# HIGH EXPECTATIONS, LOW RECOGNITION: THE ROLE OF PRINCIPALS AND TEACHERS IN DISASTER RESPONSE AND RECOVERY IN THE ASIA-PACIFIC. [Submitted pre-print version]

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#### **ABSTRACT**

This chapter is drawn from the author's research over several years across five Asia-Pacific settings examining the role of schools in disaster response and recovery. The settings include two developed nations (New Zealand and Japan) and three developing nations (Nepal, Samoa and Vanuatu). The events include earthquakes, tsunami and cyclones. Participants include principals, teachers, students and parents who participated in semi-structured interviews, focus groups and arts-based activities. The article draws mostly on interviews with principals and teachers. It argues that because schools are located in centres of population and responsible for the wellbeing of children in their care, they are automatically engaged in all phases of the disaster cycle and need to be considered as such. I will highlight three findings from my study. First, in the immediate aftermath, principals and teachers made their responsibilities towards their students the highest priority. Second, post-disaster, despite often being victims themselves, their focus was on schools remaining places of safety, calm and support for their students, families and communities. Third, schools continued to play an important role in assisting students, families and communities through the long-term repercussions of the disaster. Yet, despite the valiant efforts of principals and teachers throughout the disaster response, recovery and reconstruction phases, they were rarely acknowledged by anyone other than their students' parents and local community members. This chapter aims to bring their service in post-disaster contexts to wider attention.

Keywords: schools, communities, disaster response, disaster recovery, Asia-Pacific

#### INTRODUCTION

In 2010/2011, the author was caught up in the devastating sequence of earthquakes in her hometown of Christchurch, Canterbury, New Zealand. The earthquakes themselves have been well-documented (see, for example, Aydun, Ulusay, Hamada & Beetham, 2012; Bannister & Gledhill, 2012; Canterbury, Earthquakes Royal Commission, 2012; Education Review Office, 2013; Potter, Becker, Johnston, & Rossiter, 2015; Thornley, Ball, Signal, Lawson-Te Aho, Rawson, 2013). Although the damage amounted to over 40 billion dollars, this disaster was only one of many to hit the Asia-Pacific region in the last decade (see, for example, Ferris & Petz, 2012; Ferris, Petz & Stark, 2013). What these disasters have in

common, apart from their general location in the Asia-Pacific, is that they hold some of the common misconceptions about disasters up to scrutiny. The 2010/2011 Canterbury earthquakes and the 2011 Japanese triple disaster were discussed in the report, *The year that* shook the rich (Ferris & Petz, 2012), highlighting that disasters do not just impact underdeveloped countries with limited economic and political stability but also wealthy, well-resourced nations with strong infrastructure. As the report states, "high-impact lowprobability events can overwhelm the best prepared society" (Ferris & Petz, 2012, p.xi). Scientists and researchers predict that the effects of climate change will increase the frequency of unexpected and major events from extreme weather events, sea level rise and environmental degradation (Back, Cameron & Tanner, 2009; Dixon, 2017; Intergovernmental Panel on Climate Change [IPCC], 2018; Pittock, 2017; United Nations International Strategy for Disaster Reduction [UNISDR], 2009). The 2012 Brookings Institute report (Ferris & Petz, 2012) concludes that we need to be prepared for a "newnormal" where a "once-in-a-century" disaster becomes a "once-in-a-generation" and new greater "once-in-a-century" disasters will overwhelm our current state of readiness and understanding (p. xii). It is no surprise, therefore, that the current focus for global disaster agencies is on improving disaster preparedness in order to lessen the catastrophic effects of these new mega-disasters (Ferris & Petz, 2012; Global Alliance for Disaster Risk Reduction in the Education Sector [GADRRRES], 2017; Ranghieri & Ishiwatari, 2014; UNISDR, 2009). What this chapter argues is that, as part of disaster planning and preparedness, it is important to revisit aspects of prior disaster response and recovery efforts that worked effectively and to build these into future considerations. While this chapter cannot cover all the events of the last decade in the Asia-Pacific, it focuses on the author's research across five different countries and three different disaster types in order to highlight an underresearched and mostly unacknowledged force in positive disaster response and recovery – the local school.

After beginning a project in 2012 to document the stories of schools in post-earthquake Christchurch, I found myself invited to share the findings and conduct research post-disaster stories in other schools in the region, namely, post-tsunami schools in Samoa, post-earthquake and tsunami schools in Japan, post-cyclone schools in Vanuatu and post-earthquake schools in Nepal. In this article, I share a qualitative comparative cross-case study of fifteen schools across the five settings – two developed countries and three developing countries – and then argue that the roles played by schools in disaster events are worthy of stronger consideration. First, I briefly synthesise some of the key literature relating to schools and disaster events. Next, I discuss the theoretical and methodological frameworks underpinning my research across the five settings. The findings are presented as three cross-country themes drawn from the analysis. In the discussion section, I argue that while there are high expectations for the roles that schools will, and do, play, schools are not well-supported to prepare for, or undertake, these roles. And, when their post-disaster roles are successfully concluded, the role of schools in disaster response and recovery is largely unacknowledged.

#### LITERATURE REVIEW

Disasters are described as the consequences of events triggered by natural hazards or human interventions that overwhelm the ability of local response services to manage or contain the impacts. Disasters are large-scale events, which seriously affect the physical, social and economic structure of the region. They are characterised by suddenness or lack of preparedness, unexpectedness of the size of the event and ensuing damage, and the inability of existing systems to cope. There is often large-scale death or dislocation, and a lack of immediate access to food, water, shelter and medical aid (Back et al., 2009; Ferris & Petz, 2012; Mutch, 2014a; Smawfield, 2013; Tatebe & Mutch, 2015; Winkworth, 2007).

An examination of the relevant literature demonstrates that schools figure in all phases of the disaster process (Tatebe & Mutch, 2015). As schools are places of education, they include disaster-related content in their curricula and undertake evacuation drills (Mitchell et al., 2013; Tatebe & Mutch, 2015; UNISDR, 2007; Wisner, 2006). They play a part in community and family awareness of hazard awareness and disaster mitigation (Mitchell et al., 2013; Tatebe & Mutch, 2015; UNISDR, 2007; Wisner, 2006). Schools also contribute to building community cohesion and connectedness which, in turn, enhances community resilience in times of disaster (Callaghan & Colton, 2013; Direen, 2016; Duncan 2016; Education Review Office, 2013; Mutch, 2014b, 2016, 2018a). Schools have both the physical facilities and, depending on the circumstances, the personnel to respond quickly to an emergency (Mutch, 2014a, b, 2016; Smawfield, 2013; Winkworth, 2007). Should a disaster event ensue, schools are well placed to play a wide range of roles as immediate response and relief sites, communication centres, supply depots and support agency hubs (Direen, 2016; Mutch, 2014b, 2016, 2018a). As places of pastoral care, they have staff, or can access appropriate personnel, with the skills and knowledge to attend to the complex social, emotional and psychological needs of children, young people and their families in post-disaster contexts (Gibbs, Mutch, O'Connor & MacDougall, 2013; Johnson & Ronan, 2014; Lazarus, Jimmerson and Brock, 2003; O'Connor, 2014; O'Connor & Takahashi, 2013; Mutch & Gawith, 2014).

Table 1 is reproduced from an earlier publication (Mutch, 2014a) in which a comprehensive literature review analysed over 50 international sources relating to schools and disasters. It synthesises the role of schools in disaster preparedness, response and recovery at three levels: (a) supporting their wider community: (b) activities within the school itself; and (c) looking after the physical safety and social, emotional and psychological needs of the children and young people in their care.

Table 1. The role of schools in disaster preparedness, response and recovery

|                                 | Preparedness   | Response  | Recovery   |  |
|---------------------------------|--|---|--|--|
| Community                       | Schools as part of<br>the disaster planning<br>and preparedness<br>process         | Schools as relief<br>centres and<br>community<br>response and<br>communication hubs | Schools as<br>community drop- in<br>and re-bonding<br>centres  |  |
| Schools                         | Schools as sites and facilitators of preparedness learning and activities          | Schools as first<br>responders or post-<br>event<br>response centres                | Schools as pastoral care and agency hubs for staff, students and families                                |  |
| Children<br>and young<br>people | Schools as sites of integrated disaster learning inside and outside the curriculum | Schools as first<br>responders and<br>places of calm and<br>security                | Schools as screeners<br>of severe responses<br>and facilitators of<br>appropriate<br>recovery activities |  |

Source: Mutch, 2014a, p.19

In conclusion, schools play a significant part, depending on the size and nature of the disaster, in response and recovery efforts. The role of schools as the 'glue' that holds a community together through these phases is a strong feature of the literature (Direen, 2016; Duncan, 2016; Education Review Office, 2013; McDonald, 2014; Mutch, 2014a, b; O'Connor & Takahashi, 2013, Shirlaw, 2012; Smawfield, 2013; Winkworth, 2007). In this chapter the focus is on the multiple roles played by principals and teachers immediately after the disaster, and over the short and long term recovery processes as they supported their communities to come to terms with the enormity of the event.

# THEORY AND METHODS

The theoretical approach to this study was grounded in the notion that our experiences are viewed through social, historical and cultural lenses (Burr, 2005). Rather than seeking to establish the facts, this approach focuses on how the participants construct narratives of their lived experiences (Denzin & Lincoln, 2011) and how they make sense of the events in order to absorb them into their own personal histories (Gibbs et al., 2013). Storying disaster experiences has proved to be beneficial to the emotional and psychological recovery of disaster survivors (Appleton, 2011; Bonanno et al., 2010; Cahill et al., 2010; Gibbs et al., 2013; Mutch, 2013a; Peek et al., 2016; Salloum & Overstreet, 2012). To this end, the researcher used a range of qualitative and open-ended methods to allow participants to express their feelings and construct their narratives. With children, arts-based methods, storytelling and video-making were used (see, Mutch, 2013a). The focus in this chapter, however, is on the stories of the adults involved, primarily principals and teachers. With adults, the main data gathering method used was semi-structured interviews. Because of the post-disaster context, it was important to build a relationship of trust before data gathering Cite as: Mutch, C. (2022). High expectations, low recognition: the role of principals and teachers in disaster response and recovery in the Asia-Pacific. In H. James, R. Shaw, V. Sharma & A. Lukasiewicz (Eds.), Risk, Resilience and Reconstruction: Science and Governance for Effective Disaster Risk Reduction and Recovery, pp.147-173. Palgrave McMillan.

could begin. This meant prior visits to the locations to meet and share the purpose of the research and ensure all participants understood that participation was voluntary and that they could stop, take a break or withdraw if the interviews caused distress (see, for example, Mutch, Yates & Hu, 2015). It was also important to conduct the interviews in culturally appropriate ways, which might include beginning with a prayer, sharing food or exchanging gifts. The interviews were mostly conducted in English but, in Japan and Nepal, local interpreters helped as necessary. The interviews were transcribed and a constant comparative analysis method was used to code, categorise and collate themes from the data (Mutch, 2013b). Each interview was analysed independently for its own themes, before themes were analysed horizontally across participant type (e.g., principal, teacher or parent) within country and across country (Mutch, 2018b).

Overall, I conducted interviews with participants from fifteen schools in the five countries, in some cases on more than one visit. Table 2 summarises the disaster settings and numbers and types of participants.

| Table 2. Details of research sites and participants | Table 2. | Details | of resear | ch sites | and | partici | pants |
|---|----------|---------|-----------|----------|-----|---------|-------|
|---|----------|---------|-----------|----------|-----|---------|-------|

| Setting             | New          | Japan         | Samoa        | Vanuatu     | Nepal         |
|---------------------|--------------|---------------|--------------|-------------|---------------|
|                     | Zealand      | ( <b>J</b> )  | (S)          | (V)         | (N)           |
|                     | (NZ)         |               |              |             |               |
| Disaster            | 2010/2011    | 2011          | 2009         | 2015        | 2015          |
|                     | Canterbury   | Tohoku        | earthquake   | Cyclone     | Gorkha        |
|                     | earthquakes  | earthquake    | and tsunami  | Pam         | earthquake    |
|                     |              | and tsunami   |              |             |               |
| <b>Participants</b> | Five schools | Four schools  | Two schools  | Two schools | Two schools,  |
|                     | from five    | from two      | from two     | from two    | two different |
|                     | different    | different     | different    | different   | locations;    |
|                     | locations;   | locations;    | locations;   | locations;  | two           |
|                     | five         | one           | two          | two         | principals;   |
|                     | principals,  | principal,    | principals;  | principals; | 18 children   |
|                     | 12 teachers; | four          | one teacher; | one deputy  |               |
|                     | ten parents  | teachers; one | one art      | principal;  |               |
|                     | and 72       | parent        | educator     | one teacher |               |
|                     | children     |               |              |             |               |

### **FINDINGS**

There are many common themes that arise from the analysis but those selected for this article elaborate on the roles of principals and teachers. The findings are presented in three sections: (a) immediate response and aftermath; (b) returning to school; and (c) longer term repercussions.

## **Immediate Response and Aftermath**

In New Zealand, Samoa and Japan, the disasters hit while school was in session. If students were in danger, principals' and teachers' thoughts were immediately on how to rescue or assist them. In Japan, the principal talked of schools telling children to run for their lives and not look back. In Samoa, one principal was on her way to school when she saw the tsunami:

The earthquake hit just after 7 in the morning. I was walking to school. I was about halfway there when I felt it. I started to run so I could get to school before anything happened. At the gate I saw the wave. Many children were already in the classrooms with their teachers. They saw me and started running towards me. I tried to signal for them to go the other way. I turned away from the school and started running up the hill and they started to follow me. Some were screaming. Some were crying. The tsunami caught the latecomers. It was very sad. We sat under a shaded tree and said a prayer. (Principal, School S1).

One New Zealand teacher describes being at a water sports complex with 100 children:

My thoughts then were never, "We aren't going to get out" or that it would collapse, but my thoughts now when I look back is that the whole place could have fallen in. We were so jolted that we stood up, then we were jolted back down the force was so great. There was a group of children in the boat, and all we could see was the whole thing swamped with the big waves, and we couldn't even get to them. We tried to stand and go forward, but we were just knocked back...the lights went out, and the children were screaming. All I remember is the siren noise, and I went and grabbed a few of the Year 4 children out of the pool, and I just huddled with them. (Teacher, School NZ5)

Regardless of how frightened they were themselves, teachers and principals had to put on a brave face, "I was guiding them back out, and I remember glass being on the carpet in the foyer, and we all had bare feet. I calmly told the children to watch out, and I walked them out (Teacher, School NZ5). One Japanese teacher was taking his students for basketball when the earthquake hit, "I was in the gym and I was worried about the lights falling down so I led the students to a safe place and was trying to calm them down" (School, J3). Another New Zealand principal describes how she felt when parents were coming to get their children:

I put on my principal's smile. Parents arrived and were standing outside. I realized then that I had an audience and my response needed to be calm and instantaneous. I had to look like I was in control. (Principal, School NZI)

When the shaking stopped after the Japanese 2011 earthquake, teachers checked and tidied up the buildings:

The leader of the teachers said to check the school. Each teacher had to go to each floor and check if there were still any students inside. If we found students they had to go to the school grounds. (Teacher, School J2)

Principals and teachers were also worried about their own families: "I was worried about the students but I couldn't stop thinking about my family" (Teacher, School J2).

I was getting texts from my daughter who is a nurse and she was trapped in the hospital. My grandson was trapped at school and my schoolteacher husband couldn't leave either. I couldn't think of my family at the time and just had to assume they would be okay. (Principal, School NZI)

In many cases the drills practiced beforehand were put to good use:

The school was phenomenal. The children streamed out of the classrooms and down onto the field. The teachers were incredible. It was very prompt and very calm. (Parent, School NZI)

During the training for earthquakes, students practiced to escape and the parents came to the school to take them home. The training for the tsunami was getting them to move to the shrine and if parents come, students can go with their parents. (Principal, School J1)

One principal commends the way her leadership team put their training into practice:

On the day, the leadership team kicked in and they were making sure the right thing happened. The training and up-skilling really worked for the school. They worked calmly and there was no personal heroism. (Principal, NZ1)

Principals and teachers often had to wait until all the children were collected. One Samoan principal said it was more than four hours before a friend or relative came to get all the children. In New Zealand, some parents were unable to collect their children, so the unclaimed children were taken to the local *marae* (cultural centre) to be cared for. A teacher describes her experience:

We had to wait until all the parents had picked up the children. I had one girl in my class whose mum didn't come for a very long time. As time went on, she got a little bit more worried, but I assured the kids that their parents were on their way and that there would be road blockages. When the mother arrived, she was in a real state... in tears and redfaced, and she was like, "The Cathedral's gone, there are people dead in the streets...." That was like the moment of reality. (Teacher, School NZI)

When children were collected, teachers returned to their homes, if they could, to find out the extent of the damage:

In February our house broke in three places. We had water coming in with the rain, which was great with three young children. We had liquefaction to knee deep right through the backyard again, but luckily not through the house... It was horrendous. (Teacher, School NZI)

Even in those settings where the disaster happened outside school hours, principals' and teachers' thoughts went to children and their families:

After the earthquake, I came to realise that most of the students in the affected area lost everything. Their houses were collapsed. They lost their books and their uniforms, some even lost their parents. I asked my Rotary friends in Australia to raise some funds to help the victimised families. (Principal, School N1)

Across the five settings, many teachers and principals were often also victims:

Our roof lifted off and there was water everywhere. The shutters below off and the glass in the windows broke. In the daylight, I could see how bad the damage was. Every neighbour had their roof blown off and water had come in. The bridge was down so no-one could get across. The telephone lines were all down. It was three days before there was any communication with the outside. (Deputy Principal, School VI)

Regarding my family – for almost two months my whole family, we stay outside because most people were frightened to go inside their houses even if they were only partially damaged. We stay in a tent and the whole neighbourhood stayed out with us. Fifteen families together. We shared everything and cooked together. (Principal, School N1)

Whether the event had happened inside or outside school hours, principals and teachers returned to school to inspect the damage so they could report to authorities and begin the clean-up. Even the teachers in Japan who were being moved to new schools in April returned to their former schools to help with the clean-up.

After the cyclone, I have to be a carpenter. I look at the classrooms and make a report. The Ministry came around to assess the damage. I ask parents to assist as I have no handyman. We still have things to be done. We have to spend school money on the roof. (Principal, School VI)

In some cases, the school was in use as a community shelter. In Japan, one principal had a conference with the local residents to explain what would happen with the local schools. His

school had been used a shelter for a month but the people still living there would be moved and three schools would use the buildings together. The children and teachers from two schools that were damaged would be bussed to their school. Two of the New Zealand schools were also community shelters:

The school closed and the Army came in to clean up. They brought water tanks and set up community showers and washing facilities. It became a community hub. There was so much support here. Room 19 was set up as a coffee room. Children and parents felt safe here. (Parent, School NZ5)

While waiting for schools to reopen, principals and senior leaders worried about their staff:

It was one big challenge for me because I've never been through this before. I wanted to meet with the teachers to tell them that the cyclone has passed but we have been affected. But I have to give time to my teachers because some of them have lost their own houses so I have to accept that they can't come to school if they are busy at home. (Principal, School VI)

While they were waiting for official permission to re-open their schools, principals and teachers made plans:

Within that first week and a half, we were working out the safety of our school first. We were checking in with our staff to make sure that they were emotionally ready to support children, and also how our families were coping and what they [staff and students] might need when we got them back. (Principal, School NZ4)

Preparation for returning to school included ensuring that teachers would be able to cope with what they might face. In Vanuatu, one principal encouraged the teachers to tell their stories so that the children would know that they had suffered too. Principals described how they needed to look after their teachers, to allow them to express their emotions so they would be ready when the students returned:

We had a big debrief in the staff room. We had a chance to connect with the other staff to find out about all their different situations as some of the staff had lost homes and really suffered. The session was not just about commiserating, we were also celebrating that we were all still here. (Teacher, School NZ1)

Schools received information from their Ministries of Education on how to debrief the disaster when the students returned:

The MoE gave us two weeks to recover then we come back to school. They tell us to go slowly with the children so that they can forget about this. After a week when some start coming back, the teachers ask them about what happened to them – to tell their stories and we have lessons about safety precautions, what to do if there is another cyclone. (Principal, School V1)

We received support from the Ministry of Education—had a support team come in and meet with the staff about two days before we opened, and we talked about the kind of things we could do to support the children. To say: "It's okay to tell your story about what happened in that quake and the aftermath," and that it was good to tell the children that every story was important, and "the way you are feeling is a normal feeling...some people might feel differently [than] you about what happened, but however you are feeling is normal." (Principal, School NZ4)

Even before schools officially re-opened, they found ways to support children and ease them back into routines. One New Zealand school set up informal classes in parents' or teachers' living rooms for the children in the area. In Samoa, they used four undamaged village houses. Bringing children together was helpful for them and enabled parents to have time to deal with the myriad of problems they now faced. In Nepal, one principal set up a mobile school:

We started a mobile school system. Because I saw that my students were frightened and sad. They had no food and nothing to do and their parents were busy with rescue work. I mobilise my teachers and we go to different places for one or two or three days. We let the children do drawing and painting and singing and dancing to make them happy. We feed them a small snack. We did more than 50 places. The parents appreciated what we started. (Principal, School N1)

## **Returning to School**

Before school could start, there needed to be appropriate facilities for children to return to:

When I got to my school, I found the roof of my classroom had gone. UNICEF provided tents but the school needed to decide who would use them. They decided on a younger class who wouldn't need desks and an experienced teacher – like me. (Teacher, School VI)

Schools let their communities know that their school was ready or that an alternative was available:

Slowly, I started coming to school myself and visiting the parents. I invited them to inspect the school buildings. I made an awareness programme for them of what we would do if there was another disaster. Then I invited the children to come back and we did different things to remove the trauma – drama and singing and dancing. Slowly, we started to teach the classes. (Principal, School N1)

We had a preparation day where kids could come in and see the school was still normal. The kids were amazing, we couldn't get over it, like it was security for them, it was really good. (Teacher, School NZ5)

Schools reported that it took time for their usual cohort of students to return:

[When school resumed] we just made ourselves out there. We had a coffee morning straight away for the parents. We had lots of notices around the school saying, "Kia kaha [stand tall], we're strong, we can work through this together." And we kept referring to this as we welcomed the kids back. Half of them didn't come back, of course, because some of them had shifted away. Some of them were too scared to come back. Some parents were too scared to let their children come back, so there were a whole lot of different reasons why we didn't have our normal cohort. (Principal, School NZ2)

Often the basics were school's first priorities:

Another challenge was supporting families. Their first priority was shelter, food and water. Many lost their homes and their jobs. To feed the children, people donated local food and the school paid for meat. The teachers would take the food home and prepare it or show the children how to cook it. Then they are together. (Principal, School VI)

Obviously, we kept on feeding kids, we've always done that to a certain extent but that became more evident. There were kids without lunches; there were kids without breakfasts. We just fed them as the need arose. Kids were really tired, so we would put cushions in the back of the room for them to sleep. (Principal, School NZ2)

Schools were grateful to the agencies, businesses and charities that helped out. They mentioned, for example, World Vision, Red Cross, Caritas, UNICEF, Presbyterian Support Services, the Salvation Army and Rotary International: "In less than a month, UNICEF came and gave us some activities and sports equipment. That was good to keep the children coming to school" (Principal, School V1).

Schools and volunteers from other areas, even other countries, offered their support:

Many principals from other schools came to help out. Many famous persons came to the school to visit students. Students participated in taiko (drumming), field trips and other activities (Principal, School J1).

Through my Rotary friends we supported a thousand people. For 15 days we fed them – breakfast, lunch and dinner because they didn't have anything and they have to live outside. We built some temporary shelters out of bamboo and gave them some blankets. (Principal, School N1).

Different activities were provided for children to distract them from their sadness and encourage them to process their experiences. In Samoa, the five most badly-affected schools benefitted from an on-going art project where children wrote stories, painted pictures, made postcards and created puppets. The leader of the project commented that:

To begin with the art work had horrific and vivid images and the colours were muddy and dirty. As the project kept going, the children started to focus on lighter themes – trucks, bulldozers, Red Cross, the Army and gifts from donors. Later, they started drawing trees and plants growing back and birds and fish returning. (Personal communication, L. Latai, January, 2018)

Another important activity was to ensure that students were ready for any future disasters:

After the February quake, the school organised a box full of beanies [warm hats] and safety blankets in the shed. It all felt a bit safer having the earthquake box in the shed under the school. My teacher made up a cellphone box. We put our cellphones in the box, so that if there was a really big aftershock, we could contact our parents. (Student, School NZI)

In Vanuatu, Japan, New Zealand and Samoa, schools mentioned putting more emphasis on drills for all situations – earthquakes, fires, cyclones, tsunami and floods. One Japanese teacher said: "The most important lesson is to take disaster education seriously so that people know what to do. Every day, they should be aware of evacuation routes and assembly areas" (Teacher, School J3).

It was also important to get back to the normality of schooling as soon as was reasonable:

As a school we wanted things to get back to normal. The teachers tried to create a place that was as normal as possible. The school was pretty undamaged, so that helped. When the children returned to school we reinforced the key message that the earthquake was a natural thing and it just happens. (Teacher 1, School NZ1)

Teachers kept going despite the difficulties in their own lives:

We have to be strong. We have to have patience. We give what we can give to the best of our ability to help children so that they feel there is still someone there for them. We must be good role models – be strong instead of complaining. (Teacher, School V2).

Principals uniformly praised the response of their teachers: "My teachers co-operated a lot. They understand that for six months we could not provide the proper salary. Some of my teachers had a lot of problems – their house collapsed and they lost everything" (Principal, School N1).

Teachers, that's the interesting part, straight after February, teachers rallied round. Teachers are great. I can't say enough about how much strength, how much integrity, how much they would go the extra mile to drop kids off, to look after kids in their classrooms after school, to buy them special treats, take them to McDonalds, all those sorts of things... to find clothes for them, to find a pram for a mother who didn't have a pram to wheel her baby to school. (Principal, School NZ2)

And in response, teachers praised their principals and senior leaders: "I've had a really supportive [senior leadership] team, and they have got in counsellors for staff and children and parents. They have provided opportunities for us to talk, just to chill out together" (Teacher, School NZ5).

The school looked out for the staff. There were constant e-mails and messages at morning teas and lunchtimes – that if staff were not coping to let management know as there was support and funding for relief teachers. Also, if we needed to go and sort things out with our houses, then we were encouraged to do so (Teacher 2, School NZ1)

The efforts of schools did not go unnoticed by parents:

All these teachers are quiet heroes. I know there are teachers here that have lost their homes and some of them are living in the same situation as we are and they come to work and they get on with it. They do their job as best they can and they never ever show their frustration to the kids. (Parent, School NZ5)

## **Longer Term Repercussions**

Many of the participants in the study mentioned how they had never experienced such a disaster and how under-prepared they were for the reality of it. Principals and teachers noted teaching about disasters or practising drills but that neither they nor their students fully comprehended until it happened to them. Another aspect they felt unprepared for was how

long it would take for services to be up and running, for schools to be repaired and for their regions to get back to a semblance of normality. All this was to take a huge toll on their physical, emotional and psychological wellbeing.

That starts to wear down the staff, so we knew that we had to look after each other. We really had to look out for each other – be prepared, watch for the signs: "This teacher is not going to be at school tomorrow. I can just tell, she's looking shaky." (Principal, School NZ2)

We know from all the international literature that this will stay with people. I've got colleagues who've been diagnosed with cancer, with stress-related illnesses. They go to the doctor, get medical attention, but still there has been a gradual decline in teachers' well-being. Support staff here have been counsellors on the phone with crying parents. (Principal, School NZ5)

This was compounded by inadequate facilities, lack of resources, and support being withdrawn too soon:

To begin with the children liked the tent. It was like playing house. But when it was hot, the tent was dry and dusty and when it rained the floor was full of puddles. After a few months the children wanted to go back to a regular classroom. (Teacher, School V2)

Yet schools tried to stay positive: So almost two years later, we are still positive, we are still giving positive messages. We are still advocating for the school... but our reserves are running out. (Principal, School NZI)

I'm so happy with my teachers because they adapt to the situation – even though they have never done teaching in a tent. They cope with that and with me doing the maintenance. Even though our records and stationery and our textbooks are wet, they find ways. (Principal, School V2)

Schools continued to look after their communities:

We also had the library open for parents to go in and have coffee in the morning and just to talk. There could only be four or five of them but they could all sit in there. If they wanted to cry, they could cry. You know, they could do whatever they wanted to, out of our sight. (Teacher, School NZ5)

Their support did not go unnoticed by their communities and had a positive effect:

They [the community] started caring more. They feel cared for; they start helping others. I've got a whole lot of people who would've actually come into the school offering to help other people in our community—people who they felt needed help. To me, that's the synergy of really strong relationships in a community. (Principal, School NZ2)

Yet with the on-going nature of disaster recovery and the accumulation of secondary stressors, schools felt the strain:

We were affected for the whole year. More than 100 students could not come back. They were frightened and their parents did not want them to come to school. Last year the results of the examination were not so good. Students couldn't study. They are squeezed into a small tent with no lights – very difficult. (Principal, School, N1)

It's the cumulative things we are dealing with. People have got so many responsibilities, so much is going on and the big decisions are just not under our control. A teacher's performance has to be affected. It is not possible to carry on being the person of usual everyday circumstances. (Teacher, School NZI)

In some cases, bureaucratic decisions, such as school relocations, closures and amalgamations, compounded the effects. In Japan, principals and teachers are relocated to new schools every few years. This meant that principals and teachers left behind the communities they had been through the disaster with and, in some cases, new principals and teachers arrived at traumatised schools with limited understanding of what the school community had been through. In Samoa and Japan, some damaged schools were demolished and rebuilt on new sites. While done with the best of intentions, students and staff had mixed feelings as they passed the old sites on their way to school each day. Also, in Japan, post-tsunami school mergers upset locals who felt that not rebuilding a school in their area would be another death knell for their communities. One New Zealand school described the permanent closure or amalgamation of nearly 40 schools in the disaster zone as "another aftershock." One teacher describes hearing the news about her school closure:

I was just sick in my stomach thinking, okay, what is it saying about jobs? What is it saying my child's school; other children's schools? . . . There wasn't enough information given out at the time, for you not to think about what does this mean for you, for your future. I mean, we're already living in house waiting to be repaired, and we're going to lose my job now and my child's going to lose their school. (Teacher, School NZ5)

Although schools affected by closures and amalgamations in New Zealand protested, presented submissions, even took cases to court, most decisions remained unchanged. One principal shares his frustration:

How does that affect the staff? The emotional ties and the relationships are torn apart; families that have been associated with the school for decades have gone. That kind of link and historical connection and knowledge of the community and the school and its involvement goes as well. History goes; it travels with the people. [School NZ5] has been around for 141 years...it's not a place of recent history, we're looking at quite a significant place in the community. (Principal, School NZ5)

And through all this, principals and teachers had to hold everything together:

They were so positive. I mean the teachers were going through more themselves about the whole merger and how it was going to work. They all had to apply for their jobs and all the rest of it. And yet they were so positive with the children. They did their best to make sure that when the merger occurred, that the children had a positive view of the whole thing. So, I take my hat off to the teachers because they were going through so much too... – the earthquake, the merger, the uncertainty themselves about how everything was going to happen. (Parent, School NZ5)

#### **Discussion**

Schools are significant places in society (Mutch, 2018c; Witten, Kearns, Lewis, Coster, & McCreanor, 2003). They are charged with educating children and young people with the knowledge, skills, attitudes and dispositions that will prepare the next generation of citizens, workers and community members who will uphold the values on which that society is based. The evidence from the schools in this study highlights that principals and teachers see their role very much as service to their community and wider society. They are proud of their profession and go to extra lengths to support children and their families. Schools play a significant role in building community connectedness and cohesiveness (Callaghan & Colton, 2008; Mutch, 2018c). When disaster hits, their commitment is taken to a new level (Education Review Office, 2013; Mutch, 2014b, 2018c).

If the disaster hits while schools are in session, principals and teachers become first responders, rescuing, evacuating, calming and caring for children until there is somewhere for them to go (Mutch, 2014a; Tatebe & Mutch, 2015). In the case studies detailed here are specific examples of this "pedagogy of love and care" (O'Connor, 2013). In New Zealand and Samoa, teachers and principals waited many hours until someone came to collect each child, making other arrangements, including taking students home, if they were not collected. They did this while hiding their anxieties about their own families. The Japanese principal in this study was trapped for five days with no food and only rationed water from a water tank until the group he was with were rescued by helicopter. Without communication with the outside world, he had no idea if his own family had survived.

In each of the five disaster settings discussed in this chapter, principals and teachers lived in the area and were victims themselves. They had to deal with their own family deaths or injuries, personal losses of homes and possessions, and the long, drawn-out rebuilding of their communities. Schools are often the first institutions re-opened, mostly in temporary make-shift conditions with only basic materials. Even before authorities had announced the formal re-opening of schools, the principals in this study were finding ways to get back to a sense of regularity. One New Zealand principal borrowed a hard hat and boots and, with her caretaker, started assessing the damage and getting her school repaired. In Vanuatu, a principal called for the local community to come and help himself and his teachers tidy up the school grounds and repair the classrooms. In Nepal, another principal set up mobile schools going from shelter to shelter to give children activities to take their minds off the disaster. When school resumed, teaching took place in temporary shelters, tents, church halls and living rooms. In Christchurch, undamaged secondary schools ran two shifts of schooling - a morning shift and an afternoon shift - to get as many secondary school students back to school as soon as possible (Ham, Cathro, Winter, & Winter, 2012). In all cases, principals and teachers were simply expected to turn up to school and look after other people's children, providing them with a safe haven and a return to normality, despite whatever else they were dealing with themselves.

One of the problems teachers faced was that schools were often lacking the basics. While there were agencies, such as UNICEF or Red Cross, providing basic supplies, I also saw on my visits inappropriate donations provided by well-meaning donors. I watched as a group of parents in Vanuatu eagerly opened a box of educational supplies to find a full set of *Encyclopaedia Britannica*, when what they really needed was paper and pencils. When schools didn't have supplies, principals and teachers found creative ways to acquire them or, if they could, paid for them out of their own pockets.

Because of the place, both physical and social, that schools have in their communities Callaghan & Colton, 2008; Mutch, 2018a, Witten et al., 2003), they are often used for a range of other post-disaster purposes beside education. In the case studies, they were places where families needing shelter or comfort, could come to sleep, eat or just talk. Again, principals and teachers took on these extra roles, distributing relief supplies, staying overnight at school, preparing food, offering support or whatever was required of them. And, this was on top of coping with their own trauma and family issues. While there was support from Ministries of Education and other agencies to begin with, it was often too little, was not always what was needed, and was withdrawn too soon.

One of the areas where support was often lacking or withdrawn too soon, was mental health support. While counsellors and support agencies might provide guidelines and some services, they were stretched thin and could only focus on the most severe cases. It was up to principals and teachers themselves to find ways to support each other, their students and their

schools' families. This constant pressure led not only to a decline in principals' and teachers' emotional and psychological wellbeing but in their physical health. In the New Zealand case, for example, Christchurch now has a mental health crisis (Hollis-Locke, 2017), with the government taking eight years before this was fully recognised. There were many stories of heart attacks, strokes, cancer, nervous breakdowns, suicides, alcohol abuse, family violence and other ways in which the post-disaster communities in these five case studies demonstrated that they were not coping – and again schools were bearing the brunt of these issues on top of their own.

To add to the stressors already mentioned (Gawith, 2013), many communities were then often impacted by bureaucratic decisions, such as the relocation, amalgamation or permanent closure of their schools. Principals, teachers and communities were rarely consulted and the decisions went ahead without any consideration for the multiple ways in which schools might be affected (see, for example, Mutch, 2017).

Finally, when the post-disaster citations were read and the medals given out, principals and teachers were almost never included. They were simply considered to be 'doing their job'. While I don't wish to downplay the work of thousands of committed first responders, search and rescue, fire officers, army, police, ambulance services and so on – they are at least trained for these situations. Nor do I wish to downplay the many selfless volunteers who risked their lives to save or help others. In the case of principals and teachers, however, they did not have a choice about whether they could volunteer, they were simply expected to get on with what they had to do with little support or recognition.

## **Conclusion**

This chapter shared findings from across five different disaster settings in the Asia-Pacific region, highlighting the role of principals and teachers in post-disaster contexts. Common themes arising across the five settings were that: (a) principals and teachers put their students first when they faced a disaster situation together; (b) principals and teachers returned to work despite often being victims themselves; (c) teachers focused on children's needs more than their own; (d) teachers tried to balance helping children to process their experiences safely with returning to normal school routines; (e) schools also needed to look after their school families and communities; (f) schools continued to provide the best education they could despite limited facilities, lack of resources and insufficient funds; (g) the stress of coping and trying to keep positive through a prolonged recovery period led to the decreased physical and mental wellbeing of teachers and principals; (h) bureaucratic decisions made by government agencies without consideration or consultation added to the stresses that schools were facing; and (i) little acknowledgement was given to principals and teachers of the heavy burden that they carry in post-disaster contexts.

To date, most accounts of the role of schools in disaster response and recovery are descriptive and related to a single event (see, for example, the chapters in Smawfield, 2013). What this study adds is a more detailed cross-case analysis that lifts these findings from anecdotal accounts to providing collective and comparative insights into post-disaster roles that are largely taken-for-granted and unacknowledged. While it cannot be claimed that *all* principals and teachers acted in these ways, it is significant that clear patterns of caring dispositions and supportive actions were displayed across these five different post-disaster settings.

The disaster risk reduction literature tends to focus on telling schools what they *should do* (see for example, UNISDR, 2007). This study has highlighted what schools, in fact, *did do* in post-disaster contexts. What is needed now is for these efforts to be well-supported with appropriate training and funding so principals and teachers are better prepared when they are next called upon. And, when principals and teachers complete these roles beyond expectation, as those in this study have done, that they are recognised for their significant input into disaster response and recovery – we need them now and we are going to need them even more in the future.

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