

# ***An early childhood education ecological sustainability research perspective from Aotearoa<sup>1</sup>***

***Jenny Ritchie***

Te Whare Wānanga o Wairaka, Unitec Institute of Technology, New Zealand<sup>2</sup>

## **Slide: A Praxis-oriented research base for teacher education**

As teacher educators, we operate in a flow of praxis, located at the cutting edge of intersections between theory and practice. The critical pedagogue Paulo Freire defined praxis as “reflection and action upon the world in order to transform it” (1972, p. 28). We consider it very important to be able to access research as inspiration for teachers and teacher educators, research which generates new narratives reflecting an ethic of care for ourselves, each other and the environment. These counter-narratives invoke possibilities for praxis of sustainable ways of living with the earth.

## **Slide: An eco-pedagogy in the pursuit of social justice and Peace**

In response to growing concern about the cumulative components of the ongoing ‘climate crisis’ critical pedagogues are interrogating the pervasiveness of a ‘dominator culture’ (hooks, 2003, 2009). Antonia Darder wrote recently that “the Western ethos of mastery and supremacy over nature has, to our detriment, supported the unrelenting expansion of capitalism and its unparalleled domination over all aspects of human life”. She highlights “The need to embrace the fundamental relationship of interconnectedness that we share with all life on this planet” (Darder, 2009, p. ix).

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<sup>1</sup> Aotearoa is a Māori name for New Zealand.

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### **Slide: The Woven Universe**

This *re*-cognition of our interdependence as planetary beings can be seen to require a shift away from an individualistic paradigm to one which recognises and promotes our inter-subjectivity, interdependence, inter-connectedness and inter-relatedness as members of a shared 'woven universe' (Marsden, 2003). This is a paradigm that has been upheld by indigenous people despite the impacts of colonisation (Cardinal, 2001; Haig-Brown & Dannenmann, 2002; Patterson, 2000).

### **Slide: Hierarchical individualism..... holistic worldviews**

Māori, the indigenous people of Aotearoa (New Zealand) perceive Papatuanuku, the Earth Mother, and Ranginui, the Sky Father as their ancestors, central to their whakapapa, a genealogical web which is shared by humans, plant-life and other living creatures.

### **Slide: Kaupapa Māori – Values of Care**

The enactment of this dimension of intersubjectivity, which recognises that our destiny is intimately/ultimately bound up with the destiny of the Earth (Marsden, 2003), occurs through Māori concepts such as kaitiakitanga – guardianship of the earth and resources; manaakitanga – care, respect, kindness, hospitality; and aroha - overwhelming feeling, pity, affectionate passionate yearning, personal warmth towards another, compassion and empathy, especially in the context of strong bonds to people and places.

### **Slide: Validating counter-narratives**

In Western discourses also there has been growing awareness of a need to prioritise an ethic of care based in recognition of the interdependent nature of individual and collective wellbeing within our academic and professional discourses and enactment (Foucault, 1997; Gilligan, 1982; Martin, 2007; Noddings, 1995, 2005a, 2005b; Rinaldi, 2006). In order to challenge the Western drive to dominate the Other, including nature, we need to attempt to offer counter-narratives which recognise and validate our inter-connectedness. We must also be cautious of deeply held tendencies to replicate historical patterns of hierarchical dominance.

### **Slide: Titiro Whakamuri, Hoki Whakamua**

Our recent study "Titiro Whakamuri, Hoki Whakamua. We are the future, the present and the past: caring for self, others and the environment in early years'

teaching and learning” was a project involving teachers, children and families of ten early childhood centres from throughout Aotearoa, which arose from the interests and concerns of early childhood teachers, who were determined to take a proactive stance in the face of what some saw as a depressing global ecological forecast.

### **Slide: Te Whāriki expectations**

The New Zealand early childhood curriculum, Te Whāriki includes the expectation that early childhood education programmes will foster children’s relationship with the natural environment and a knowledge of their own place in the environment; their sense of respect and responsibility for the well-being of both the living and the non-living environment; and their ability to theorise about the living world and gain knowledge of how to care for it (Ministry of Education, 1996, p. 90)

### **Slide: Research Questions**

Focussed on exploring:

- Policies and practices that address the need for change towards more ecologically sustainable practices in early childhood centres.
- How Māori ecological principles are informing and enhancing ecological sustainability praxis.
- How teachers articulate and work with a pedagogy of place that emphasises the interrelationships between ethic of care for self, others and the environment.
- How centres work with the local community in the process of producing sustainable practices.

I have time here only to indicate the pedagogical approach of just one set of teachers, those from Richard Hudson Kindergarten in Dunedin. I would like to acknowledge these teachers, Grace, Adele, Charlotte, Miriam and Jan, for their endeavours.

### **Slide: RHK Teachers formulate their research question**

In order to gain a sense of clarity and ownership of their project, these teachers reformulated their own research question: “By learning about Rakinui/Ranginui and Papatuanuku can we inspire our children and whānau to consider making ecologically sustainable choices?”

### **Slide: Māori cosmology as a starting point**

The next step in their journey was to introduce the Māori creation story at mat-times, followed by inviting Māori elder Huata Holmes to visit the centre and share his Southern Māori originary narratives, “as told to him as a child by his grandmothers and great grandmothers”.

### **Slide: Children’s understandings of Ranginui and Papatuanuku**

Children’s responses were immediate.

Through their introduction of the Māori construction personifying our Earth Mother and Sky Father, the teachers observed children’s increased empathy transforming into agency.

### **Slide: Children’s Narratives of empathy**

Here is a story dictated by a child to accompany her picture:

Papatuanuku had too much rubbish on her, because someone had dropped too much rubbish on her. I didn’t know who dropped it on her. Rangi actually saved her, because he threw all the rubbish away in the rubbish bin. It was a really naughty person that dropped the rubbish on Papatuanuku – they didn’t have a rubbish bin. The naughty person is in jail now. (P-C, RHK)

### **Slide: No more “sad” wrap**

A parent reported how her daughter, Petra, was concerned about the damage she saw occurring to Rangi and Papa, expressing her distaste for the rubbish being discarded onto Papatuanuku, and the smoke pouring forth into Ranginui’s lungs. Here is an excerpt from the narrative written by the teachers:

*Petra has used the information given to her at mat times to add depth and concern to what she knows of the world. She has spontaneously decided to pick up rubbish in her neighbourhood because of her concern*

*for the earth mother. The personification has allowed her to deduce that the smoke from chimneys would not be beneficial to Rangi's lungs, making it hard for him to breathe. Petra is thinking further afield too. She wants to go to the beach and do a clean-up with her family. She has thought a lot about these things. She has also talked about "Sad Wrap" at kindergarten recently, [saying as she considered her lunch wrapping] "I have sadwrap. This is not good for Mother Earth". (RHK, 2)*

**Slide: the teachers write:**

The teachers wrote of how their understanding of Māori cosmology enabled a 'personification' of earth and sky which appeared to be enhancing children's empathy towards the environment:

*It gives them a personification of sky and earth to embrace and understand. It invites them to see the earth and sky through their own eyes and through their understanding of family. A mother, a father and some children – just like themselves. A family. A family who have had to face challenges and change, and who have new challenges to face and problems to solve. Perhaps, just like them.*

**Slide: Teachers contd...**

*Knowledge of Rakinui/Ranginui and Papatuanuku also gives our tamariki (children) a seed of knowledge and concern about the vulnerability of our world. We must all do what we can to look after Mother Earth and Father Sky. By giving the young learners of our society ecological strategies in a realistic context, we are laying the foundations of a generation of earth users who know to care (RHK, 1).*

**Slide: Conclusion**

A failure within the individualistic Western construct, to recognise oneself in the Other, is a dislocatedness that has allowed the exploitation of our planet. Western colonization/globalisation continues to have devastating impacts on both 'natives' and 'nature'. Our research has demonstrated the possibility for early childhood pedagogies to generate counter-narratives respectful of indigenous views regarding nature; narratives incorporating a fundamental and central recognition of our inter-connectedness and inter-dependence with our environment. This requires a paradigm shift away from western positivistic secularity and individualistic endorsement of egocentrism. These counter-narratives redefine our sense of wellbeing to involve not only caring for ourselves, but also for others and our environment.

