

Narratives of relatedness in ecological sustainability in early childhood education in Aotearoa.

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Abstract:

This paper provides an overview of the context and some preliminary findings from a current two year Teaching and Learning Research Initiative (TLRI) funded 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”. Central to the study has been the recognition of interdependent inter-relatedness as expressed in kaupapa Māori notions of manaakitanga, aroha, and kaitiakitanga , as well as in the ‘ethic of care’ outlined in the work of some western educational philosophers (P. Martin, 2007; Noddings, 1994). Whilst the data gathered from the ten different early childhood centres is extensive, this paper considers that contributed from Richard Hudson Kindergarten in Dunedin.

Introduction

Growing concern about the health of our planet has provoked a range of responses, nationally and internationally, across many sectors of societies, including government, business, and education. As educators and researchers, we were moved to embark on a research project which aimed to explore ways in which early childhood education can be part of a much wider shift towards global ecological sustainability. Underpinning the practical steps that aim to reducing waste and the effects of global warming is a much more fundamental philosophical shift in the attitudes of those in Western industrialised countries towards the earth and its resources, as outlined in 2004 by the New Zealand Parliamentary Commissioner for the Environment:

Our dominant value systems are at the very heart of unsustainable practices. Making progress towards better ways of living therefore needs to be a deeply social, cultural, philosophical and political process – not simply a technical or economic one. Technical and economic mechanisms will certainly be key parts of the process. However, they will not come into play unless we, as a society, are prepared to openly and honestly debate the ways that our desired qualities of life can be met. That is why there must be a vastly expanded focus on education for sustainability. (Parliamentary Commissioner for the Environment, 2004)

Western positivistic thinking has displayed an arrogance and sense of dislocation from non-Western others as well as the environment, employing ideologies such as that of “fatal impact” justifying colonialistic exploitation through Darwinian notions of the ‘survival of the fittest’ (Belich, 1996, p. 126). Urbanisation and an increasing dependence on technologies have contributed to a sense of displacement from the natural world. “As we have shifted our status to superspecies, our ancient understanding of the exquisite interconnectivity of all life has been shattered. We find it increasingly difficult to recognize the linkages that once gave us a sense of place and belonging” (Suzuki, McConnell, & Mason, 2007, p. 12).

Seeking 'Other-wisdom' - interconnectivity as a paradigm for sustainability

Western cosmologies have promoted an ethic of hierarchical dominance which sits in direct contrast with indigenous notions of interdependence with other people, living creatures, and the planet (King, 2005; Marsden, 2003a; Rose, 2004). These notions of our shared whakapapa, as planetary beings, offer a counter-narrative honouring of our inter-connectedness with others and nature as an alternative response to Western discourses of individualism and materialism, in which a dislocation resulting from failure to recognise oneself in the other has allowed for exploitation of both indigenous peoples and nature.

Māori perceive Papatuanuku, the Earth Mother, and Ranginui, the Sky Father as their ancestors, an ancestry which is shared with plants and fellow creatures. This represents another dimension of intersubjectivity, one which recognises that our destiny is intimately/ultimately bound up with the destiny of the Earth (Marsden, 2003b). However, the hierarchical and binary-dominated paradigm within Western culture tends to separate from people from nature, rather than encompassing the interconnectivity and relationality implicit in indigenous conceptualisations. In Te Ao Māori, there is a high value placed upon manaakitanga, a core value within kaupapa Māori, central to which, is "nurturing relationships. looking after people, and being very careful about how others are treated" (Mead, 2003, p. 29). Implicit within the structure of the word manaakitanga is "the idea that the giving and acceptance of kindness and hospitality bestows mana on both host and guest" (Benton, Frame, & Meredith, 2007, p. 186).

Western educational theorising has in recent years turned to theorists such as Vygotsky, Rogoff, and Bruner in shifting our lens from a focus on the individual child to viewing children as interlocutors within their sociocultural contexts. Intersubjectivity, a sense of the other's feelings and perceptions, is enhanced when adults share a deep knowledge of that child's socio-cultural positioning (Bruner, 1990; Rogoff, 1990, 2003; Van der Veer & Valsiner, 1994). Bruner (1990) reminds us that the historical repositories of our cultural values and motivations are shifting, responsive to exigency, reflexivity and reconceptualisation. We have the capacity to "conceive of other ways of being, of acting, of striving", our cultures bequeathing us "with guides and stratagems for finding a niche between stability and change", our individual and collective agency enabling us to either embrace or reevaluate and reformulate our ethics and motivations (Bruner, 1990, p. 110).

Nel Noddings (1995) has proposed an ethic of care as a pathway towards compassionate, caring ways of living. An ethic of care is founded in an understanding of people as relational beings, and can be seen as comprising three central components: conceptual and emotive understanding, deep respect and intrinsic worth of others, and a willingness to act for the other (P. Martin, 2007, p. 57). In Noddings' view of what she describes as our "moral interdependence", she considers that "Our goodness and our growth are inextricably bound to that of others we encounter" (Noddings, 1995, p. 196). This notion of respect as underpinning of interdependent relatedness is a strong feature within indigenous epistemologies, which include Papatuanuku - the Earth Mother, Ranginui - Sky Father, and all living creatures, the children of these parents, in the web of interrelatedness described as whakapapa. Tilly Reedy (2003) has explained how, in a Māori conceptualisation, tamariki-children are inculcated with a sense of connectedness, not only to whānau – family, but to the land of their birth. The notion of mana whenua, incorporates "a sense of sovereignty, of identity and of belonging" (2003, p.70). After a baby has been born, the pito -umbilical cord and whenua - placenta are buried in the land, also called whenua.

Because of these traditions, the child has a spiritual unity with the land, with its people, and with the universe at large. A sense of identity with the land of their birth is inculcated in the child; love and respect for the land and its environment, and the geographic features of home, are learnt and imprinted in the child's mind. The spirit of the land lives in the child; the physical and emotional identity with the land is strengthened through myths, song, dance, and karakia. Confidence and self-esteem are the outcomes. (Reedy, 2003, p. 70)

In Māori conceptualisations, a deeply connected respectful recognition of interdependent wellbeing means that the ethic of care extends beyond immediate family to embrace wider relationships with others through whanaungatanga. This underpinning notion of respect continues through kaitiakitanga – guardianship, to include the planet, its geographical features such as rivers and mountains, along with animals and insects, in this caring embrace (J. E. Ritchie, 1992). It has been suggested that all children are born with an innate receptivity to a sense of connectedness to nature which can be enhanced through the cultural messages and experiences that they receive, such as those offered through early childhood education programmes (Prince, 2008). Place-based pedagogies have been offered by Māori educationalist Wally Penetito (2009), as a model which might serve the needs of children to experience a connectedness with their local milieu. These pedagogies have the potential for embodying ways of knowing and being reflecting a sense of consciousness which involves a union of mind and spirit, the mauri (life force) and wairua (spiritual interconnectedness).

Pedagogical impetus for enhancing a sense of relatedness in ecological sustainability

Early childhood educators in Aotearoa are privileged in that we work under the auspices of a socioculturally framed curriculum, Te Whāriki (Ministry of Education, 1996), which is unique in its honouring of the indigeneity and diversity of children and their whānau/families. Notions of respectful, reciprocal relationships are deeply embedded in the discourse of Te Whāriki. Te Whāriki can also be seen as recognising the importance of the inter-relationships between children's cultural values, knowledges and learning being validated as integral to our collective wellbeing as planetary citizens. In explicating an ontology of relationships and connections, theorists are being to recognise the complexity of the interconnectedness of self, others, and culture (Kincheloe, 2005). As Joe Kincheloe explains, "Culture is not merely the context in which the self operates but also "in the self"—an inseparable portion of what we call the self. Who we are as human beings is dependent on the nature of such relationships and connections" (2005, p. 328).

Te Whāriki recognises the role of interactions with others in reinforcing the child's holistic self-understanding, as "enhancing their recognition of their spiritual dimension and the contribution of their heritage and environment to their own lives" (p. 72). Carlina Rinaldi (2006) has signalled the importance of re-emphasising notions of collective wellbeing. As bell hooks (2003) writes in the final sentence of her recent book, "Teaching Community, A Pedagogy of Hope":

Dominator culture has tried to keep us all afraid, to make us choose safety instead of risk, sameness instead of diversity. Moving through fear, finding out what connects us, revelling in our differences; this is the process that brings us closer, that gives us a world of shared values, of meaningful community (hooks, 2003, p. 197).

As we face increasing global disturbances and uncertainties related to climate change, terrorism, natural resource depletion, and inequitable economic distribution, educators might indeed choose to respond by seeking pedagogies of hope, imbued with intuitive understandings of our inherent inter-connectedness within and across communities and cultures, and as planetary citizens.

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'

This project was inspired by an early childhood educator who sought a pathway forward, in the light of the seemingly depressing global sustainability crisis. It had resonance for the collective of four early childhood academics and other educators from ten early childhood centres across the length and breadth of the country who chose to share the research journey, which began in 2008, with funding from the Teaching Learning Research Initiative.

The project was grounded in the following four research aims:

- to focus on policies and practices that address the need for change towards more ecologically sustainable practices in early childhood centres. Each centre will already have practices and policies in place that can either be developed or modified.
- to identify how Māori ecological principles are informing and enhancing a kaupapa of ecological sustainability, as articulated by teachers, tamariki and whānau?
- to understand how teachers articulate and work with a pedagogy of place that emphasises the interrelationships between ethic of care for self, others and the environment. Within this project, the use of the term 'pedagogies of place' refers to the understanding that practices do not exist in isolation; they arise according to available knowledges and discourses in specific locations.
- to investigate how centres work with the local community in the process of producing sustainable practices, based on an ethic of care for the self, others and the environment.

Narrative methodologies

In this study we continued to employ the methodological approach we have been exploring in our previous studies (J. Ritchie & Rau, 2006, 2008). Our kuia, Rahera Barrett Douglas and kaumātua Huata Holmes provided wisdom and spiritual presence. An initial collective hui was held which enabled all co-researchers, both educators and co-directors, to share and clarify methodological and ethical expectations. The four project co-directors, along with a research facilitator, Lee Blackie, in Dunedin, worked closely alongside the educators from the various centres, discussing the emergent data in ongoing co-theorising hui, employing the strategy of co-exploration (Diller, 1993, cited in Noddings, 1995, p. 93) "collaborative storying" (Connelly & Clandinin, 1990, p. 336), or whitiwhiti kōrero (Holmes in Bishop, 1996, p. 104). This co-theorising continued at the final collective co-theorising hui, when educators from all the centres presented their data and analysis, and discussed the key learnings from their involvement in the project. Data was gathered through observation, examples of children's art, centre pedagogical documentation, recorded interviews with educators and parents, photographs, videotaped activities, and field notes. We asked each group of educators to provide us with three sets of data from their centre, over the one-year data collection phase of the project.

Re-narrativising our relatedness through early childhood pedagogy

As the narrative data gathered from across the ten early childhood centres is so rich, broad, and diverse, this paper will reflect on the journey undertaken by one participating early childhood centre, that of the educators, tamariki and whānau of Richard Hudson Kindergarten in Dunedin. The teachers at this kindergarten began their research journey by reflecting on the many ways in which their practice already reflected a commitment to ecological sustainability, acknowledging at the same their feelings of inadequacy with regard to the second of the listed research aims. Despite their strong ongoing commitment to Tiriti-based practice, evident in their involvement in a previous study (J. Ritchie & Rau, 2008), they were unsure of how they might be placed in relation to the task of identifying “how Māori ecological principles are informing and enhancing a kaupapa of ecological sustainability” within their centre programme.

The teachers sought affirmation of their path from within our early childhood curriculum, Te Whāriki (Ministry of Education, 1996) noting that the curriculum requires the incorporation of Māori ways of knowing and making sense of the world and of respecting and appreciating the natural environment. Te Whāriki stresses the need for educators to offer children opportunities to gain familiarity with stories from different cultures about the living world, including myths and legends; working theories about our planet and beyond; and knowledge of features of the land which are of local significance, such as rivers or mountains. Educators are to encourage children to recognise their relationship with the natural environment and enable them to gain knowledge of their own place in the environment. Further, educators are to generate in children a sense of respect and responsibility for the well-being of both the living and non-living environment; and to foster children’s working theories about the living world and knowledge of how to care for it (Ministry of Education, 1996, p. 90).

The teachers reflected that “Our collective vision compares children to trees – with attentive gardeners (teachers and parents/other adults) to tend and nurture them” (RHK, 1). Their reflection led them to reformulate their own research question: By learning about Rakinui/Ranginui and Papatuanuku can we inspire our children and whānau to consider making ecologically sustainable choices? They reflected on their philosophical approach to implementing their study, writing that “The seed of this research has been planted, is being watered every day and is growing. Right from the start we decided that whatever direction we went in and whatever teaching and learning happened with the children, it had to be done gently and in a way that encouraged empowerment and positivity”(RHK, 1).

The next step in their journey was to introduce the Māori creation story at mat-times, followed by inviting Huata to visit the centre and share his Southern Māori originary narratives, “as told to him as a child by his grandmothers and great grandmothers”. They noticed that Huata’s “kōrero has supported our teaching of the importance of Papatuanuku in our lives” (RHK, 1). They were amazed at how quickly this was evident in the children’s play and learning, writing that “The research has had a ‘stone in the pond’ effect. It is becoming visible in many aspects of our everyday teaching and in the casual conversations of the children at play. They talk about “mother earth” and know that we need to care for her, and that we can!” (RHK, 2).

In their second set of data, the teachers wrote a narrative describing the children’ growing sense of relatedness to both Ranginui and Papatuanuku. Children expressed agency in requesting plastic-free lunch-box wrapping, and opportunities to clean the local area. Through their introduction of the Māori construction personifying our Earth Mother and Sky Father, the teachers observed children’s increased empathy transforming into agency. A parent reported how her daughter 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 a narrative written by the teachers:

P 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 Ranginui's lungs, making it hard for him to breathe. P 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)

Children in this centre perceptively reframed the terminology of 'gladwrap' as 'sadwrap'. The resonance of the Māori creation stories soon became evident in the children's play, artwork and story-writing. P-C dictated the following story to explain her painting:

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. Ranginui 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. (RHK, 2)

Another child L wrote her own story to accompany her artwork, portraying the pain of Ranginui and Papa's separation: "Ranginui is at the top. He is really, really close to the children. You can't see the baby because he's in the ground with his mother. They pushed them apart. The earth mother wasn't close to Ranginui anymore. So. So. So. So. Sad." (RHK, 3).

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. Knowledge of Ranginui/Ranginui and Papatuanuku also gives our tamariki 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).

Later in the year, the teachers revisited the kaupapa of Ranginui and Papatuanuku with the children, writing that "We began this period of data collection by revisiting the creation story of Aotearoa. Much of our shared understanding (the teachers and children) concerning this research project is centred around our responsibility to our earth mother, Papatuanuku" (RHK, 3). Again children's individual interpretations were reflected in their contributions to this project:

This learning was revisited and reinforced through creating an area on our verandah that is a dramatisation of the creation story. The children helped to create it. K suggested plastic shopping bags could be clouds. T was keen to pass things up the ladder for Ranginui's realm. O, M and S loved making the props through creative art work. Many children were interested, and watched as the area developed over about a week, giving suggestions, identifying parts and articulating their significance. Many of the children drew a child of Ranginui and Papa on the poster on the wall, when invited to – many choosing to draw the baby, Ruamoko – one baby was even on a 'waterslide' down the side of the volcano we had

drawn! The children told what they knew of the story, and a combined RHK tamariki story was published for interested adults to read. (RHK, 3)

A student teacher on practicum in the centre at that time wrote the following reflection on this activity:

The children at Richard Hudson Kindergarten have been a part of an exciting journey of exploration into the myth of 'Ranginui and Papatuanuku'. .. The ideology of this story has led us, as a community of learners, to create this amazing display on the veranda. Many children have offered valuable input and participated in creative learning experiences to put the pieces of the display together. An important disposition that has continued to develop as a result of this experience is the children's knowledge skills and attitudes towards ecological awareness. All the creative media we used has been recycled and this remains a strong focus within RHK to date. The children have been immersed in learning about sharing ways, and participating in ways we can care for Papatuanuku. The children have developed a significant respect for Māori tikanga and te reo Māori. It has been so exciting to be a part of, and the children's interest and empathy has been increasingly significant. They have explored working theories about Papatuanuku and developed a relationship with the natural environment as well as a sense of responsibility for the well being of Papatuanuku, and how we can care for it. (RHK, 3)

Along with this work, children in the centre were engaged with gardening, composting, recycling, caring for centre animals, and excursions for beach and park cleanups. These activities were linked through conversation with teachers to the notion of caring for Papatuanuku, as seen in the following: 'When the children were asked about ways to look after Papatuanuku recently at mat time, they said "Pick up all the rubbish", "recycle", "reduce" and "reuse"' (RHK, 3). Parents reported their children bringing these notions into their homes, as seen in this example: "T has been coming home talking a lot about Papatuanuku and the words reduce, re-use, recycle, which is great to hear. He also looks on packaging to see if he could see the recycle sign, and he helps put things into the recycle bin". Newsletters were sent home, mostly electronically, informing parents of the latest centre sustainability practices, such as 'litterless lunchboxes'. The teachers also decided to send a letter to local schools explaining the centre's philosophy, in response to reports that some children who had graduated to primary schools had been unable to find the [non-existent] recycling bins.

As part of their data collection for this study, one of the teachers talked with a Māori parent, S, about his perceptions of his son's involvement in these activities. Teacher A reported on her discussion with S:

When S heard the overview of our kindergarten's te ao Māori research focus on Ranginui, and particularly Papatuanuku, he stated that he sees Papatuanuku as a living being. She is of utmost importance to him because we come from our mother, then go back to Papa. Further, he stated that Papatuanuku is "the most beautiful person in the world" and that looking after her is, without a doubt, the right thing to do. S believes that we not only need to look after Papa, but that caring for "Tane's turf" was very important too. "It just doesn't look nice", he said of rubbish in our environment. (RHK, 3)

This teacher then reflected on the significance of what S had shared with her, considering his perception of respect for Papatuanuku, and also for Tane-Mahuta's domain (of the children of Ranginui and Papatuanuku) to be one that had been a life-long orientation as opposed to her more recent efforts to engage with this worldview:

The interview with S. has really helped the depth of my understandings of the place of Papatuanuku in our lives. S's words and wisdom have helped deepen and fine tune my appreciation and awareness of her significance in our country. S articulates his understandings of Papa so passionately, so genuinely and in such a heartfelt manner. The

difference in S's conception, connection and sensitivity to the story is probably that his has been learned aurally, over a lifetime, taught to him by people who have also learnt it passionately as a 'fact of life', an absolute reality, and shared it with their next generation. My knowledge has been learnt; as an adult, mainly from books, then by adding bits to the body of knowledge over time. Mine lacks the aroha, empathy, true identity, connection, whakawhanaungatanga and scope of the tangata whenua. This provides some challenge when, as a Pakeha teacher in Aotearoa/New Zealand, I share the creation story with the children I teach. But challenge is good! (RHK, 3)

Discussion

The teachers at Richard Hudson, despite their initial trepidation in relation to the research question exploring Māori perspectives in relation to ecological sustainability, have demonstrated that they were prepared to challenge themselves and deepen their own understandings around their practice, at the convergence of early childhood pedagogy, kaupapa Māori, and ecological sustainability. Their reframing of their research question to be one focussed on caring for Papatuanuku enabled them to frame ecologically sustainable practice as one of caring for our environment and planet through including the Māori cosmology, generating a sense of relatedness. Inviting the participation of local elder, Huata Holmes, to introduce authentic indigenous narratives, brought authenticity to their curriculum in line with Wally Penetito's call for place-based pedagogies (Penetito, 2009). For Penetito, a sense of place is a fundamental human need which embodies a sense of relationship between people and their environments.

Teachers, in reaching out to parents and their centre community, were willing to become advocates for a process of social and cultural change towards more ecologically sustainable lifestyles, through incorporating kaupapa Māori perspectives. They led this process in a gently inclusive manner, with children sharing this advocacy. These teachers were undoubtedly fortunate in that they had the support of a local kaumātua, in the initial stages of the project. However, it appears that it was their own commitment that was crucial to the children's receptiveness and responsiveness to the focus that the teachers had chosen. Through endeavouring to understand the perspectives of parents, the teachers were also challenged to extend their own views, gaining more respect for Māori conceptualisations in doing so. The teachers were sensitive to their role as Pākehā stepping into the domain of Te Ao Māori, cautiously doing their own research and consultation with Māori before introducing new concepts and material.

Children demonstrated through their conversations, sociodrama, story-writing and artwork, their empathy for Papatuanuku and Ranginui. This heartfelt sense of caring for their environment, is expressed in the Māori notion of kaitiakitanga (J. E. Ritchie, 1992). In a contextually response manner, the teacher A, had introduced the notion of rāhui in relation to protecting flowers from over-picking. The notion of people serving as kaitiaki, or guardians of our local places and waterways, is one that teachers might consider introducing to children in the future. Other kaupapa Māori notions could also be offered at some point in time, for example the term manaakitanga could well be used to describe the practices of caring for each other and the environment that are already being enacted.

A reflexive cycle became evident: as the teachers became more passionate and excited by the children's responsiveness, the focus on Papatuanuku and Ranginui became embedded as part of

everyday practice, extending into homes, and into the wider community through communications initiated by the centre. The teachers reported a 'stone in the pond' effect, as ripples of responses emanated beyond the initial context. Environmentally-focussed changes were initiated by children not only within the centre and their homes, but also reaching into local schools. This effect was also seen in a recent New Zealand study focussing on environmental competence in an early childhood centre (Vaealiki & Mackey, 2008). This research reported that "children's articulate and confident responses to their parents suggest that as the children's knowledge about the environment increased, so too did the belief that they could influence their families' actions" (Vaealiki & Mackey, 2008, p. 9).

Vaelaliki and Mackey identify advocacy on behalf of the environment as an aspirational environmental competency, which is in accord with the recently promulgated New Zealand Curriculum (Ministry of Education, 2007). This document contains the vision that children in our schools be "connected to land and environment" (p. 9) and uphold a value of "ecological sustainability, which includes care for the environment" (p. 10). The document further outlines the key competency of "participating and contributing" which involves the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments" (p. 13). The brief overview of data provided here from just one of the ten early childhood centres in our study outlines the potential of early childhood programmes to elicit environmentally engaged curriculum implementation in line with this vision. Key to the process at this kindergarten has been the positioning of kaupapa Māori conceptualisations at the heart of the programme. The Māori creation stories The work of these teachers and tamariki demonstrates the re-narrativising potential of an early childhood programme, whereby generating stories of relatedness which emanate an ethic of care and manaakitanga offer transformative potential for contemporary communities, future generations, and the planet itself.

Final Thoughts

As the data from our ten participating early childhood centres has been gathered and co-theorised with the educators who undertook to enrich their early childhood programmes with these philosophical commitments, some exciting transformational possibilities have been emerging. Each early childhood centre community chose their own pathway within the wider research journey. This paper has only had the scope to focus on one of these. Other philosophical focuses that have emerged during the study from other centres include that of sanctuary and healing, and children's advocacy and citizenship.

This paper was written with a background awareness of the convergence of ideas from the data from Richard Hudson Kindergarten with those of philosophers (Abram, 1996), academics (Berry, 1999), indigenous story-tellers (King, 2005) and scientists (Suzuki et al., 2007). These reinforce the importance of reframing our narratives to re-position as central our relatedness (K. Martin, 2007) to each other, the earth, the universe, and the life/energy forces that drive and unite these. Underpinning all cultures' narratives are our creation stories, which provide paradigms for either hierarchical dominance as in the Genesis narrative, or cooperation as seen in some indigenous creation stories (King, 2005). As Thomas King has pointed out, if we want to promote a different ethic, we need to tell a different story (2005, p. 164). Māori creation stories identify people, plants

and other living creatures to be fellow descendents of Papatuanuku, the Earth Mother and Ranginui, the Sky Father. Some of the data gathered so far has demonstrated ways that these indigenous narratives have resonated for young children in their early childhood education experiences.

At our final co-theorising hui one of the educators expressed her ongoing sense of urgency, regarding the sense of impending doom that she continues to feel when considering the state of our planet. Yet for me, as we begin to delve more and more deeply into the data gathered by our co-researchers, the sense I have is more one of optimism, as we encounter the strength and beauty of these children's journeys. For many of these children, ecological understandings and practices, proactively fostered through their teachers' own vision and commitment, were simply becoming part of their way of knowing and doing, their sense of manaakitanga extended to include the earth and beyond.

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