. Interviews were chosen as a research method because it allowed exploration of participants' experiences and reflections to be shared.¹⁶ A strength of an interview is that the researcher can capture the emotions and feelings of the participants. A Stimulation Re-call approach¹⁷ was used to prompt participants to remember and recall their experiences. The one-hour interviews were semi-structured. The interviews were audio recorded and transcribed.

A thematic analysis approach was used to analyse the qualitative data of each interview.¹⁸ The key words and phrases in the responses to each question in the interview transcripts became codes. These codes were then grouped into themes. Each theme was colour coded in relation to the themes/categories. Colour coding was used because it is visually easier to identify patterns and connect groups of similar themes across questions.¹⁹

Kaupapa Māori

Regarding kaupapa Māori, the interviews were an opportunity for rich discussion in terms of whakawhiti kōrero (conversation). Discussion is important as a shared experience for whanaungatanga (bonding/relationships) and manaakitanga (reciprocity/caring about each other) so participants felt comfortable to share.^{20 21} Kōrero (oral speaking) is also important, allowing participants to voice their experiences. Kanohi ki te kanohi (face to face) is an important kaupapa Māori methodology that values each person's story.

NGĀ KAUPAPA – THEMES

The following are the themes identified from the data analysis:

Neke Whare – Relocation

Displacement from CPIT/Te Puna Wānaka (TPW)

Before the 22nd February 2011 earthquake hit Ōtautahi, the whānau of Te Puna Wānaka had their own building complex with facilities and resources for staff and students. Te Puna Wānaka staff and Kaiārahi met a week later, post-earthquake, to discuss a plan of moving forward, which ended up with Te Puna Wānaka relocating to the Cashmere Club.

Relocation to the Cashmere Club

The first week was mainly focused on a wānanga style of learning where all programmes came together. This time was concentrated on Whanaungatanga (Relationship building) and coming together as a Whānau (Family), doing as much as possible together including Karakia/Pānui (Prayer time & Notices), Waiata (Songs), Whare Tāpere (Māori Performing Arts) and team building activities.

This type of delivery worked well even though there were some changes, for example, one whole day was timetabled for courses instead of half days. All six programmes were delivered in the one room, where there was enough space for groups to operate without disturbing each other.

Many ākonga came with no resources throughout the initial couple of weeks. Te Puna Wānaka were gifted books and resources to assist in the delivery of programmes. These were from external organisations, for example, Māori Language Commission, Huia Publishers and many more.

Throughout the interviews, 'Relocation' was commented on by the participants:

Kaiako 4

- It was an incredible space, even though we had to adjust the learning and the way we managed ourselves. We then got the go ahead and we were the first teaching group to start teaching.
- We changed the way we were operating and took much more of a collaborative approach, which meant that we had a lot more flexibility.
- It was almost like it became a bit of a safe haven. It became a place where you were with people that cared about you, that cared about what else was happening.

Kaiako 5

- I was looking for ways to help our students and to continue to teach.
- Yeah, when we relocated most of our resources were locked up in storage and we could not quite access it during that time but when we were there at Cashmere, even space wise, it was a bit of a challenge. Plus, I knew my students needed space to burn their energy and learn the way they learn. That was a bit of challenge to adjust to that change of environment to shared space.

Having everyone in one large space had its operational challenges, however; Māori tikanga was immediately established and this proved crucial for creating a space that was safe in the midst of crisis. Establishing a safe environment also allowed whanaungatanga to flourish. This provided a strong foundation from which teaching and learning could continue in the midst of post-earthquake chaos and trauma.

Māori Pedagogies – Māori teaching methods/strategies.

The following teaching Kaupapa Māori teaching and learning strategies were shared by kaiako:

Whanaungatanga

Throughout the interviews, participants considered how whanaungatanga and the learning environment would be set up:

Kaiako 4

- It happened at the Cashmere club because of those conversations. Being able to pull in the expertise of others as well into a conversation around how could we do this, how could we teach this, how could we respond. It was really pivotable.
- I think the conversations around what the different groups needed in terms of the kind of classes was big and what we could achieve within the environment, so we had groups that previously had not had a huge engagement with each other.
- We like to think that we are doing those things before, but they probably were not happening at speed and they weren't happening in the way that we ended up behaving.

Pere²² states in times of survival whanaungatanga is essential, and this was evident at the Cashmere Club. This research also shows that whanaungatanga became strong because the educators and ākonga depended on the networks of team, colleagues and whānau to be able to make sure they had what was needed, and the students had a safe and positive experience for their learning.

Tuakana/Teina

Throughout the interviews 'Tuakana/Teina' was commented on by the participants:

Kaiako 4

- Which was getting with the tuakana/teina, actually in some of their assessments, being in the teaching of others.

Kaiako 5

- What I think was modelled well is that we did the tuakana/teina model within the staff members because there were some of us that were brand new and had not been in the job very long and then others that were in there a lot longer.
- So we started to adapt the tuakana/teina model, so that we could have some of our tuakana who were like the third years working alongside our teina.
- Having more of a tuakana role and so it kind of helped them have a responsibility to manaaki the others coming from below and that we do the same as staff, so just that they are kind of their safety net for the younger students, the teina.

Kaiako 2

- Tuakana/Teina. In this setting too and in this space, it didn't necessarily mean, go by age. Even though these ones might be younger than these ones, they have a tuakana space, and they have been around the organisation and been with us for a lot longer; so they understand how we roll and understand how the organisation, the institution as such rolls. Yes, some in age wise but more came to an experience and knowledge base I think in that space.

Here we see the concept of tuakana/teina being adjusted to meet the learning requirements in the change of circumstances. The tuakana/teina model allowed the more experienced to awahi those with less experience. It created stability and a continuation of knowledge, building confidence in both the tuakana and the teina. This shows how responsive and adaptive Māori pedagogies are in a time of crisis.

Te Whare Tapa Whā

Throughout the interviews Te Whare Tapa Whā was commented on by the participants:

Kaiako 1

- I think that we catered to all four dimensions because of Taha Tinana, we looked after the manaakitanga with offering kai but we'd have Taha Wairua, to sort of settle everyone, everyone's wairua and then we had kapa haka, so that sort of brought everyone together. Taha Whānau, we were all there and even for what is happening to everyone outside of the classroom or outside of Cashmere club, we came together. Taha Hinengaro was when we were in the classes and sharing mātauranga and everybody.

Kaiako 5

- We need to look at Te Whare Tapa Whā model especially. That our tauira have a lot that impacts on them. It impacts on everyone differently and the only way that we can really move through those kinds of traumas or those impacts, is to do it together and to help build each other up. I think it is this concept of whānau. For us, we're building the whānau that wants them to succeed.

It is difficult to learn in a time of crisis. The comments show the value of Te Whare Tapa Whā as a yardstick for kaiako to measure their practice and consider the whole learner. The ākonga in this situation were looked after in terms of all areas of Te Whare Tapa Whā and flourished as a result.

Anga Whakamua – Future

At the end of the interviews, the participants commented on how academic staff could be prepared for a natural disaster in the future.

Kaiako 1

- One part is we've got everything on online servers now, so as long as saving when they're meant to, it's a lot less effort for us to maintain contact with our resources. The thing is, our resources are generally developed for our current delivery context, so that's not to say our resources would still be fit for purpose, if you're delivering in some other setting.

- Yes, I think for us as iwi Māori, with everything we've been through, earthquake, snow, flooding, COVID19, I think we are very good at it. I think our response is very quick. Quicker than others. We just need a big room, power points as in power sockets. And white boards. And a kitchen. Yeah, and a good supply of food. Food, shelter in the right space, then we're pretty made.

- Yeah, and it's our ability and instead of pursuing the old status quo of whatever, we need to be focusing on our skills to respond to an unknown future.

Kaiako 5

- Our students since the earthquakes are now leaders in our community.

- I think a lot of what we adapted and adopted because of the earthquake would be what we keep and I know that we've been through other trauma and tragedy since the earthquakes and people come to us to find their grounding and find their security and all of that stuff, cos we've got that in place now.

- I think that they might've always wanted food. Being at Cashmere Club, the food was right there and they did a special menu for us, a \$5 menu and it was nice and affordable and it was really yum. We came back to Te Puna Wānaka and we still fed them and it's been something that we've, as part of being showing manaaki where we've always done that for our taura.

- It was more of us acting as tuakana and our students are our teina and realising that that's the legacy of our whare is to look after our community and to look after our people and so at the same time.

- Coming together for karakia every morning, sharing pānui is something that we added in, in terms of what we do during that karakia and that keeps evolving. Now we're seeing and especially it has been a long time since the earthquake but we've had a lot of events upon events impacting on our community and so it's become more of what we would call a sharing circle where people would share their experiences or things that are going on outside of the class that actually they might not feel safe to share with anyone else.

- It's become a safe place to be themselves and not be judged for being themselves and we've kept that and we've tried to empower that within our whānau and within the whare. Whether you're here for reo or not. If you're part of our whare, we want you to know that you're supported, that people care about you and care for you, even if there's no one immediately around that it feels like that.

Māori pedagogy showed many strengths in supporting both kaiako and ākonga in the post-disaster recovery. The experience of the Cashmere Club impacted on all involved and learnt practices of whanaungatanga and manaakitanga were brought back to Te Puna Wānaka when everyone returned to the polytechnic campus and are still used today.

WHAKAKAPI - CONCLUSION

The stories from the kaiako of Te Puna Wānaka about post-earthquake recovery using Kaupapa Māori and Māori pedagogies have a significant and unique place in post-disaster literature. Kaupapa Māori proved to be flexible and essential to ensure the well-being of both kaiako and ākonga. At the Cashmere Club, ākonga were totally immersed in the whanaungatanga and the wānanga style of teaching and learning. Māori pedagogies, in particular, ako and tuakana/teina enabled ākonga and kaiako to adapt to the teaching and learning needs. Te Whare Tapa Whā attested to being a valued framework for reflecting on mental, emotional and physical health and the nature of teaching and learning. Kaiako and ākonga thrived in the midst of crisis and trauma in a safe, well established environment, no matter the everchanging nature externally. Māori pedagogies were experienced at a deep, holistic level at the time of the earthquake and are still being enacted in a similar way today. Therefore, Māori kaupapa and pedagogies have a profound contribution to make to education and recovery from post natural disasters.

Whatungarongaro te tangata, toitū te whenua

As people disappear from sight, the land remains.

Charmaine Tukua (<https://orcid.org/0000-0001-9619-4871>) is a full-time Senior Academic staff member at Te Puna Wānaka and currently works at Ara Institute of Canterbury (Ltd).

Niki Hannan is a Teacher Educator and works at Ara Institute of Canterbury (Ltd).

Books / Journals

Bevan – Brown, J. (2003). *The cultural self-review, providing culturally effective, inclusive, education for Māori learners*. Wellington, New Zealand: NZCER

Patara, L. (2012). *Integrating culturally responsive teaching and learning pedagogy in line with Ka Hikitia*. Wellington, New Zealand.

- 1 D.Paton, R. Bajek, N. Okada, and D. McIvor, "Predicting community earthquake preparedness: A cross-cultural comparison of Japan and New Zealand," *Natural Hazards* 54, no. 3 (2010): 765-781.
- 2 J. R., Elliott, and J. Pais, "Race, class, and Hurricane Katrina: Social differences in human responses to disaster," *Social Science Research* 35 no. 2 (2006): 295-321.
- 3 E. McKenzie, B. Prasad, and A. Kaloumaira, *Economic Impact of Natural Disasters on Development in the Pacific, Volume 1: Research Report*, Australian Government (2005).
- 4 Earthquake Engineering Research Institute, *The 2010 Canterbury and 2011 Christchurch New Zealand Earthquakes and the 2011 Tohoku Japan Earthquake: Emerging Research Needs and Opportunities*, Report from a Workshop held February 9 and 10, 2012, <https://www.eeri.org/japan-new-zealand-nsf-rapid-workshop/>.
- 5 Elliott & Pais, "Race, class, and Hurricane Katrina"; C. Harris, *Was Hurricane Katrina good for the education of students in New Orleans?* (2012), <https://commons.trincoll.edu/edreform>. [this needs more information – if it is a book it needs the publisher etc, the link does not go to the item and I can't find it]
- 6 M. Thrupp, *Notes from a visit to Christchurch primary schools four years on*. Save Our Schools NZ, (2014). Retrieved from <http://saveourschoolsnz.com/> [this website doesn't look right – I wonder if it's been hacked?]
- 7 <http://shapingeducation.govt.nz/wp-content/uploads/2012/09/RenewalPlanAug2012.pdf>
- 8 J. Fletcher and K. Nicholas, "What can school principals do to support students and their learning during and after natural disasters?" *Educational Review* 68 no. 3(2016): 358-374.
- 9 Fletcher and Nicholas, "What can school principals do?"
- 10 R. Pere, *Ako – Concepts and learning in the Māori tradition*, (Hamilton, New Zealand: University of Waikato, 1982).
- 11 Ibid
- 12 R. Bishop, M. Berryman, T. Cavanagh, and L. Teddy, *Te Kotahitanga phase III whanaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream secondary school classrooms*, (Wellington, New Zealand: Ministry of Education, 2007).
- 13 Pere, *Ako*
- 14 W. Hemara, *Māori pedagogies – A view from the literature*, (Wellington, New Zealand: Council for Education Research, 2000).
- 15 M. Durie, *Whaiora – Māori Health Development*, (Auckland, New Zealand: Oxford University Press, 1994): 67 – 81.
- 16 C. Mutch, *Doing Educational Research. A Practitioner's Guide to Getting Started*, (Wellington: NZCER Press.005, 2005).
- 17 R. Thorpe, and R. Holt, *The SAGE dictionary of qualitative management research* (Vols. 1-0), (London: SAGE Publications Ltd, 2008), doi: 10.4135/9780857020109.
- 18 Mutch, *Doing Educational Research*.
- 19 J. Creswell, and V. L. Plano Clark, *Designing and conducting mixed methods research*, (Los Angeles: Sage, 2011).
- 20 R. Bishop, and T. Glynn, *Culture Counts Changing Power Relations in Education*, (Auckland: Dunmore Press Ltd., 1999).
- 21 L.T. Smith, *Decolonizing methodologies: Research and indigenous peoples*, (London, England: Zed Books, 1999).
- 22 Pere, *Ako*