

Food Reciprocity and Sustainability in Early Childhood Care and Education in Aotearoa New Zealand

Jenny Ritchie

Victoria University of Wellington, Wellington, New Zealand

Abstract

This article offers a perspective from early childhood care and education in Aotearoa New Zealand. It draws from the data of four recent studies to demonstrate pedagogical practices informed by Indigenous (Māori) perspectives. Māori values, such as *manaakitanga* (caring, hospitality, generosity) and *whanaungatanga* (relatedness), are shown featuring in routines focused on provision of food and serving as a key focus of early childhood education for sustainability. It is argued that providing opportunities for children to become engaged with growing, cooking and sharing food enables them to operationalise compassion towards themselves, others and the environment, reconnecting with the source of their food and demonstrating generosity and care to others (both human and more-than-human) in their communities. This can be viewed as a pedagogical response to the increasing encroachment of neoliberalism, with its incumbent individualism and lack of collectivist consciousness or concern for the environment, into education settings. Furthermore, drawing upon Indigenous perspectives honours traditional, localised wisdom regarding sustainability practices.

*Nā tō rourou, nā taku rourou, ka ora ai te iwi.*¹

The purpose of this article is to retheorise data from several recent New Zealand studies (Kelly et al., 2013; Ritchie, Duhn, Rau, & Craw, 2010; Ritchie & Rau, 2006, 2008). It explores ways in which educators, children and families of the early childhood care and education settings were engaged in regular practices of growing, harvesting and preparing food from their centres' gardens, often informed by traditional Māori views, and the ways in which these practices extended out to and involved the wider community in this endeavour, which, in most cases, side-stepped the consumerist economy. The theoretical framework for this article derives from literature pertaining to Indigenous perspectives (Cardinal, 2001; Kincheloe & Steinberg, 2008; Meyer, 2008; Stewart-Harawira, 2005), pedagogies of place (Gruenewald, 2003; Penetito, 2009), and early childhood education for sustainability (Davis, 2010). The methodologies of the

Address for correspondence: Dr Jenny Ritchie, School of Education, Victoria University of Wellington, PO Box 600, Wellington 6140, New Zealand. Email: jenny.ritchie@vuw.ac.nz

original projects were narrative, collaborative processes with active involvement of teacher co-researchers (Clandinin, 2007), informed by kaupapa Māori methodologies (Bishop, 2005; Smith, 1999/2012).

As our communities suffer the repercussions of the global economic recession, the severity of the impacts on low-income families is made even more extreme by the latest onslaught of neo-liberal policies that place the blame for hardship on families rather than considering ways in which social, economic, and educational policies might serve to alleviate these deprivations. Currently in our country, Aotearoa New Zealand, increasing numbers of families (25% of all New Zealand children) are struggling due to the impacts of poverty impeding their quality of life and, in particular, their access to good nutrition (Office of the Children's Commissioner, 2013; Robinson, 2012; Wynd, 2011). This increasingly serious problem of food security is related to childhood obesity, poor nutrition and related illnesses (Robinson, 2012; Utter, Scragg, Percival, & Beaglehole, 2009).

Poverty is implicated in both food deprivation and obesity (Children's Commissioner's Expert Advisory Group on Solutions to Child Poverty, 2012). Since 2006–07, New Zealand childhood obesity rates have increased from 8% to 11%, while a further 22% are overweight (New Zealand Ministry of Health, 2014). While one third of all New Zealand children are overweight, it is also concerning that 19% of Māori children and 27% of Pacific Islands children are obese. Children living in the most deprived areas are three times more likely to be obese than children living in the least deprived areas (New Zealand Ministry of Health, 2014). Similarly, while food security is a concern for about 20% of New Zealand households, for Māori and Pacific Islands families, low income and the cost of healthy food are two of the most pressing issues in relation to food security (Carter, Lanumata, Kruse, & Gorton, 2010).

Many children, particularly those living in low-socioeconomic areas, can only access predominantly prepackaged, obesogenic, processed foods from school canteens, local stores and fast food take-away chains. Such food has been produced anonymously, via 'energy-intensive, polluting, and often obesity-promoting industrial food-manufacturing systems' (Blair, 2009, p. 18). This places New Zealand in the position of being in breach of the United Nations Convention on the Rights of the Child (Article 24, item 2c), which recognises the child's right to 'the provision of adequate nutritious foods' (United Nations, 1989). Neo-liberal approaches fail to acknowledge the complex realities of structural factors such as poverty-related poor nutrition and health that underpin the lag in educational achievement for children from poorer communities (Children's Commissioner's Expert Advisory Group on Solutions to Child Poverty, 2012).

This article revisits four recent research projects (Kelly et al., 2013; Ritchie et al., 2010; Ritchie & Rau, 2006, 2008) in order to further illuminate ways in which early childhood care and education settings are offering support and sanctuary to families via everyday pedagogical practices sourced in Māori values such as *manaakitanga* (caring, hospitality, generosity) and *whanaungatanga* (relatedness). It considers ways in which these practices offer counter-narratives to the individualistic, profit-oriented, greed-aggregating practices of the neo-liberal capitalist project, instead demonstrating that early childhood care and education settings have potential to serve as sites for rebuilding a sense of community through shared endeavours such as gardening, sharing of produce, and caring for Papatūānuku (Earth Mother). It begins with a brief overview of neo-liberal policies and values, juxtaposed with the collectivist focus of early childhood care and education, before moving to an overview of Indigenous onto-epistemologies, with a particular focus on those of Māori. The article then theorises the relationship between food and sustainability before introducing some data from the research studies to illustrate how the work in these early childhood care and education settings can

be seen to be providing a counter-narrative to neo-liberalist views of the individualist entrepreneurial 'self', through offering collectivist, collaborative generation of food and nutrition as a source of community wellbeing.

Education as Counter to Neo-Liberal Individualistic Profit-Oriented

The incursion of neo-liberalism into early childhood care and education in Aotearoa New Zealand has been dramatic, in that we have seen an increase of privatisation in our sector in the past decade (ECE Taskforce Secretariat, 2010). Meanwhile, the requirement for early childhood educators to be qualified has been reduced to a 50% minimum of qualified teachers per setting, which enables greater profits to be made by businesses and corporates that run early childhood centres. The quality and qualities of the early childhood care and education provision are thus jeopardised by such neo-liberal policies. While capitalism has increasingly focused its marketing on children, grooming them to become mass consumer pawns (Kincheloe, 2011), neo-liberalism has transformed government, which had previously seen its role as being 'responsible for human well-being, as well as for the economy, into a state that gives power to global corporations', with education systems increasingly becoming part of these global corporations through increased privatisation of what was formerly seen as a common good (Davies & Bansell, 2007, p. 248). Meanwhile, the neo-liberal project aims to provide education that produces individualistic entrepreneurs (Davies & Bansell, 2007). Social, collective, common-good efforts are subsumed within the all-powerful, un-challengeable 'free' market economy, while the individual is 'reconfigured' as an 'economic entrepreneur' of her/his own life (Davies & Bansell, 2007, p. 248).

In contrast, early childhood care and education centres in New Zealand offer a collectivist philosophy focused on the recognition of children as integral members of family and community. In Aotearoa New Zealand, the early childhood education curriculum *Te Whāriki, He whāriki mātauranga mō ngā mokopuna o Aotearoa* (New Zealand Ministry of Education, 1996) is bicultural, sociocultural, holistic, and honouring of both indigeneity and children's home languages and cultures. The openness of this curriculum, whereby the community members (teachers, parents, and children) of each setting are encouraged to weave their own curriculum using the document as a framework, can be seen as visionary (Ritchie, 2012, 2013). Early childhood care and education settings are recognised as providing foundational experiences, establishing dispositions in young children that orient them towards future learning pathways (Shonkoff & Phillips, 2000). However, under the current regime of globalised neo-liberal incursion, which is shifting the education focus from 'inputs', such as having qualified staff, to 'outputs', such as measurement and comparisons of national standards of achievement, the opportunities for establishing dispositions of caring, reciprocity and respect for the planet are in danger of being ignored (Noddings, 2005b, 2005c).

Indigenous Sustainability Onto-Epistemologies

Indigenous onto-epistemologies offer insights into local, place-based pedagogies for sustainability (Gruenewald, 2003; Penetito, 2009). Cardinal (2001) has written that: 'Indigenous peoples with their traditions and customs are shaped by the environment, by the land. They have a spiritual, emotional, and physical relationship to that land. It speaks to them; it gives them their responsibility for stewardship; it sets out a relationship' (p. 180). As we become increasingly concerned about the damage being done to our planet (for Māori, the Earth is *Papatūānuku*, the Earth Mother) through unrestrained capitalist and technicist exploitation of her resources, Indigenous knowledges can

provide us with alternative conceptualisations regarding our relatedness to the Earth and our role as her custodian:

Indigenous ontologies or ways of being and knowing have much to contribute to the reconceptualizing of being in the world and in the development of radical pedagogies of hope. In this period of the extinguishment of hard won freedoms and rights and the unmaking of democracy, the articulation and embodiment of ancient ways of being in the world provides one means to creating new understandings of being in the world and with each other. (Stewart-Harawira, 2005, p. 154)

For the Māori of Aotearoa New Zealand, core values such as *manaakitanga* (caring, hospitality, generosity) and *whanaungatanga* (relatedness) are central to ways of being, knowing and doing (Mead, 2003). It is considered important that children are raised with a sense of responsibility to be *kaitiaki* (guardians) of Papatūānuku (Earth Mother), of forests, rivers, lakes and oceans. The obligation of *kaitiakitanga* (guardianship) is explained as ‘the mutual nurturing and protection of people and their natural world’ (Waitangi Tribunal, 2004, p. 8). Despite two centuries of colonisation, Māori have continued to assert their Tiriti o Waitangi² confirmed right to *tino rangatiratanga* (self-determination), exercising their *kaitiaki* responsibilities as holders of the *mana whenua* (ancestral authority) over their traditional lands, lakes, rivers and seas, holding these in trust for future generations. As Capra (2007) reminds us, there is much to be learnt from the values and practices of traditional societies, which have enabled people to sustain themselves for centuries through recognising their integral role within their local/global ecologies.

Theorising Food, Sustainability, Community and Early Childhood Care and Education

As we grapple to understand the diverse and widespread impacts of the current planetary ecological and economic crisis, we do not stray too far from consideration of food. While the impacts of global warming such as climate extremes of floods, fire and drought are increasingly affecting food security around the globe (Vidal, 2013, April 13), ‘developed’ Western countries are facing a crisis of childhood obesity and nutrition-related illnesses. Yet there exists within this multifaceted global crisis an element of opportunity in this ‘systemic instability’ (Stone, 2007, p. 19). The potential realised by this opportunity is dependent on the quality/ies of educational practices, which create not just awareness of the need to change ways of living on the planet, but provide practical sustainability pathways that simultaneously generate dispositions of caring individuals and communities. Sustainability always involves community; or, more correctly, networks of nested communities within communities (Capra, 2007). An Australian community/school garden project was seen as having created a space that facilitated ‘a strong sense of belonging’ (Cutter-Mackenzie, 2009, p. 122). Gardening as an education for sustainability practice has links to wider emotional and health benefits (Cooke, 2010). Food gardening in education settings enables children to reconnect with their food, personalising the production of what they eat, offering sensory and sensual experiences and the health and environmental benefits of fresh, locally grown produce, as well as contributing to their understandings of ecosystems, seasonal cycles, processes of food production recycling and regeneration (Blair, 2009; McNichol, Davis, & O’Brien, 2011). It is clear that educators can play a crucial role in awakening their students’ concern for their environment and planet, and in enhancing students’ strategies to avoid being commandeered by neoliberalist, exploitative ideologies (McLaren & Houston, 2004).

Integral to understandings of sustainability is the recognition of the centrality of reciprocity, not just between humans, but within our daily engagements with our planet. Growing fruits and vegetables and sharing this produce is a form of gift-giving external to the capitalist economy, reflecting instead values of nurturing, caring, and showing respect to our community members and the environment within which we reside (Vaughan & Estola, 2007).

Te Whāriki (Ministry of Education, 1996), the Aotearoa New Zealand early childhood curriculum, has a strong socioculturally informed focus of recognising children as located within their families, communities, and cultural backgrounds. It recognises that: ‘The well-being of children is interdependent with the well-being and culture of adults in the early childhood education setting; whānau/families; and local communities and neighbourhoods’ (Ministry of Education, 1996, p. 42). It also values the particularities of each ‘community to which a child belongs’ as providing ‘opportunities for new learning to be fostered; for children to reflect on alternative ways of doing things; make connections across time and place; establish different kinds of relationship[s]; and encounter different points of view’ (Ministry of Education, 1996, p. 9). The curriculum values these experiences as ‘enriching children’s lives’, providing them with exposure to new ‘knowledge, skills and dispositions [needed] to tackle new challenges’ (Ministry of Education, 1996, p. 9). Local Māori communities are included as valued sources of these knowledges, skills and dispositions, to be supported by liaison with local *tangata whenua* (people of the land; i.e., Māori) and respect for Papatūānuku (Earth Mother) (Ministry of Education, 1996, p. 54).

Data From Recent Research

This section draws upon data from four recent research projects from Aotearoa New Zealand, and aims to illustrate ways in which Māori perspectives have informed food-related sustainability practices in a range of early childhood care and education settings (for full explanations of participating early childhood centres, methodologies and findings please see the original reports: Kelly et al., 2013; Ritchie et al., 2010; Ritchie & Rau, 2006, 2008).

For many Māori, traditional foods remain important (Rush, Hsi, Ferguson, Williams, & Simmons, 2012). In the following description, a Māori kindergarten head teacher in a small, predominantly Māori township signals the importance of sharing traditional foods as enactment of *manaakitanga* (caring, generosity, hospitality) and *whanaungatanga* (kinship, relatedness):

Cooking is also an important part of our programme and especially some wonderful delicacies such as boil-up — pork bones and pūhā [sowthistle] from the garden, fish heads, fried bread, kai moana [seafood] galore, etc. We grow lots of vegies in our gardens and the whānau [families] and community are welcome to help themselves to this kai [food]. (As cited in Ritchie & Rau, 2006, p. 30)

This is how we discussed this contribution in the original report from that study:

In this kindergarten, the teachers modelled their manaakitanga [caring, generosity], whereby one is obligated to provide hospitality and sustenance to visitors, and this was reciprocated in kind by the centre whānau [family], who also provided kai [food] that was shared with the tamariki [children] and whānau [families] present, providing a tangible link to their culture, as well as the physical and spiritual sustenance. Eating together is a celebration of the collective sustenance of life, providing affirmation of whanaungatanga [relatedness]. (Ritchie & Rau, 2006, p. 30)

In a subsequent study (Ritchie & Rau, 2008), the sharing of food featured once again, as Pera and Pat, teachers in an urban kindergarten that serves a 'low socio-economic' community ensured equitable nutritional provision to the children and families who attended the centre:

Let's see, our food is an interesting one too. Lunch boxes: totally out, won't have them near the place [laughter], but what we do is we have an incredible range of socio-economic situations. A lot of really poor families, so we have donations of fruit, everyone brings fruit, every week and it goes in the communal basket and it's on the kai [food] table in a container with the lid on it and tongs, and children get a plate and they use tongs. And the morning children can make themselves a sandwich, so we ask for donations of bread and spreads. On a Monday and Friday we're there longer so we have sandwich, popcorn and fruit day, and Fridays we make pizza with the children — we have pizza and fruit. And so all the time we're sharing kai together, we're enjoying each other's company. There's always an excuse to bake and make something. We're never short of food. And those families who can donate the bread and spreads do. Those who can't, don't. No-one's asking, no-one's counting, no-one's noticing. It's about people feeling comfortable. (As cited in Ritchie & Rau, 2008, p. 66)

In a third study (Ritchie et al., 2010), these same teachers expanded on this theme, illustrating not only their concern for equitable provision of nutrition to attending children, but also the way in which children were being favourably introduced to eating vegetables such as broccoli:

The other thing I think we need to comment on is that 'kai' [food] is really important in this kindergarten and feeding people and making it simple for people so our kai philosophy here is, they don't bring lunchboxes, they don't bring juice bottles, they bring kai to share. The food just comes in and the children get fed. Simple, healthy food, water in the tap and people pick up on that and it's so much simpler than everyone bringing in their own individual lunch boxes ... We sit together as a whānau [family] and have a kai and we're always either making something with the children or encouraging them to try things and we grow food in our gardens. Broccoli is our favourite food, and it's amazing the children who will eat the kindergarten broccoli but won't touch it at home because it doesn't taste the same, but because they've planted it, they've cut it, they've washed it, they can smell it cooking. And it's just a tiny little sprig sometimes but they eat it, and we had some lettuce out there and there was a little boy who would pick his lettuce and make his lettuce and marmite sandwiches when he made his marmite sandwich for morning tea. I just brought some potatoes in the car. We're going to plant potatoes and new silver-beet. And so we're renewing our gardens all the time and we've got fruit trees out there that are starting to all get fruit. A mum gave us a black raspberry plant so we've got raspberries and the children can go and pick them, and we must encourage them to pick them because they've got raspberries on there now. Our feijoa tree — last year was our first fruit. This year we're going to have heaps of fruit and they go out and pick the food off the ground and bring them in so we can share them. The tomatoes are growing ... (As cited in Ritchie, Duhn, Rau, & Craw, 2010, p. 79).

The preparation of food at this kindergarten is a holistic, sensory experience, whereby children and families appreciate that the food has been grown and cooked with care and love. A mother marvels that when using the same pizza recipe, she is unable to replicate the experience of eating pizza cooked in the early childhood centre, the produce plucked

from the garden by children, the dough kneaded with love by Whaea Pera, the Māori teacher (Ritchie, Duhn, Rau, & Craw, 2010). Jane Bone reports a similar occurrence in her study of spirituality in early childhood care and education settings, in which the teacher at a Steiner Kindergarten explains that the food cooked at the kindergarten tastes better because in that setting there is both physical and spiritual digestion, via a process of inner appreciation regarding the preparation and consumption of that bread (Bone, 2005).

Reciprocal exchange was evident in the cycling of foods from home to centre, as seen in this example from a childcare centre in a small rural community:

As centres sent excess garden produce home with the children, so also were parents and community generous in their contributions to the centres. In discussion with Hinemania, a teacher at Raglan Childcare and Education Centre, Jenny asked her about this reciprocity:

Hinemania: So we've had all the tomato plants self-seed and they've gone home. The strawberries have gone home. Even the sunflowers went home and the lettuces have gone home.

Jenny: And parents keep sending things in like more seeds?

Hinemania: Yeah, so we've just received this week corn, tomatoes, beans and I think someone brought in a swan plant as well.

Jenny: Wow, all in one week?

Hinemania: Yeah! (Ritchie et al., 2010, pp. 82–83)

Seedlings generated in the centre were taken home by children and then grown at home, with some of this harvest such as lettuces then being returned back to the centre, to form part of shared lunch-time sandwich making. Excess produce was juiced, made into soups, jams and chutneys, and gifted back to families. *Matariki*, a Māori mid-winter seasonal festival including a *hākari* (feast), was celebrated by many of the participating early childhood services across all four studies.

Food reciprocity also featured in an early childhood education centre's responses to a recent marine environmental crisis in Aotearoa. On Wednesday, October 5, 2011, residents of the Bay of Plenty region of the North Island of New Zealand awoke to discover the overnight occurrence of New Zealand's worst environmental maritime disaster when a laden container ship, the *Rena*, struck the Astrolabe reef off the coast of Tauranga. The ship was damaged, and immediately began to leak its 1,700 tonnes of heavy fuel oil and 200 tonnes of marine diesel oil, as well as to spill heavy shipping containers, some of which contained hazardous materials, into the ocean. Wildlife in the sea and on the shore was immediately seriously impacted, and response teams comprising volunteering citizens, bird-rescue crews as well as army personnel began the arduous task of ongoing clean-up. Local Māori who serve as *kaitiaki* (guardians) of that area were particularly upset at the desecration of *tangaroa* (the ocean) and of their seafood source (Welham, 2011). Teachers at local kindergartens supported children and families who were immeasurably distressed by the carnage of wildlife and contamination of their ocean and shoreline.

Five weeks after the grounding of the *Rena*, a focus group discussion was recorded as part of a research project focused on early childhood care and education centres providing children with access to wild spaces such as the *ngāhere* (indigenous bush; Kelly et al., 2013). During this discussion, a teacher described how the children's and families' responses, which were grounded in Māori conceptualisations, had resulted in the

collection of donated food at the centre, which was then distributed to the volunteers working on the Rena clean-up:

We spoke to the children about it and said, 'You know, what can we do to help?' and the first thing they said was 'kai' [food]. And so they went home to their whānau [families] and said 'we need kai for the Rena workers' and before you knew it, the whole kitchen was filled. And that's, you know, that's their language, that's what they give. And I think, you know, the fact that we've concentrated on local Māori myths and legends and things that whānau had knowledge of, it's made the learning more real to them [the families / whānau] and they can relate more to what we're doing. (As cited in Kelly et al., 2013, p. 53)

This is another illustration of Māori conceptualisations of *whanaungatanga* (relationships) and *manaakitanga* (caring, generosity), enacted through gift-giving, a transaction symbolic of care and nurturing using food as its currency and operating in service of caring for both people, the community and the environment.

Final Thoughts

In recent centuries, waves of industrial, technological, capitalistic and, more recently, neoliberalist ideologies and practices have served to create disjuncture between food production and consumption, by mass producing highly processed, non-nutritive food-stuffs that are so widely available they have come to replace home-grown and localised sources of nutrition for many families. Pollan (2006) has emphasised the importance of having a deep consciousness regarding the sources of our sustenance, including the cost to the environment, pointing out that 'we eat by the grace of nature, not industry, and that what we're eating is never anything more nor less than the body of the world' (p. 411). Arguably, 'food is something we have it in our genes to care about, and we have been severed from that caring for too long' (Benyus, 2002, p. 57). Noddings (2005a) has called for pedagogical refocusing on an ethic of care, extending this caring and compassion to include animals, plants and the earth; and, in particular, the soil, recognising our reliance upon it for our wellbeing.

The examples provided in the previous section provide a brief glimpse into ways in which early childhood care and education settings, where teachers are committed to pedagogies informed by a Māori worldview, have been enacting practices that reclaim a sense of community, collective responsibility, equity and empowerment, and which feature gardening as a source of wellbeing; and the growing, preparation and sharing of food as a source of nurturing and community building (Ritchie, 2010). These practices serve as stark contrast to the wider narratives of neoliberalism, which concentrate on generating individualistic/corporate profit from industrialised food production at the expense of the environment. This article has illuminated alternative pedagogical practices, ones of caring for ourselves, others and our environment, conceptualised through Māori notions such as *whanaungatanga* (relatedness), *manaakitanga* (caring, generosity) and *kaitiakitanga* (guardianship over the environment), fostered in early childhood care and education centres. These pedagogical approaches and values are consistent with *Tē Whāriki*, the Aotearoa New Zealand early childhood curriculum. They might also be considered to be a form of environmental education that is sociocultural, collectivist, eco-centric, and holistically integrated throughout the daily rituals and programs of the early childhood care and education settings, offering a hopeful counter-narrative to neoliberal policies focused on exploitative, mechanistic outcomes and profits.

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Note

- ¹ ‘Nā tō rourou, nā taku rourou, ka ora ai te iwi’ is a Māori whakatauki (proverb) that translates as ‘With your food basket and my food basket, the people will thrive’.
- ² Te Tiriti o Waitangi was the treaty signed in 1840 by Māori chiefs and the British Crown, which legitimised British settlement of Aotearoa New Zealand, in exchange for guaranteeing Māori protection of their *tino rangatiratanga*, their self-determination and authority over their lands and resources.

Keywords: early childhood, Indigenous, food, sustainability, reciprocity

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Author Biography

Jenny Ritchie lectures at Victoria University of Wellington, New Zealand. Her teaching, research, and writing has focused on supporting early childhood educators and teacher educators to enhance their praxis in terms of cultural, environmental and social justice issues.

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