

Children's understanding of natural hazards in Christchurch: reflecting on a 2003 study

David Johnston, Kevin Ronan and Sarah Standing revisit their 2003 study and reflect on its continued relevance 10 years on.



but there was a continuing need for hazard education that increased understanding of different hazard types, the impacts on the community and, in so doing, this would help improve further household preparedness. Further research in Christchurch prior to the 2010-2011 earthquakes highlighted some community awareness of the potential for damaging earthquakes but less understanding of their consequences, and low levels of household preparedness (Becker 2010).

The impacts of the 2010-2011 earthquakes on the community are complex and research is on-going. Numerous researchers are exploring aspects of the impacts on children, their role in creating the narrative of the earthquake, and role of schools in the response and recovery process (e.g. Taylor 2011 and Much 2013). Much of this research is still incomplete, unpublished or still being designed and implemented. Building on this early research done by Sarah and the rest of us, provides much of the evidence base to further develop effective school-based education programmes to help children and young people prepare for and respond to future hazard events.

References

- Becker, JS 2010, *Understanding disaster preparedness and resilience in Canterbury: results of interviews, focus groups and a questionnaire survey*. GNS Science Report 2010/50, 97.
- Finnis, K, Standing, S, Johnston, D & Ronan, K 2004, *Children's understanding of natural hazards in Christchurch, New Zealand*. *Australian Journal of Emergency Management* 19(2): pp. 11-20.
- Taylor, M 2011, *Year 11 geography teachers' response to the Darfield earthquake*. *New Zealand Geographer*, 67(3), pp. 190-198.
- Much, C 2013, 'Sailing through a river of emotions': capturing children's earthquake stories. *Disaster Prevention and Management* 22: pp. 445-455.

In 2003 Cobham Intermediate School student, Sarah Standing, teamed up with our research team as part of her school science project, to collect data on her fellow students understanding of natural hazards in Christchurch (Finnis *et al.* 2004). Using a questionnaire that had recently been used in an Auckland study, she surveyed over 100 of her classmates to investigate natural hazards risk perceptions, levels of preparedness and participation in hazards education programs. The results of the Cobham survey showed students had high awareness of many hazards, with over half ranking earthquakes as one of the two most likely. Over three quarters reported having felt an earthquake in the past.

The school had an on-going hazards education programme and students displayed good knowledge of corrective actions to take during an earthquake. Two thirds of the students identified 'drop, cover and hold' as an action to take during earthquake shaking. We concluded back in 2004 that the school had done well

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