

# Stories of Resilience and Innovation in Schools and Early Childhood Services

Canterbury Earthquakes: 2010-2012

June 2013





# Ko te Tamaiti te Pūtake o te Kaupapa

# The Child – the Heart of the Matter



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We welcome your comments and suggestions on the issues raised in these reports.



#### **Foreword**

The Education Review Office (ERO) is an independent government department that reviews the performance of New Zealand's schools and early childhood services, and reports publicly on what it finds.

The whakatauki of ERO demonstrates the importance we place on the educational achievement of our children and young people:

Ko te Tamaiti te Pūtake o te Kaupapa The Child – the Heart of the Matter

In our daily work we have the privilege of going into early childhood services and schools, giving us a current picture of what is happening throughout the country.

As Canterbury experienced the devastation of the earthquakes and their impact, the Christchurch ERO office temporarily suspended education reviews in the region. When our review officers started to re-enter Canterbury schools and services, they heard stories of innovative practices and lessons learned during and after the earthquakes. We wanted to capture these stories and share them with the wider education sector.

This report includes extracts from those stories. They speak of courage, resilience and professionalism. They are stories from which we can all learn.

Successful delivery in education relies on many people and organisations across the community working together for the benefit of children and young people. We trust the information in ERO's evaluations will help them in their work.

Diana Anderson

Chief Review Officer (Acting)

**Education Review Office** 

June 2013

#### STORIES OF RESILIENCE AND INNOVATION IN SCHOOLS AND EARLY CHILDHOOD SERVICES

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### Acknowledgement

To all the people who shared their stories with ERO – thank you for your strength, your insights and your practical know-how.

In memory of the 185 people who lost their lives as a result of the Canterbury earthquake on 22 February 2011.

# OVERVIEW

#### Overview

When Canterbury was struck by a severe earthquake at 12.51pm on 22 February 2011, staff in the education sector in the region rose to the challenges presented with great professionalism, courage and calmness.

Not one child, student or teacher who was in a school or early childhood service at the time lost their life or received serious injuries.

The stories in this ERO report illustrate what staff did at the time and what they changed later as a result of their experiences during and after the quake. The stories provide examples of the resilience and caring qualities of staff who put the safety and wellbeing of the children and students ahead of their own personal circumstances. In essence, the stories reflect ERO's whakataukī: *Ko te Tamaiti to Pūtake o te Kaupapa - The Child, the Heart of the Matter.* 

When relating their experiences, the leaders, managers and teachers emphasised how people came first. People were more important than procedures. Leaders in schools and early childhood services became role models for others. If the leaders stayed calm, then children, staff and parents were more likely to remain safe and calm. Pastoral care and wellbeing were the most important focus at the time of the immediate crisis and in the aftermath.

Schools' and services' emergency procedures needed to be flexible enough to be useful in a range of different, and sometimes unanticipated, situations. Managers and leaders subsequently suggested that everyone review their emergency procedures by considering how these might work in practice in various scenarios. They recognised that they often had to make quick decisions and change their plans along the way.

The need for detailed communication planning was identified by many staff in schools and early childhood services. They highlighted the need to make sure communications systems will operate even when people do not have access to an office, school/service computer or power. Parents need to know how they can keep in touch during and after an emergency. Everyone should have an emergency plan for picking up their children, staff and parents. Many schools and services made considerable improvement to their communication plans after the February 2011 earthquake.

Teachers found that getting children and young people back into learning helped to normalise the situation for children and their families. The school's and service's curriculum needed to be adapted to respond to the emotional and learning needs of their children and young people. Some schools and services had to quickly find ways to make

learning more 'portable', for example, with off-site learning hubs, learning at home, and connectivity between the teacher and the student to maintain continuity in learning.

The school was seen as a vital hub in the local community for not only the families attending the school, but also the wider community. Giving to others and connecting with the community was a very positive outcome of the crisis created by the Canterbury earthquakes.

The stories in this ERO report affirm the extraordinary work of all those people working in schools and services in Canterbury and beyond who were affected by the earthquakes.

#### Introduction

The earthquakes that struck Canterbury in September 2010 and in February, June and December 2011 had an immediate and significant impact on the provision of education in the region.

The following diagram illustrates the direct impact of the earthquakes and the aftermath.

Figure 1: The Canterbury earthquakes and their impact on education

#### **Major Canterbury earthquakes**

- September 2010
- February 2011

#### Schools and services closed

All schools and early childhood services closed immediately after these two quakes

#### Student and staff numbers

When the quake struck on 22 February 2011

- 150.000 students
- 10,000 staff were engaged in education.

# Damage to schools

In wider Canterbury, 215 schools were damaged by these two quakes.

# Within 12 days of the 4 September 2010 quake

- 99% of early childhood services
- 98% of schools had reopened.

# Within three weeks of the February 2011 quake

- 62% of early childhood services
- 84% of schools were operating.

## By 3 August 2011 - where were the students?

- 11,800 were enrolled in a different school from that in February 2011
- 6,700 had returned to their original school
- 4,700 were still at a different school

# Ministry of Education support for affected schools and services

- Assessing school property
- Arranging repairs
- Relocating students
- Providing bus services
- Funding and emergency grants
- Wellbeing resources for more than 180 schools and 250 early childhood services

During this time, many boards, managers, leaders and teachers in the affected Canterbury schools and services introduced new practices to help keep children safe and calm in their learning, while still managing significant property and resourcing issues.

Large numbers of families left Christchurch and their children enrolled, either permanently or for a short period, in neighbouring schools and early childhood services. Many of these schools and services also quickly responded with practical solutions to welcome and support newly enrolled children and their families.

In 2013 the number and intensity of earthquakes has continued to decline. Since 4 September 2010, the Geonet website has recorded over 13,000 tremors. Six shakes during 2012 were recorded as magnitude 5 along with many smaller shakes. The nature of the aftershock sequence has delayed rebuilding programmes and decisions about property and land.

During 2012, more early childhood services and school facilities were subsequently closed for varying lengths of time following detailed engineering evaluations. Some schools and services are still facing significant disruptions two years after the February 2011 earthquake.

#### **ERO** reviews in Christchurch

For most of 2011, ERO did not review schools or early childhood services in the earthquake affected areas in and around Christchurch. As ERO reviewers began returning to schools and services, they heard many stories of innovative practices and changes introduced in schools and services, which helped students, parents, teachers and communities to build resilience and enable children to feel safer and continue learning.

While listening to the stories from schools and services in Christchurch and beyond, it became clear that there were responses and solutions to the crisis that could provide useful learning for others in the wider New Zealand education community.

ERO decided to add a focus on resilience and innovation to its evaluation framework in Canterbury schools and early childhood services. The aim was to gather and share some of the learning that had taken place as a result of the natural disaster.

During Canterbury schools' and services' education reviews, ERO collected examples of innovative and successful practices that board members, managers, education leaders and teachers had used during the ongoing earthquakes.

Evaluation literature emphasises the importance of evaluating in times of disaster. In schools and services during the crisis, leaders and staff evaluated in real time how well their planned procedures were working and made changes during the events to ensure that everyone was safe. Many have carried out more formal evaluations following

the events of 22 February 2011 to find out what worked well and what needed to be adapted or changed for future use. The lessons learned can help other organisations to prepare for and manage potential crises.

Ritchie and MacDonald (2010)¹ reached the following conclusion about evaluating disaster and emergency management.

There is an old adage: 'to know what you know, and to know what you don't know, is to know'. Evaluation and monitoring of disaster relief can contribute to both what we know and what we don't know. Evaluation is a process that discerns what can be known with some certainty, and can help provide a clear vision of targets for the future.

 Ritchie, L.A & MacDonald, W. (2010) Enhancing disaster and emergency preparedness, response, and recovery through evaluation. New Directions for Evaluation. Summer (126).

#### Methodology

#### Information gathering

During schools' and early childhood services' education reviews conducted between January and August 2012, ERO asked if people would like to share information about how they had responded to the earthquakes since September 2010. Boards, early childhood service managers, school leaders and teachers were invited to tell their stories in any way they chose. Information was collected from 17 schools and 27 early childhood services. This report includes extracts from some of their stories.

The information collected included:

- self-review reports from schools and services
- PowerPoint presentations
- learning stories/assessment records from early childhood services
- interview notes from discussions with staff, students and trustees.

The stories recounted the ways that:

- emergency procedures had operated and been adapted in response to the situation
- staff had supported children's wellbeing and learning
- managers had supported staff and families.

Information was also gathered from discussions with school and early childhood associations, principals' associations, and the wider education sector. Reports and articles were also referred to from, for example, the PPTA journal, New Zealand Principal magazine, research reports, Canterbury Earthquake Recovery Authority (CERA), the Ministry of Education, and Kidsfirst Kindergartens' special earthquake issue.

#### **Evaluation framework**

When a school or service identified innovative or significant examples of practices they wanted to share, ERO used the following questions to guide their story:

- How well did your crisis management processes perform during and after the crisis?
- What innovations were particularly effective?
- What would you do differently next time?

Reviewers recorded the information under the following headings:

- Context/description of situation
- Things that worked well as a result of crisis management systems
- Improvements made or advice (learning) to share with other schools and services.

#### **Findings**

Four key themes emerged from the stories gathered about how schools and services had responded to the earthquakes. They are discussed in this report under the following headings:

- Keeping children safe
- Supporting children's learning
- Supporting staff and families
- Managing ongoing anxiety.

Most of the examples are particularly related to the Canterbury experience, but many of these ideas provide useful guidance for schools and early childhood services facing a range of crises or events.

Leaders and teachers have shared their stories so that people from throughout New Zealand can consider how well prepared they are and take steps to review and improve their systems and procedures.

#### Keeping children safe

The Canterbury earthquakes are different from many crises in that they are not

from many crises in that they are not a one-off event but a sequence that continued for over two years. Nevertheless, the

a one-off event but a sequence that continued for over two years. Nevertheless, the major earthquake of 22 February 2011, occurring as it did at 12.51pm, in the middle of a working day in the school term, and in the urban Christchurch area, provided the greatest challenge for staff in schools and early childhood services.

The larger earthquake six months earlier on 4 September 2010 occurred early in the morning when most people were still in bed. Because the epicentre was in a sparsely populated rural area, the impact of that earthquake was less severe for most schools and early childhood services than the one in February 2011.

The fact that no child in a school or service at the time was seriously injured by the

#### The day the quake struck

A principal describes the situation at her school immediately after the February 2011 earthquake. The school was situated at the foot of the Port Hills.

It was lunchtime when the earthquake struck. The children were all outside playing. The shaking was fast and intense. A rock fall on the cliffs behind our school happened immediately.

The children were covered in a cloud of brown soil and dust. The junior children near the back of the school struggled to see where they were going. This added to the panic. Duty teachers and many other adults rushed to the junior area to help the children get to the front of the school.

From my office and then the admin area I rang the bell. I could see children running across the front field to the fence. Others had run out the gates and across the main road. It was a natural flight instinct.

We usually assemble on the west side field above the car park but not that day. The number of children who had gathered in the front field by the fence made it clear very quickly where we were going to assemble.

2011 earthquake is a credit to the work of all staff in the education sector. Staff in Canterbury schools and services rose to the challenges of 22 February 2011 with great professionalism, courage and calmness. They stayed with children and young people until they were picked up, despite being unable to contact their own families or not knowing about the state of their homes.

In most cases, school students were on a lunch break, and therefore not in classrooms where earthquake drills would have been routinely practised. The usual response to an earthquake is the 'stop, drop and cover' approach. Similarly, in early childhood services, children are taught to turn 'turtle', drop to the ground, cover their heads and hold on to something if possible. In classrooms, students usually try to get under a desk and avoid exposure to window glass. The procedure usually finishes with an 'all clear' and lessons resume as before. In many cases on 22 February the emergency procedure could not be followed as practised because students were scattered around the school grounds.

Schools and services faced a number of different hazards depending on their situation. These included:

- rock fall danger for those near the Port Hills
- liquefaction in playgrounds, particularly in the eastern suburbs and near rivers, and, in some cases, flooding
- unsafe and collapsing buildings.

The disaster resulted in road closures and loss of power, water, and sewage services. The cell phone network was overloaded and unreliable for some time after the major earthquake.

You can never plan 100% perfectly for the unknown, but you can do your best. Every disaster is different, and will require you to make big decisions and on-the-spot responses. The best you can do is plan for most eventualities. (Christchurch principal)

#### What worked?

Here are some of the ways that schools and services responded immediately to the impact of the 22 February 2011 earthquake:

- School/service staff remained calm and reassured children in a variety of ways, for example, singing, reading, providing blankets, food and drinking water.
- Staff provided support for parents who arrived on site in an agitated or distressed state after the emergency so that they did not further distress children.
- Older children supported younger children and family members to give extra reassurance.

• Staff remained with children or took them to a safer place until someone arrived to pick them up, in some cases, many hours later.

A city primary school found that their communications system worked efficiently in contacting parents in the period immediately after the February 2011 quake.

The school was able to communicate quickly and easily with parents after the earthquakes using a smart phone, the school Facebook page and Twitter. When things go wrong you can get word out fast. This is quicker than maintaining an up-to-date parent contact list and sending a message to the whole list or groups on the list. Linking up with Twitter as well gives more options. Parents can receive the postings via the Facebook page, email, text or tweet. When schools lost power and access to school computer systems, a smartphone already set up with emergency information was an essential tool.

Several early childhood services found that their emergency procedures worked very well, despite the hazards faced on the day. Here are some examples:

Children responded to the February earthquake by following the procedures learned in the 'Turtle Safe' programme. When the shaking stopped, teachers gathered the children inside around the ellipse, comforted them and kept the atmosphere positive by singing songs and reading nursery rhymes. The room was dark as power was out. Liquefaction which had filled the under two-year old children's playground was starting to come inside, so children were evacuated to the car park. Teachers continued singing as parents began arriving. Liquefaction then reached the car park, so children were gathered together and evacuated to a neighbour's raised deck using the civil defence safety rope as water was flowing. Children were given fruit, blankets and books.

(City education and care service)

The procedures that were already in place worked well on the day. Children had practised the emergency drills regularly and were familiar with them. Although the power and phone were out, the emergency preparedness kit contained a transistor radio which proved valuable and the centre had a plug-in landline, so parents could still phone in. In the next few weeks, staff left updated messages on the answer phone to let parents know when the centre would be re-opening.

(City education and care service)

The supervisor placed herself at the entrance to the centre to support parents as they arrived to pick their children up. She reassured all parents that everyone was safe and no one was injured. Only one parent had to be calmed down before going to see her children. (City education and care service)

Visiting teachers from a home-based service were able to contact home educators and families using their cell phones. When cell coverage was unavailable, they were able to quickly access their Facebook page as all educators were 'friends' on the page and were able to keep in touch that way. (Home-based education and care service)

#### Changes made as a result

Many schools and early childhood services reviewed and updated their emergency procedures after the main crisis. Some of the improvements they reported included:

- developing better systems for accessing information, such as attendance registers and parents' contact details, for when they could not access the office, computer system and files, and had lost power
- improving processes for communicating with parents, often using texting, Facebook, school website and Twitter
- making changes to emergency procedures, including more flexible evacuation points they could use if buildings or land are unsafe
- encouraging each family and staff member to have a plan for who will pick up children following a major emergency.

The following examples illustrate some of the changes made after schools or services reviewed and refined their emergency procedures.

#### **Schools**

Teachers now have clipboards with names and contacts for all children on the class roll. Parents have been given a cell phone number for text communication with the schools, and an outline of ongoing responses and procedures for future events. (Small rural school)

We had to change the location for our school-based emergency assembly area and our higher ground tsunami evacuation point. We have practised both these with the children. We have prepared a wheelie bin with all our emergency requirements in it locked to an outside location so that even if we have to leave the buildings with nothing we still have what we need in an emergency. We have planned for a better system of signing out children when they are collected after an evacuation. We are stricter about signing visitors in and out and plan to take the visitors' book outside with our other class and staff lists during an evacuation.

(Primary school in seaside suburb)

High-visibility vests have been purchased for all staff – orange ones for teachers and yellow for support staff – to wear on duty during an emergency. All teachers have been supplied with a whistle, and children will be taught that a short blast of the whistle means stop, look, listen.

(Large city primary school)

The school has drawn up a 'flight path to re-opening' in the event of any future closures. This involves carrying out checks on the property, water supply, drainage and power. The school now has several earthquake kits, all of which include water supplies, tarpaulins, first aid resources, cell phone with internet and text SMS access, solar powered radios, hand sanitizer and biscuits.

(Large city primary school)

All parents now have to nominate three people who can be contacted to pick up their children in an emergency. Everyone now knows where the emergency lists and files are kept and can access them in a variety of ways. Systems for communicating with parents have improved with access set up to multiple networks, mobile and landline telephones and internet to provide immediate information.

(Large city intermediate school)

#### Early childhood services

The centre's communication provisions and systems have been improved. One of the managers has a data stick with all family contacts in case of an emergency, and phone messages can be accessed remotely. The centre has also set up a Facebook page for information sharing and updates following aftershocks.

(Education and care service)

Staff could not access their offices for some time after the February earthquake, and luckily one visiting teacher had her own folder, containing a copy of the staff manual with her. All educators and visiting teachers now have a similar folder which they keep at their homes. The manual has been updated to include all educator and parent contact details.

(Home-based education and care service)

The centre has been working on developing a new portable civil defence kit. The Playcentre journal contains a list of items to have in this kit, including a torch and radio provided by the local Playcentre Association. It also has an annual 'check and renew' list for these supplies, tips on how to keep children safe and happy, and lists of other resources and where these are located in the centre.

(Playcentre)

Text and email communication have worked well, especially as most families left the area immediately after the February earthquake. Because the centre's web provider is located in North Canterbury, updates could be made even when the centre and licensee were without power. The centre now has plug-in phones.

[Early childhood centre in seaside suburb]

The parent company improved its internal system for contacting centres and parents. They will do so through the North Island office if the South Island office is out of action. The centre now holds more regular earthquake and evacuation drills, and also keeps emergency equipment in the outside shed, where it can be retrieved without entering the main building.

[Education and care service that is part of a national organisation].

#### Supporting children's learning

Immediately after the September and February earthquakes, all schools and early childhood services were closed. After the February event, it took three weeks or longer to open schools and early childhood services again. Some providers were not able to reopen on their own site but shared facilities with other schools or used community facilities.

Four schools were still site sharing at the end of 2012 and one was operating on a borrowed site. Twenty one early childhood education services had been permanently closed and a further nine were operating from temporary premises.<sup>2</sup>

Particular challenges were faced by secondary schools which were site-sharing. As a consequence of the shortened school day and the compression of lessons into shorter periods, students may have covered fewer curriculum topics. Despite this, students across greater Christchurch achieved some of the best National Certificate of Educational Achievement (NCEA) results in New Zealand in 2011, with some schools reporting an increase of up to 15%. The Chief Executive of the New Zealand Qualifications Authority (NZQA) stated that this was not the result of the special 'Earthquake Exemption' derived grades process introduced for course endorsement for 2011 but a "testament to the students, their teachers, principals and parents".<sup>3</sup>

Across the education sector additional demands were placed on leaders and managers who kept their schools and services operating through extraordinary circumstances. Many were personally affected by the earthquakes but provided support to the students, their families, staff and communities. Staff regularly put the needs of the children and students before their personal worries and situation. Some of the stories shared with ERO described the immediate steps taken to keep children and young people learning, while other stories described longer term changes.

#### What worked?

The following key factors contributed to successful outcomes for children's learning despite the many challenges leaders and staff faced:

- leadership that put children's wellbeing and learning at the heart of the school's focus
- developing a curriculum that was responsive to the learners' experiences
- creative use of information and communication technologies (ICT) to support learning at home and in off-site learning centres
- flexible use of time during and beyond the 'school day'
- effective collaboration with other learning institutions.
- 2 Retrieved from http:// shapingeducation.govt.nz/
- 3 Retrieved from www.stuff.co.nz/ the-press/news/christchurchearthquake-2011/6261376/ Christchurch-pupils-achieve-bestresults

In some cases, parents and teachers worked together to maintain children's learning while schools were closed.

Staff decided to set up a learning hub at a local church. Teachers willingly worked long hours at weekends to set up new classrooms at this hub, so they were ready for the students. The school focused on making learning fun. Nearly every teacher set up a blog site listing activities and learning. The blogs and learning hub worked well, with lots of communication between the school and parents. Initially the hub was more like a drop-in centre, but then the Ministry of Education helped with resourcing. (A seaside primary school, closed due to rock fall danger)

Some schools adapted their curriculum and added new programmes in response to the emotional stress experienced by children.

After the quake, an arts therapist living locally worked with all classes on safe environments and did one-to-one counselling with children. A music therapist set up an office in Lyttelton for children and families. The Loons (a local drama company) did a drama production with the senior students on their earthquake experiences. The play was staged on the Volcano restaurant site (building had been demolished) where tents, containers and seating had been set up. The play was developed around the concept that the only children left were two rival groups of children, with one supply of water guarded by the enemy. Children loved the play and found it therapeutic and fun to mime and explore their emotions in this way. The school paid for these initiatives at first but then organised funding through three charities to refund the school account. The principal considered that all these additional learning experiences were beneficial to the children in the circumstances. (Primary school in a port town)

Immediately after the February earthquake, many families moved away to small towns and rural locations where they may have had family connections or felt safer. One school in Central Otago had five extra classes of Christchurch children for a few weeks.

A total of 160 children came to our school from Christchurch after the February earthquake. The initial goal was to welcome and integrate new students and listen to children's and adults' stories. The principal decided to establish separate classes for the Christchurch students as they needed a modified programme that both distracted and engaged them. Many of the students' records were unavailable and our school did not request them.

Programmes focused on oral language, retelling experiences, practical art, and education outside the classroom. Local teachers were engaged along with a teacher from Christchurch whose school was closed. Christchurch parents were made to feel very welcome in the school and community. Many helped in the school with playground supervision, while others came to the school for mutual support and to be assured that their children were safe and secure. The Ministry of Education was very supportive with funding and staffing. (Central Otago primary school)

Other schools in Canterbury, especially on Banks Peninsula, found that their rolls doubled as Christchurch families moved to holiday houses in the area. Most Christchurch students left their 'temporary' school within two weeks, but some stayed for up to two terms. In one case, the country children interviewed the city children, and these interviews were videoed and shown to parents. Friendships were formed, many of which continued after the city families returned home.

Another school hosted families staying on the adjacent marae, an emergency accommodation point. The roll increased by 40 percent for a time. Some of these children were from the local hapu and had returned to stay with whānau while their parents worked in Christchurch as part of the crisis team for Māori. The physical location helped the children feel safe as it is in a rural area with no tall buildings. Learning programmes were designed to let them experience being home in their own rohe. The school provided a lot of manaakitanga and pastoral care. Whānau members did not want to be far from their tamariki but saw the benefits of children being engaged in motivating learning experiences.

One secondary school found that some of the changes forced on them as a result of site-sharing with another secondary school suited the boys' learning needs well. When they moved back on their own sites, several schools continued with modified timetables and a different 'school day'.

Throughout 2011, while site-sharing with another secondary school, the curriculum and overall organisation were made flexible, and adapted in response to students' ongoing needs. For example, the school began holding tutorials and co-curricular activities in the morning, and adapted a 'module' approach to learning. These changes have worked well for students, and leaders have taken them on board so they influence ongoing decision-making. From the experience of the earthquake crisis and subsequent upheaval, the staff and leadership team have learned that education does not necessarily have to take place on only one site, and that the school day can be modified if necessary. (Single sex boys' secondary school in east side of city)

Several secondary schools reported that they had developed their management systems to improve off-site access to learning while the school was closed and afterwards. The school's website, intranet, Facebook and blogs were used to maximum effect to maintain learning continuity across all subject areas and enable students to communicate easily with their teachers about their work. Course resources were provided online and students were able to submit and receive feedback on their work when face-to-face contact may have been more challenging.

Several stories included examples of teachers using the earthquakes as a theme or topic in the curriculum. One described how children practised multiple evacuation plans, such as how to avoid tsunami threats when the planned escape route is 'falling down'. This approach was particularly evident in early childhood services, as the following examples illustrate.

Teachers have practised earthquake drills but have not instigated discussion about the quakes. Instead they have provided opportunities for children to talk about their experiences and have reaffirmed that they are safe and that the preschool is not damaged. Many children have been using play as a way of expressing their feelings and understandings. Teachers have encouraged this with a positive approach. (City education and care service)

Resources are available for children to 'act out' their earthquake stories, for example they still pick up clipboards and pencils when someone is inspecting the building or grounds. (City education and care service)

Children's learning stories reflect the earthquake experiences. Teachers wrote a 'Shaky Time' narrative for each child after the February earthquake and invited parents to contribute to follow-up stories written a year after the September 2010 earthquake. Teachers commented: 'Our children have learned a lot over the last year and have shown us how resilient they are to change. We now see a lot of play in our classroom around earthquakes as children have a wide knowledge and understanding about them. We have also fallen in love with Stan of the Turtle Safe DVD who teaches us how to be safe when the earth starts to shake. (City education and care service)

Centre parents recognise the importance of allowing and enabling children to play out their stress associated with a disaster. (Playcentre)

#### Supporting staff, families and the local community

Chief Science Advisor, Professor Sir Peter Gluckman, commented on the psychological consequences of the Canterbury earthquakes. He stated that community engagement and empowerment are essential to speed up psychosocial recovery after the Canterbury earthquakes.<sup>4</sup> The greater Christchurch Recovery Strategy notes the need to grow capacity, knowledge and skills within the community to build resilience. It suggests delivering services, such as education, that are collaborative, accessible, innovative and flexible.<sup>5</sup>

Many stories ERO gathered told of closer relationships between schools and their communities as a result of the crisis. Communities identify with their schools, particularly with schools that welcome their input and collaboration, and provide access to facilities. Resources were delivered to schools. Staff and parents helped deliver them to their community. The identities of communities and schools are often closely intertwined: good local schools can have a positive impact on how people feel about their neighbourhood.<sup>6</sup>

The role of the school is critical in providing stability and rebuilding students' lives and the local community. (Christchurch principal)

Effective strategies contributed to the recovery by:

- building mental resilience and flexibility
- helping people to share experiences, feel part of the community, and use others as mentors
- helping people to find meaning, hope and purpose.

#### What worked?

Here are some of the approaches taken by schools, services and the Ministry of Education to support Canterbury communities:

- Maintaining a focus on people throughout the crisis and beyond
- Developing strategies for identifying those most at risk and putting in place support as needed
- Welcoming the community into the schools so that the school becomes the community hub.

The Ministry of Education provided a range of effective support for school and early childhood services. As part of the earthquake response strategy, a position was created for a principal to provide support for the most affected schools in an advocacy role. The full-time position was funded by the Ministry of Education and the seconded principal worked closely with the Canterbury Primary Principals' Association (CPPA) and the teachers' unions. This was part of the wellbeing strategy that was a joint project of several agencies, disaster researchers and sector groups.

- 4 Gluckman, Professor Sir Peter, Prime Minister's Chief Science Advisor (May 2011), News release, Psychosocial consequences of the Canterbury earthquake
- 5 http:/cera.govt.nz/recoverystrategy/overview
- 6 Ministry of Education and Tertiary Education Commission (2012), Shaping Education, Directions for Education Renewal in Greater Christchurch, p. 11

Another useful resource was a Ministry of Education website for earthquake support. It provided five steps to wellbeing: give, keep learning, be active, take notice and connect. The theme was: respond, recover, renew. Leaders in schools and early childhood services reported very positively about the support provided, such as pastoral support, earthquake counselling, resilience presentations, the website and the extra personnel available.

Some schools set up new processes for supporting families who may have been at risk and for reconnecting families with the school after closure. Schools have seen the importance of maintaining effective communication with parents during and after a crisis.

Communication and community links have been strengthened though the crisis. The school has increasingly focused on pastoral care and on getting parents more involved in the school. This has led to the establishment of a pastoral care committee and the appointment of 'patron parents' who provide support for other parents. (Catholic primary school in a seaside suburb)

When the school was closed, we maintained communication with families and staff by phone, text/SMS, and online through the school's website. The school held community events, such as games' afternoons and cleanups which helped build connectedness and resilience. After reopening, we set up a pastoral register, surveyed staff, students and parents, and put programmes in place to support them, with help from external sources, such as the Social Workers in Schools service. Coffee mornings provided a forum for parents to air concerns and receive support, and for professionals, such as a volunteer from Save the Children, to speak with parents. (Large urban primary school)

A text tree has been developed to improve communication with parents in a crisis. As the tsunami threat is more real now that the earthquakes are more frequently offshore, a gate has been put in the fence between the school and the golf course so that staff and students can move more quickly to higher ground. Students know to go to one of their fellow pupil's house as it is out of tsunami range. This has strengthened relationships between the school and its local community. (Small rural primary school)

The school has accessed funding for parents and families who are in need. It has also opened its doors to other community organisations that have needed help. Since the earthquake, the school has been hosting a preschool community playgroup and a weekly Plunket group. (Primary school in a port town)

One school developed a mutually beneficial relationship with a road crew that was repairing infrastructure outside the school.

The staff and students developed a relationship with a road crew repairing the surrounding streets. The school invited the crew to use school facilities, and provided them with some refreshments and parking for their vehicles in the weekend inside the school's security system. The interactions led to the road crew providing some playground repairs at no charge as gratitude for the school's hospitality. Children were fascinated by the large machinery and the work of the road crew. (Primary school in the eastern suburbs)

In Lyttelton, the schools became a very important part of the community as few other services were available. For a time, the town was isolated from the city as the tunnel to Christchurch was closed and rock fall dangers affected road transport. Giving back to the community became a focus, helping people to remain active and feel connected.

The school became the community hub, as so many buildings in Lyttelton had been damaged beyond repair and there was no civil defence centre in the town. School staff freely gave their time to the 'time bank' and 'bank of people' concepts, to share out food and other sources of help in the community. Teams of staff assisted the school community with manual labour, food and childcare in the time immediately after the earthquake. The principal supported a bereaved family who could no longer access their home and accessed funding for families who were in need. The school played a major role in providing information for the response through its database and website. (Primary school in a port town)

In central Otago, the local community supported the refugee children and parents with clothes, outings and food. Relationships between the Otago school and its community were strengthened as a result.

Early childhood services told stories about different ways that the staff had supported families and the community, and relationships that were strengthened as a result.

For example, one parent did not want to go home on 22 February 2011, as her husband was working in central Christchurch as a firefighter. Against the organisation's policy, an educator had this parent and her child stay with her until they felt safe to go home. (Home-based care service)

In some cases, new links were forged with the community.

There has been a significant change in the local community since the earthquakes. Some families left and others suffered many stress-related

issues. A number of parents stayed at kindergarten during the worst times because they did not feel safe and did not want to leave their children. With all the changes, we have worked hard on making links with the whole community. We have asked parents to contribute in a number of ways, including cultural events, reviews, excursions, and maintenance, as well as in the daily programme. Parents and whānau now come to us with information, cultural events and family skills they want to share with us. This has resulted in the kindergarten becoming a centre for learning for the community and the community gaining a sense of belonging and ownership with the centre. (Urban kindergarten)

#### Managing ongoing anxiety

Teachers, students and families had to cope with multiple issues and difficulties from September 2010. The greatest loss was family members, friends and work colleagues. The next greatest loss was income and financial security as many businesses lost their premises, or jobs were lost or became insecure. Another great loss was homes, many of which were uninhabitable or not able to be repaired, mostly in the eastern suburbs, hill areas and around Kaiapoi in North Canterbury.

The stresses caused by bereavement, loss of jobs and homes continued over a long period of time. Professor Sir Peter Gluckman, Chief Science Advisor to the Prime Minister, described the experience as 'chronic stress ... imposed by the ongoing human, economic and social costs of the earthquakes'.<sup>7</sup>

In the education sector, students and teachers experienced interruptions to schooling, closures, relocations, and reduced access to educational resources and facilities. Gluckman observed that younger children can exhibit 'fear of separation, strangers, withdrawal or sleep disturbances'. Teachers noticed some children getting anxious or having trouble letting their mother leave. Routines were often quite disrupted, especially when children were not staying in their own home or the school had moved. A study of the children after Hurricane Katrina in the United States in 2005 found that children were nearly five times more likely to suffer serious emotional damage and long-term stress symptoms resulting from the event than adults.

Teachers supported children who exhibited a range of emotional responses. One principal reported that a psychologist told him that up to 50 percent of children who might have gone on to suffer post-traumatic stress disorder avoided it due to the calming actions of teachers. In feedback to the Canterbury Earthquake Recovery Authority (CERA) from focus groups, some submissions acknowledged the excellent work teachers and principals had put into providing for their children and helping to keep communities together.

7 Professor Sir Peter Gluckman. The psychological consequences of the Canterbury earthquakes – A briefing paper. 10 May 2011

The following examples highlight the stress symptoms shown by children and the different ways educators managed the situation:

The principal and teachers have noticed increased behaviour problems amongst students after each major earthquake and aftershock. The wider community has provided significant levels of support and donations to the school. (Small city primary school)

Many students remained anxious for the rest of the year. Some had to sit by the door, while others needed to have a cell phone on their desk. A counsellor was employed for three hours a week throughout 2011. (Large city intermediate school)

Affected students in need have been offered free one-on-one therapy with the arts therapist, and respite trips. The principal supported a bereaved family who could no longer access their home, organising therapy, clothing, toys and games for the family.

(Primary school in port town)

The boarders received strong, consistent pastoral support. For example, staff sometimes stayed up all night with girls who were upset by earthquake events. Staff maintained close communication with students and their families, and acted quickly to organise replacement accommodation, meals and other necessities. They also provided a wide range of enjoyable activities aimed at building trust and support, and ensured that senior girls were easily accessible to junior girls, particularly during the nights. Among both boarders and other students, peer support has been significantly strengthened, especially in the way senior students support juniors. (City secondary school - boarding hostel)

Staff in some kindergartens reported very positively about the support provided by the Ministry of Education trauma team.<sup>8</sup>

The trauma team specialists talked to teacher and parent groups. The presentation included information about the ways people respond to trauma, how to acknowledge it, methods of coping and how to process what happened so that adults' fear and anxieties are not passed on to the children. The trauma team pointed out the range of normal reactions, such as sadness, fatigue, sleeplessness, headaches, social withdrawal and a sense of powerlessness. Children's issues might include nightmares, bedwetting, clinging, immature behaviour and reduced concentration.

<sup>8</sup> Source EQ7.1.Special Earthquake Edition of Kidsfirst Kindergartens newsletter.

The Ministry of Education website provided some practical guidelines for supporting children through a crisis, and these included:

- following normal routines as much as possible
- accepting a child's feelings
- emphasising family togetherness

And, above all, allowing children to get on with being children through play and laughter. (A kindergarten association)

A kindergarten association appointed an earthquake recovery facilitator to support teachers and parents in their work with affected children. Children identified by teachers or parents as having significant changes in behaviour as a result of the earthquakes were referred to child and family psychologists through relationship services, or were supported using individual plans. The facilitator recommended that teachers also developed self-care plans to monitor and manage their own stress levels throughout the recovery process. She emphasised that teaching and learning was still at the heart of what teachers needed to focus on. Many of the goals in *The New Zealand Curriculum* and *Te Whāriki* help children to develop resiliency.

Another preschool described how it had managed children's ongoing anxiety.

Some children have struggled with taking part in earthquake drills. As a result, staff and parents now warn the children that they are going to practise the drill, but call it "being turtles" rather than using the word "earthquake". (City playcentre)

The owners have increased the staffing ratios, and provided professional development and team building to get staff from the two centres working more collaboratively and cohesively to support children emotionally. As part of the healing the staff and children have laid a time capsule in the carpark. (City education and care service)

Teachers and managers in one service spoke of focusing on 'settling' and building relationships with new families who began to attend the service in significant numbers. Most of the families had previously attended other local services which had closed after the February 2011 earthquake. Some of these families had lost their homes and brought with them the stresses of displaced families. One family opted to keep their son at kindergarten after he turned five because they didn't think he would cope with school.

Teachers in another kindergarten tried to shield children from adult conversations about trauma by having these conversations in private and by moving parents away from children's hearing while they were sharing emotions.

#### Advice for other schools and services

Managers and leaders in schools and services suggested that everyone review their emergency procedures by considering how these might work in a range of different scenarios.

A leader in one school highlighted the lessons they had learnt and the need to be well prepared:

The school has learned some lessons from their own experience, and from research into disasters and post-traumatic stress syndrome. Three core elements are effective in giving people the ability to cope:

- mental resilience and flexibility
- sharing their experience with the community and/or mentors, and
- the ability to find meaning or hope and purpose.

When disaster strikes, it is too late to start thinking about improving processes and setting up communication channels. (City contributing school)

Members of the Canterbury Primary Principals' Association shared the need for people to think about the implications a disaster might have on their community. They stressed the need for leaders and managers to look after the people first in a disaster. They also asked that leaders and teachers consider and respond to the following questions:

Do you have good communication systems?

- Does your association have good communications channels they can use with other members of the education community?
- Have you established the necessary emergency checks?
- Are your risk management procedures robust, regularly reviewed and understood?

Advice suggested by managers and educators in early childhood services included the following:

- Keep emergency procedures short and simple so they are easy to remember.
- Think about storing your emergency supplies in a backpack somewhere near your emergency exit.
- Make sure everyone is aware of who is in charge all the time, even when the head teacher is away from the service.
- Have regular earthquake and evacuation drills.
- Check to see if your environment is safe and gives children somewhere to be safe near windows and hazards.
- Make sure your communications records are up-to-date.
- Have an emergency cell phone handy at the service.

The Christchurch ERO team was also affected by the earthquakes as the Pyne Gould building collapsed on 22 February 2011, and ERO occupied Level 3 of the building. All the staff members who were in the building at the time were rescued. However, the emotional impact of having colleagues trapped and injured as a result of the collapse, and the subsequent physical loss of office space, files and equipment caused disruption to the office for some time. ERO gained strength from the whakataukī: He tangata, he tangata, which reminded us constantly that it is about people, people, people.

Leaders and teachers from a kura shared the following whakataukī with reviewers:

Ki te kotahi te kākaho ka whati ki te kāpuia e kore e whati

When reeds stand alone, they are vulnerable but bound together they are unbreakable.

This proverb by the late second Māori king, Kīngi Tāwhiao sums up what was important at the time of the crisis – being together and working as a community was more effective than trying to act as individuals.

#### Appendix 1

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