

## A Potentiating (Powerful) Environment for Life Long Learning

How Max makes sense of his violent world, caused by the Christchurch earthquakes, and develops resilience to cope.

**Author: Carol Marks**



In the dark of night, on 4 September 2010, a change happened for 4-year-old Max, in Christchurch. Woken violently from sleep, the house thrashing from side to side with deafening sound, like a jet plane roaring outside. How was he to know this was a large earthquake, something that was to change his secure world for the next 18 months?

For the next few hours, Max lay between his parents in bed, as the aftershocks continued to rock his world and tried to make sense of this frightening phenomena in the way that small children do: by asking questions. Carr et al. (2009, p. 119) remind us that “[w]e ask questions in response to uncertainty and curiosity and indignation” and that this is a way of building resilience.



The aftermath of any disaster leaves us with hard questions to answer and children need the opportunity to talk about the emotions and issues of what is happening around them. Dad, who is a structural engineer, tried his best to explain to Max about the tectonic plates under the ground and what was happening to them. "So the plates (dishes) smashed on the lawn?" queried Max. This was clearly going to be something that would take

time to understand. But over time, Max did get to understand and formed his own theories and ideas, commenting on the cracks in the concrete when visiting Rotorua and wanting to know if we had had earthquakes as well, ever vigilant, noticing the changes in the world around him. This must have been such a frightening time for Max in so many ways. Staying strong for her children at this time was something his mother found hard to do, and Max has had to be the strong one, comforting his crying mother after a violent shake, telling her, "It's all right, it's just an aftershock" and cuddling his small sister Holly as the house rocked under them.

"When does children's intellectual development permit them to be responsible for others?" This question was posed by Barbara Rogoff in her book "The Cultural Nature of Human Development" (2003). In many communities around the world, caring for others is a responsibility for very young children and this change in community care and assisting others became a new way of life for Max.

Max' mother knew she needed to remain calm in order to help her children and this has happened, showing great resilience. If she remains calm, the children remain calm.

"Having a safe roof over your head is one of human beings prime needs and that safety issue is really deeply disturbing when it's threatened" (Marlyn Robson quoted in Hayes, 2010).

Having his parents lie next to him at bed time and seeing his house remain strong gives Max strength. After all this time he talks about his 'strong house' in his play. "My house says to the earthquakes, 'You want a piece of me? You can't take me down, I'm too strong.'" Guy Claxton et al. (2011, p. 69) write about resilience as "knowing

how to work through difficulties when the pressure mounts or the going gets tough.” There have been many accounts where some people have managed to keep their health and wellbeing intact while others, who are described as not being resilient, succumb to the crisis. Masten (2001, p. 228) describes resilience as “a class of phenomena characterised by good outcomes in spite of serious threats to adaptation or development.”

Liquefaction, brought about by the Christchurch earthquakes, was another daily difficulty that required adaptation or development. The ground under the houses and streets changed from earth to mud, silt and water, and spewed into the streets. The levels of the house changed, some of the doors would no longer shut but community life continued as neighbours and friends helped clear sections and streets from this mess. Max pitched in too, watching the men at work and helping to clear the footpaths of liquefaction.



When we think of the learning happening for Max, we can reflect on the important values of learning: to love, to communicate, to have pride, to share, to contribute, to survive, to be within a close knit community who cares for each other. Strangers turning up with spades and wheelbarrows to clear driveways, food being cooked and shared and neighbours keeping in touch.

Rogoff (2007, p.5) argues that,

“individuals develop as participants in their cultural communities, engaging with others in shared endeavours and building on cultural practices of prior generations.”

A cultural practice is forming within Christchurch of helping neighbours and friends, of boxing on and accepting that this is part of their lives and that “children engage alongside the other members of their community endeavours, learning through keen attention, collaboration, and the support of others in shared ongoing endeavours” (Rogoff, 2007, p.5, see also Martini and Kirkpatrick, 1992).

When Max attended another early childhood centre after the February quake caused his pre-school to shut down, he could be heard discussing the quakes with his new friends and standing in front of a large group to share his experiences. The pre-school curriculum “Te Whāriki” highlights the importance of young children learning within their families and communities, learning through responsive, reciprocal relationships with people, places and things. Learning outcomes are summarised as working theories and learning dispositions, not only knowledge and skills (Ministry of Education 1996 p.44).

At age 4, Max plans ahead and makes sense of his life through his play and working theories. Guy Claxton (2002) writes about a domain of learning called *Reflectiveness* which includes planning and anticipating needs and obstacles. Max has been doing this. He told his mother, “When you get a big one you don’t know if it’s going to turn into a small one and when you get a small one, you don’t know if it’s going to turn into a big one. If we get another big one at pre-school I will be a safe turtle and if I am at home I will get under my bed.” After hearing his father comment on how miraculous it was that more people hadn’t been killed after February’s earthquake, Max said, “Only a few people died with the earthquake, not heaps, only a few.”

Max and his sister have accepted earthquakes as being what life is about, they know nothing else. It is part of their culture. Max is a participant within his learning community, he experiences earthquakes alongside others, at home and pre-school and at his friends. He hears the adults talking, he shares their feelings and anxiety, he participates when liquefaction is to be cleared from the section. Carr et al. (2009, p. 27) refer to Walsh (1998) and his concept of *family resilience*. They write that,

”Resilient families are characterised as having beliefs that enable them to:

- make meaning of adversity (for example: normalising or contextualising adversity and distress; seeing the crisis as meaningful or comprehensible; having a sense of coherence)
- affirm strengths and possibilities (for example: maintaining courage and hope; optimism)
- encourage transcendence and spirituality (for example: seeking purpose in faith, rituals, creativity)."

Max's mum said, "The ones who have coped are those old people who went through the Depression and World War 2." Imagine the learning dispositions they would have developed to help them grapple with adversity! Will Max be like these elderly people? We do know that the skills and dispositions he will need to tackle uncertainty in life are receiving a strong foundation.

When reading a book about a pig wallowing in mud, Max said, "Look Mum, the pig is swimming in liquefaction." Pretend play is helping Max make sense of his shaky world - he swings his toy sword and says, "When the earthquakes come, I'll get them with my sword." And he plays 'earthquakes' with his friends, running outside to safety and playing with the baby on the floor, "The baby is dead, the earthquake came and killed the baby."

When his mother suggested that Christchurch was the best place in the world to live Max replied, "It's not the best place in the world when there is liquefaction everywhere!" And when, after the holidays, Max returned to Christchurch, he jokingly said, "Aah, earthquake, aah," and laughed and rocked around in his car seat. Opportunities to experience empathy are occurring within his family life and meaningful conversations are naturally interwoven through his day.

In their paper "A framework for teaching learning: the dynamics of disposition", Guy Claxton and Margaret Carr write about the different kinds of learning communities or educational environments. I have likened Christchurch with all its turmoil as a *potentiating environment*.

"those that not only invite the expression of certain dispositions, but actively 'stretch' them, and thus develop them. It is our view

that potentiating environments involve frequent participation in shared activity (Rogoff et al., 1993, p.533) in which children or students take responsibility for directing those activities, as well as adults (Brown et al., 1993)" (Claxton & Carr, 2004, pp. 91-92).

As we reflect on the learning dispositions that are being strengthened for Max, we also need to be mindful of this unique setting that is providing "learning opportunities, affordances and constraints" (Carr & Claxton, 2002, p.12) and although Christchurch has been regarded as a place to be feared, it is also a place that is providing a powerful learning environment for young children like Max.

Earthquakes are just a moment in time for our ever changing earth. Christchurch has had its moment. Who will be next?



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**Carol Marks** is a facilitator in the Educational Leadership Project (Ltd), a provider of professional development for early childhood teachers in New Zealand.

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