Preparing pre-service teachers for complex emergencies: Learning from traumatic

events in New Zealand

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Abstract

When children and young people face trauma, there are many credible programmes and strategies available to support them provided by specialist mental health professionals. The success of these approaches has encouraged classroom teachers and sometimes whole schools to adopt trauma-informed principles to support these students in the school context and build empathy and resilience in the wider student population. When a complex emergency, such as a natural disaster, terror attack, or pandemic overwhelms the availability of specialist trauma services, teachers step up and become frontline psychosocial support workers. After a decade of researching in settings where schools have had to face complex emergencies, the evidence highlights that teachers in New Zealand feel underprepared for this responsibility and overwhelmed when they face it. Yet, there is little coordinated preparation for either practising or pre-service teachers, despite the regularity of these occurrences. This chapter outlines how the lead author's personal experiences and ongoing research has led her to draw on trauma-informed principles to assist teachers and schools in being better prepared for their roles in supporting their students when they return to school after traumatic events, including complex emergencies.

Keywords: disasters; complex emergencies; trauma-informed teaching, pre-service teachers

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Introduction

Over the past decade, New Zealand, and the city of Christchurch, in particular, have faced many complex emergencies such as natural disasters, a terrorist attack, and, most recently, COVID-19. This chapter explores the nexus between the lead author's personal and professional life and the question that arises as she reflects on the past decade, "How well are we preparing our pre-service teachers for the roles they will have to play in complex emergencies?" The chapter will draw on the lead author's personal experiences of the 2010-2011 Canterbury earthquakes and a series of subsequent complex emergencies up to the 2020 COVID-19 pandemic. It will share findings from the lead author's research on the roles played by teachers as they supported their students, families, and communities through the different events before bringing the discussion up to date and focusing on New Zealand's COVID-19 education response. One finding that continually arose from the ongoing analysis of this research was that teachers were not prepared for these eventualities, either through professional development or as part of their pre-service teacher education programmes.

Since 2012, the lead author has documented the many different roles teachers have undertaken in complex emergencies. If an emergency, such as a natural disaster occurs when school is in session, teachers become first responders. This could involve rescuing, evacuating, comforting, and attending to first aid. Teachers might need to wait for hours until children are collected by parents or moved to safety by authorities. If students need to shelter in place because of an external threat, such as a live shooter, teachers keep students safe and calm until the emergency is over. If schools are closed for an extended period, teachers are expected to provide alternative education and emotional support until some form of schooling can recommence. If an emergency happens outside the school but impacts school community members, then teachers are left to deal with the emotional and psychological repercussions of the event in their classrooms. Teachers will need to assist those closely impacted and support others who are struggling to make sense of the event. When regular schooling commences, the trauma caused by the event does not diminish. Depending on the seriousness, the closeness, the types of impact, or other vulnerability factors, many students will initially exhibit some unusual behaviours, and up to one-third could have long-term mild to severe trauma. Teachers constantly report feeling unprepared and overwhelmed (Mutch, 2015a).

While beginning teachers expect that they will face some difficulties throughout their careers, the teachers in the lead author's studies did not anticipate the severity of challenges, the psychosocial and educational impact on their students, or the longevity of recovery (Mutch, 2015a). They also had no concept of the toll that it would take on them personally or professionally. They reported illness, stress, anxiety, and burnout as they tried to carry on without seeking support for themselves. Many of the teachers lived in the communities where they taught, and they were often personally impacted in some way. Despite their own issues, they came to school day after day, putting their students' needs and wellbeing before their own (Mutch, 2015a, 2021).

This chapter revolves around the lead author's personal story as she made sense of her own experiences and those of the schools that became part of her ongoing research into schools in complex emergencies. Teachers' stories drawn from her earlier research, and the most recent project involving the co-authors, will be used to highlight the range of experiences teachers encountered. She describes how, in 2019 and 2020, in the absence of other trauma support materials for teachers, key findings from this research and relevant literature were shaped into workshops, webinars, and hard-copy and web-based materials for practising teachers. The chapter concludes by distilling principles from her research, personal experiences, and the literature to produce a set of recommendations for trauma-informed preservice teacher education in the New Zealand context. It is hoped that the recommendations will resonate more widely as other education systems also come to recognise the imperative of preparing teachers for their roles in complex emergencies, particularly when traumatised children and young people (up to the age of 18 years) return to school.

The Lead Author's Story: Trauma up Close and Personal

On September 4, 2010, at 4:35 AM, a 7.1-magnitude earthquake struck the district where I live. People were jolted awake as the shaking toppled furniture and threw our lives into disarray. Roads and railway lines buckled, buildings collapsed, and essential services were disrupted. The earthquake occurred near the town of Darfield in the Canterbury countryside about 40 kilometres from Christchurch, the largest city on New Zealand's South Island. Despite the intensity of the quake, no one was killed. It was several weeks before debris was cleared, buildings were checked, and basic services resumed (Aydun et al., 2012; Potter et al., 2015). Although our lives were on hold, we were buoyed by the fact that we had survived the worst that we thought nature could throw at us. We endured regular aftershocks for the next few months, but the community pulled together, and we began to rebuild as is common in such events. Schooling resumed in repaired, relocated, or temporary buildings (Education Review Office, 2013; Direen, 2016).

At lunchtime on February 22, 2011, a large, 6.3-magnitude aftershock with higher ground acceleration, centered beneath the city of Christchurch, reminded us the worst was not over. People dived under their desks in schools and office buildings and waited for the shaking to stop. An already fragile city was fractured further; 100,000 buildings and homes were damaged, with over 10,000 needing to be demolished. This time the death toll was 185 people, with many thousands injured. The February quake and subsequent large aftershocks over the following year were to fully test the region's resilience and ability to recover (Aydun et al., 2012; Bannister & Gledhill, 2012; Canterbury, Earthquakes Royal Commission, 2012; Potter et al., 2015).

An event of this scale might seem enough for one lifetime, but this region and neighbouring districts were to face additional major emergencies. On 19 November, between the September and February earthquakes, 29 men were killed in a mine disaster on the West Coast of the South Island where I was born, and most of my family still live. My father had been a coal miner; relatives and friends were among the deceased. The deaths impacted the small, tight-knit community for many years to come (Gunningham, 2015). In 2016, the north Canterbury tourist town of Kaikõura was hit by a 7.8-magnitude earthquake that blocked off the region's road and rail links, trapping townspeople and tourists alike and re-traumatising Cantabrians (Hallam, 2018). In 2017, extensive wildfires on the Port Hills behind the city of Christchurch damaged swathes of property (Langer, McLennan, & Johnston, 2018). The city was to face a further unprecedented event in 2019. This time, it was not caused by natural or industrial hazards but rather a gunman that shot and killed 51 people at Friday prayers in two mosques in Christchurch (Crothers & O'Brien, 2020). The arrival of the novel coronavirus in 2020 was to test the region and the country, as the government responded swiftly and put New Zealand into full lockdown in late March (Cameron, 2020).

As Christchurch is only a small city by international standards, many people are related or know each other. It has taken much time for authorities to recognise the cumulative impact of these complex emergencies and begin putting measures in place to support the ongoing effects of cascading trauma. As a former teacher and educational leader in the city, I was acutely aware of the burden that schools took on during and after each event, with minimal support and recognition for the significant role they were asked to play. After the 2010-2011 Canterbury earthquakes, I was left wondering what I could do to help. I began by asking friends who were principals and teachers. Two ideas emerged. First, it was important to document what had happened as part of our local and national history. Second, teachers

were looking for ways to help children make sense of their experiences and help them to move forward with hope for the future.

Researching the Role of Schools in Complex Emergencies

With seed funding from the New Zealand National Commission for UNESCO and further funding from my university, I undertook ongoing qualitative research with five primary schools from different areas of the city and surrounding districts. The research aims were to capture each school's experience through a project of their choice that would engage students in collecting and sharing the stories of their wider school community in safe and sensitive ways. The ethics of working in a post-disaster context were always to the fore and the wishes of the school, the students, and their families were always respected (Dickson-Swift, James, Kippen, & Liamputtong, 2009). Engaging students in this way was based on the principles of emotional processing (Cahill et al., 2010; Gordon, 2004; Prinstein et al., 1996) where the activities carefully enabled them to express their emotions through narrative, artistic, creative, physical, or other means so that they could absorb the events into their personal and collective histories without being re-traumatised. At the end of each project, the participating schools received a completed product that encapsulated their collective experiences. Schools designed projects that included an illustrated book, videodocumentaries, an interactive website, and a community memorial mosaic (see Mutch, 2013a, for more details on the different school projects). In return, I was able to use the anonymised raw data for further cross-case analysis.

Four key themes emerged from across the in-depth case studies. The first is the role of schools as community hubs (Mutch, 2016). The second is how a principal's role changes from educational leader to crisis manager (Mutch, 2015b). The third is the way that teachers become first responders, and upon resumption of school, must balance the return to the business of schooling alongside supporting children's psychosocial wellbeing (Mutch,

2015a). The fourth theme highlights that rather than being passive victims, children and young people engage willingly and capably in response and recovery activities in their homes, schools, and communities (Mutch, 2013a).

Schools as Community Hubs

In the Canterbury earthquake research, many participants referred to the significant role played by their local schools. Initially, undamaged schools might have been called upon to provide overnight accommodation in their school halls or gymnasiums for community members who had lost their homes or were too frightened to return. They became local hubs for water distribution, essential supplies, financial aid, and access to recovery agencies or charities. Once people were more settled, they could still go to their local school for showers, to use the communal laundry facilities, or even to see a friendly face. Even once schooling formally recommenced, schools reported making their staffrooms or libraries available for parents and other community members for child minding or coffee mornings. As time went on, schools played an important role in rebuilding community cohesion through social gatherings, information evenings, and providing places for commemorative events. Most principals and teachers were members of the local community and had been personally affected by the earthquakes. Their homes might have suffered damage, they might have been caring for injured or elderly family members, hosting relatives with nowhere else to go, or coping with their own traumatised children. The fact that they turned up to school stoically despite their own concerns was not lost on the community, as this parent notes:

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.

Principals as Crisis Leaders and Managers

One of the Canterbury principals said of the disaster, "It has certainly changed the job description that principals have." Even though the September earthquake happened outside school hours, principals were quickly on the phone checking on their staff and students' families. They spent the day visiting their school properties to check on the damage and waiting for formal advice from Civil Defence authorities and the Ministry of Education. It took some time for all schools to be assessed and repairs to be undertaken or alternative premises found. Getting students back to school was seen as signaling to the community that recovery was underway.

As the February earthquake happened during the school day, it required an instantaneous response, as this principal recalls:

I was just walking out into the playground, and BANG! So the response from me was, 'Right, what do we need to do here? We need to make sure the children know where to go and to go there immediately and not back to their rooms'.

Fortunately, drills practiced after the earlier quake meant that children and teachers quickly sheltered under their desks until it was safe to reassemble on the school fields. Again, principals had to manage getting facilities and resources ready for a return to school, consider staff and student welfare, negotiate support from the Ministry of Education's trauma team, and communicate with parents. When schools recommenced, principals had to balance regular routines and educational expectations with ensuring that student and staff wellbeing was prioritized. The constant pressure of trying to juggle many priorities eventually took a toll on their physical and mental health. This principal expressed how he was trying to keep his focus: "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."

Teachers as First and Ongoing Responders

When the February earthquake hit, teachers needed to manage their own fears, instructing students to "drop, cover, hold," stay calm until the shaking stopped, and then make their way to the evacuation area. One of the schools in the study had a hundred children at a local swimming complex when the earthquake hit. Teachers had to rescue and evacuate terrified children in complete darkness and dangerous conditions. Parents then ferried students back to school in their cars across broken roads and through oozing liquefaction. The February earthquake took a greater toll on city schools. Inventive ways were needed to provide temporary schooling in living rooms, tents, or church halls. Some secondary schools collaborated to work in undamaged schools, transporting students and teachers to their morning or afternoon shifts. This earthquake was more emotionally traumatic, given the number of deaths, injuries, and the extent of damage, and as such, students had more extreme responses. Ministry of Education mental health teams were stretched thin, and teachers had to take a frontline role in supporting students' psychosocial recovery. As the school year in New Zealand runs from February to December, it was a long, stressful year that pushed teachers to exhaustion. One principal noted:

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' wellbeing.

Children and Young People as Participatory Citizens

As one of the aims of the research was to assist schools with safe ways to help children process their experiences, my research team began with arts-based or storying activities to help them gain a measure of distance from the strong emotions that their memories evoked. This approach enables children and young people to move from the *personal* (their particular story) to the *collective* (their school community's story) and to the *conceptual* (how people cope with disasters) (Gibbs et al., 2013)

As schools settled on the types of activities they wanted to engage students in to record their community's experiences, we saw students rise willingly to the challenge (Mutch, 2013a). In one school, students compiled questions, learned how to operate a video camera, and interviewed other students, teachers, and parents to create a documentary. At another school, students designed a large circular mosaic with four panels to tell the story of their town: (a) in its early days, (b) before the earthquakes, (c) during the earthquakes, and finally, (d) their hopes for the future. The community became very involved in the project, lending a digger to prepare the site, donating broken crockery and tiles for the mosaic, and volunteering their time to help the students place the mosaic pieces into the intricate story panels they had designed. Outside formal schooling, young people became engaged in a range of other community-based activities, most notable of which was the Student Volunteer Army, a student-led initiative that saw thousands of young people mobilise their skills to shovel liquefaction, remove debris, deliver food parcels, or help with other recovery activities (Mutch, 2013b).

Ongoing Recovery and Secondary Trauma

One of the most unexpected lessons from the Canterbury earthquakes was how complex the road to recovery is and how long it takes. It is now ten years since the earthquakes, and while many people have been re-housed and new multi-story buildings are appearing in the inner city, several thousand people are still caught up in post-earthquake insurance wrangles, and the process of rebuilding the iconic Christchurch cathedral has only just begun. While cumbersome bureaucracy and tensions between different interest groups are commonplace in post-disaster settings, there are some secondary stressors that could have been avoided (Gawith, 2013). One such avoidable stressor in Christchurch was the closure or amalgamation of 38 schools in the disaster zone. These were not schools that were being closed to be rebuilt because of earthquake damage. The government saw the opportunity presented by the earthquake to close schools that they deemed uneconomic and not part of their plan to establish fewer, larger, modern learning environments in the future. News of the closures and mergers led to community protests, media campaigns, and legal battles. However, the decisions were not overturned despite the shock that resonated around the city (Mutch, 2017; Duncan, 2016). An Ombudsman's report into the process described it as "flawed" and stated, "the importance of engaging empathetically and effectively with disaster-affected communities, particularly when you are proposing closure of their school, is paramount, and any failure to achieve this must be highlighted" (Office of the Ombudsman, 2017, p.21). The Ministry of Education was asked to make a public apology to the people of Canterbury.

Researching in International Contexts

As I began to publish and present on the topic of schools in disaster settings, I came to meet researchers working in similar contexts. From these connections, I was invited to visit other disaster locations, work with children, interview principals and teachers, and explore whether my New-Zealand-based findings had wider applicability (see, for example, Mutch, 2021b). In post-bush fire Australia and post-earthquake Nepal, I came to see further examples of the role of schools in local community recovery. In post-tsunami Japan and post-cyclone Vanuatu, I saw the critical roles played by principals and teachers as first responders and crisis leaders. In post-tsunami Samoa, I met an arts educator who had created a post-disaster

trauma-informed arts programme for schools in her area (Mutch & Latai, 2019). Although there were geographic, economic, cultural, social, and linguistic nuances that differentiated each setting, the four themes still resonated strongly – communities looked to their schools for guidance and ongoing support, principals stepped into post-disaster crisis leadership mode, teachers put the needs of their students before their own, and children and young people showed remarkable resilience and willingness to engage in local recovery.

Trauma-based Responses to Complex Emergencies

All Right?

The Canterbury earthquakes highlighted the lack of understanding of the long-term mental health impacts of trauma. While health agencies and non-government organisations made themselves available for initial counseling, there were not enough services to meet the demand. The Prime Minister's Science Advisor and other visiting trauma experts began advocating for a coordinated response. In 2013, a collaboration between the Canterbury District Health Board and the Mental Health Foundation of New Zealand established the *All Right*? campaign (Calder et al., 2019; Carlton & Vallance, 2013). Aligning a wide range of organisations and using a variety of strategies such as leaflet drops, billboards, community activities, and social media, the campaign aimed to inform the public about the psychosocial impacts of the disaster, how to recognise signs of trauma, how individuals could take care of themselves and others, and where to seek help (see: https://www.allright.org.nz/).

Mana Ake

While some generic trauma-related support and advice was available for schools postearthquake, researchers continued to document the extent of the ongoing need (Liberty, Tarren-Sweeney, Macfarlane, Basu, & Reid, 2016). Eight years passed after the first Canterbury earthquake and two years after the 2016 Kaikōura earthquake before the mental health needs of students and their families in post-earthquake communities were fully recognised by the government. The Ministries of Health and Education joined forces with the Canterbury Clinical Network and the Canterbury District Health Board to provide the *Mana Ake* (Stronger for Tomorrow) programme providing mental health and wellbeing support for children, their families, and schools in the affected regions (see: https://manaake.health.nz/).

2019 mosque attack

Following the March 2019 mosque attack, the Ministry of Health coordinated a national response and recovery plan based on national and international best practice to support victims and others affected (Ministry of Health, 2019). It had a four-pronged approach: to enable normal grieving and recovery; to support and treat mental distress; to promote wellbeing, coping, and recovery; and to enhance community cohesion. Support for schools, however, was delegated to the Ministry of Education. Some of the learning from the earthquakes, such as the *All Right*? campaign and *Mana Ake*, informed the Ministry of Education's support for Christchurch schools. The experience of the mosque attack, however, highlighted how unprepared the education system was for live shooters and large-scale shelter-in-place situations or school lockdowns. A review made recommendations for updating policies and practices, including the role of schools in supporting the safety and wellbeing of children and young people (https://www.education.govt.nz/news/15-march-2019-christchurch-lockdown-review/), yet, the recommendations were not accompanied by resources or training that could be provided to practising or pre-service teachers.

The Banksia Initiative

I was invited to Sydney in January 2020, along with other New Zealand and Australian disaster researchers and arts educators, to prepare resources and run workshops and webinars for teachers returning to school after devastating bushfires in Australia over their summer break. We called our programme the Banksia Initiative after the banksia flower, which regenerates quickly after bushfires. As well as generic advice for principals and teachers preparing to return to school, there were activities using art, drama, and picture books so teachers had some resources to start with when schools reopened (see: <u>https://creativewellbeingnz.org/the-banksia-initiative--recovering%2C-rebuilding%2C-</u> <u>reimagining-</u>). Our ideas were subsequently disseminated by education authorities across several Australian states.

The Impact of COVID-19

As I returned from Sydney to Auckland after the Banksia Initiative workshops, my university colleague remarked, "We need to do the same for teachers in New Zealand. We never know when the next disaster will strike." Within two months, our Prime Minister, Jacinda Ardern, had put the country into full lockdown in response to the COVID-19 pandemic. The government brought the school holidays forward to give teachers time to prepare for online teaching so children and young people could begin learning from home. After the New Zealand-wide lockdown earlier in the year, the city of Auckland went into a regional lockdown in August 2020. Following the second lockdown, the co-authors of this chapter and I began a multi-case research study of schools' experiences of COVID-19 lockdowns. From our preliminary analysis, we have selected some relevant data from interviews with teachers. Across all of the school settings (urban, rural, high and low socioeconomic contexts, primary and secondary schools), three overarching themes are emerging. The first is teachers' frustration at a system that continues to exacerbate educational inequities; the second is the importance of building and sustaining relationships and connections; the third is the importance of focusing on wellbeing as a priority.

System-level Frustrations

Acknowledging that the timeframe was short and the situation was unprecedented, the teachers in this study were still frustrated at the lack of direction and support from the Ministry of Education – and the government, more broadly. The Ministry's initial assessment

revealed that only half the country's school students would be able to access their learning through electronic means (New Zealand Government, 2020). The major problems were lack of access to the internet and insufficient or unsuitable devices. A plan was put in place to (a) increase access to the internet and provide devices to homes; (b) deliver hard-copy learning packs to families in hard-to-access areas; (c) present learning via two television channels, one in English and one in *te reo Māori*; and (d) make a variety of web resources available for teachers and parents (New Zealand Government, 2020). Many of the resources never arrived, were sent to the wrong address, or were not suitable. None of the teachers we interviewed were even aware of the television channels. Where they could, schools organised devices for students out of their own funds or delivered hard-copy materials to students' homes. Teachers commented on the glaring inequities: children who couldn't be reached, families who were living in garages or emergency housing, "students who had difficulties at home or whose parents lost jobs. They were really suffering and struggling for food and everything," and "students who were out there working in order to bring money back for their families."

Relationships and Connections

As the first lockdown took place early in the school year, teachers frequently mentioned that the relationships that they had with their students were different from those that they usually established: "We haven't got that [relationship] this year because the kids were scared and they were a bit anxious"; "You were more detached because you were creating links and sending them out ... it definitely didn't feel the same"; "I would probably give away teaching because to me it isn't anywhere near as satisfying as that sort of immediate interactivity with students"; and "Juniors were far more interactive and were more on board with the digital classroom ... but the senior students weren't, they were the ones that tended to drop off the face of the earth." In contrast, teachers reported building closer relationships with families: "In terms of relationships with parents, it strengthened the relationship quite a bit. You're in contact with them quite a lot"; "I spent a lot of time contacting parents and students to see how they were doing"; and "We are a really small community and we have good connections, it was a really good opportunity to stay in touch." Teachers also reported that they strengthened relationships with their colleagues: "The teachers were really supportive, they buoyed me up"; "Helped each other out. Lots of communication, open communication with each other"; and "Facebook groups everywhere, everyone was sharing what they had, what was helping them."

Focus on Wellbeing

Teachers reported turning their attention to students' wellbeing: "Really prioritising that ... focusing on students' needs, their psychological needs, and love and belonging"; "It's just assuring them that they are in a safe place. A big emphasis around that, making them feel comfortable"; and "That's why we were flexible in saying you do what you can and we are here to help and support." When students returned to school, teachers found them "both anxious and excited because they knew that COVID is still around," but "they all wanted to come back to school to see each other," and they were "glad to be back at school but struggled with anxiety about the unknown and not knowing what to do." The return to school highlighted the students who weren't coping: "Learning was the last thing. They have so much else to cope with"; those who had been in living in difficult situations: "School is like a safe place for them to come out of their families"; and the reality of the social and economic divide: "The whole effect of COVID highlighting inequality and the widening gap between those students who are advantaged and those who are disadvantaged." They also mentioned "students [who] never returned to school. They just continued working to support their families." Yet, little in the way of resources or support was available to assist teachers to deal with the levels of trauma they were to face.

Te Rito Toi

Prior to students returning to school after the first lockdown, the colleague I had traveled to Australia with and I discussed how students would be distressed by their experiences and teachers would be left, yet again, to pick up the pieces. My colleague organised funding and pulled together a team. We expanded the ideas we had used in the Banksia Initiative and tailored them to the New Zealand context. We prepared advice for principals, teachers, and parents, and created lesson plans for teachers in both English and Māori-medium schools, using art, drama, and picture books, on the topics of feelings, anxiety, trauma, resilience, and hope (see: https://www.teritotoi.org/). The website was promoted by the Ministry of Education, teachers' unions, and principals' organisations. We supplemented the materials with webinars across both New Zealand and Australia. The materials were downloaded hundreds of thousands of times all around the world, and the OCED highlighted our programme in their COVID-19 education continuation series (https://oecdedutoday.com/wp-content/uploads/2020/08/New-Zealand-Te-Rito-Toi.pdf).

Pre-service Teacher Preparation

Despite a growing awareness of the need for trauma-informed approaches, pre-service teacher education programmes in New Zealand still did not add preparation for traumatic events to their curricula. Following the mosque attacks earlier in 2019, my colleagues merely acknowledged the events then quickly continued with their regular curriculum, rather than taking the opportunity to integrate how their pre-service students might be prepared to help children and young people cope with such occurrences. The links to child psychology, health, social studies, cultural studies, or professional practice classes were ignored. I offered workshops on understanding trauma to supplement the classes that I taught, but they were only attended by my own students. They didn't attract wider interest across the faculty. Just before the March 2020 COVID-19 lockdown, I again offered a trauma-related session for my

classes because I had a sense of what was to come, but my offers to assist other colleagues were politely declined.

At the time of writing this chapter, the COVID-19 virus is continuing to spread, and the death toll is still climbing. In many countries, students have not yet returned to school. The psychosocial consequences will be with us for some time to come. It is time to be more proactive in New Zealand. This chapter has provided the opportunity to begin thinking about what we might do. Our first step has been to synthesise everything that we have experienced, read, and researched in order to propose a programme for preparing trauma-informed preservice teachers in our institutions.

Reviewing the Literature

We began our synthesis with a literature review to ensure that we were up-to-date with best practice. The literature in the field makes it clear that there is a widespread need for trauma-informed teaching, programmes, and practices within classrooms and across the school community. It talks about the benefits of trauma-informed teaching and how it can enhance students' and teachers' wellbeing. The majority of the literature notes that it is essential for teachers to understand how trauma can affect students' social and emotional wellbeing and academic success. It highlights the importance of teachers developing strong and meaningful relationships with their students. It suggests that teachers need to understand and acknowledge the various behaviours students can develop when experiencing trauma and enable students to manage these behaviours to ensure their ongoing psychosocial safety and development. Although teachers are well-equipped to deal with negative behaviour in the classroom, the literature emphasises that they do not usually have the resources to help students deal with trauma. In order that teachers can assist students experiencing trauma, they first need to understand the terms 'trauma' and 'trauma-informed teaching.' From there, school communities can find relevant programmes to support teachers to develop their knowledge and confidence to implement trauma-informed programmes in their classrooms (Brunzell et al., 2019; Carello & Butler, 2015; Crosby, 2015; Crosby et al., 2018; Herrenkohl et al., 2019; Phifer & Hull, 2016; Minahan, 2019; Soliemanpour et al., 2017; Thomas et al., 2019).

Below, we further discuss trauma-informed teaching and the three themes we identified from the literature: programmes that are currently implemented in schools to support students and teachers; ways teachers can incorporate trauma-informed teaching strategies in their classrooms; and the importance of building resilience prior to and after experiencing trauma.

Trauma-informed Teaching

There is a variety of explanations and viewpoints on trauma-informed teaching and ways to approach it. The Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) defines trauma as "recognizing trauma symptoms and understanding the policies and practice to reduce retraumatization risk" (p. 202). Most writers agree that trauma-informed teaching is about recognizing and enhancing students' social and emotional wellbeing, in particular, understanding how past and present trauma can affect their ability to learn. Carello and Butler (2015) state:

To be trauma-informed, in any context, is to understand the ways in which violence, victimization, and other traumatic experiences may have impacted the lives of the individuals involved and to apply that understanding to the design of systems and provision of services so they accommodate trauma survivors' needs and are consonant with healing and recovery. (p. 264)

In addition, Crosby et al. (2018) believe that trauma-informed teaching is an act of social justice, where students should receive equal and fair education regardless of what traumatic experiences they have experienced. They note that "teachers should not blame or punish students for their reactions to their circumstances, trauma-informed teaching has an embedded social justice perspective that seeks to disassemble oppressive systems within the school" (p. 20). It is also about teachers, students, and families working together to ensure the best possible approach is used. Roberts (2020) notes, "Trauma-informed teaching fosters connections, creating a sense of belonging, and commitment to flexibility" (p. 1). However, Herrenkohl et al. (2019) claim that while many schools are keen to better serve vulnerable and traumatised students, they "remain poorly equipped to address the needs of these children" (p. 373).

Programmes Implemented in Schools

The first theme from our review of the literature discusses the many programmes that are available to support students and teachers. The literature highlights the different approaches and programmes developed and implemented in schools. Herrenkohl et al. (2019), for example, reviewed 30 evaluations of nearly 20 different programmes, although many of them were variations of cognitive behavioural therapy (CBT). Much of the literature is from the United States, as the term 'trauma-based teaching' is more common there. The terms 'social and emotional learning,' 'wellbeing-informed learning,' 'positive education,' 'psychoeducation,' and 'resilience education' are also used (Herrenkohl et al., 2019; Soliemanpour et al., 2017; Brunzell et al., 2019). Herrenkohl et al.'s (2019) review included clinical interventions for individuals or small groups of children displaying trauma symptoms, undertaken by mental health professionals, such as Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) and Cognitive Behavioral Intervention for Trauma in Schools (CBITS). They also discussed school or classroom-based programmes, such as The Resilience Classroom Curriculum, and school-wide approaches, such as Healthy Environment and Response to Trauma in Schools (HEARTS) and the Cultural Adjustment and Trauma Services (CATS) programme.

Many of the programmes discussed in the literature took place in U.S. schools, but examples were available from the U.K., Canada, and Australia. As noted earlier, many programmes were based on CBT. The Cognitive Behaviour Intervention for Trauma in Schools (CBITS), for example, is a programme for students or groups of students from the 5th-12th grades who are at risk of community violence exposure. The CBITS model uses cognitive therapy procedures to teach emotion regulation, relaxation, social problem solving, and behaviour management. There have been cultural adaptations of CBITS to address the needs of different cultural and language groups (Herrenkohl et al., 2019; Phifer & Hull, 2016). One example of a trauma-informed school-wide programme is HEARTS (Herrenkohl et al., 2019). The programme aims to promote school success for students who have experienced trauma by using the multitiered system framework to address chronic stress or trauma. HEARTS educates both teachers and students about trauma-informed practices and how to deal with stress and anxiety. The framework first ensures that the learning environment is safe by setting routines and ensuring consistency with the routines. Secondly, it focuses on self-regulation to help both students and teachers manage their emotions and physiological responses. Another programme that shares similarities is the Positive Behavioral Interventions and Support model (PBIS). The PBIS model aims to improve classroom management and helps teachers identify and support students with social, academic, or emotional challenges (Wiest-Stevenson & Lee, 2016). The review of traumainformed programme evaluations conducted by Herrenkohl et al. (2019) concludes that individual and group approaches, such as TF-CBT and CBITS, are widely used and appear

well-suited to schools and, while school-wide approaches such as CATS and HEARTS show promise, they need to be strengthened to show greater impact and sustainability.

The literature emphasises a need to ensure all teachers are trained or informed about trauma-informed practices. Phifer and Hull (2016) claim that beginning teachers are not consistently taught how to deal with social-emotional or traumatic experiences that students face every day. Teachers are left to learn how to deal with challenging behaviours as they face them in their classrooms. It is essential to provide teachers with professional development that is contextually relevant and culturally appropriate, and to incorporate this learning into teacher preparation courses (Herrenkohl et al., 2019; Phifer & Hull, 2016).

Incorporating Trauma-informed Strategies into Classrooms

Every day, children are continually developing, growing, and learning. What they learn through their life experiences impacts their overall development. Data show that "up to two-thirds of the U.S. children have experienced at least one type of childhood trauma, whether it be abuse, neglect, natural disasters, or experiencing violence" (Minahan, 2019, p. 30). The effects of trauma impact a child's social and emotional wellbeing. Crosby (2015) uses Bronfenbrenner's socio-ecological theoretical model to help teachers understand the interactions that impact a child's behaviour. In this model, the child is nested inside a series of concentric circles, from a micro-system of close relationships to the macrosystem of societal and global influences that can have a significant effect on their development over time.

Even if teachers are not trained in dealing with trauma, there are many teaching strategies they can integrate into their classroom practice for students who have or are experiencing trauma. Much of the literature emphasizes that teachers should first build effective and meaningful relationships with their students and foster a warm and welcoming environment for students to learn. Minahan (2019) notes that small changes in classroom interactions can make a big difference for traumatized students. She outlines actions teachers can take, such as expecting the unexpected, employing thoughtful interactions, promoting predictability and consistency, "changing the channel" (p. 33), and "creating islands of competence" (p. 34). The National Child Traumatic Stress Network (2020) suggests that some of the essential strategies are establishing a routine and maintaining clear communication so students understand and know the expected behaviours. Another approach is to ensure that positive reinforcement and praise are given to students, as it can help reduce their negative thinking and make them proud of their work or what they have accomplished. Many teachers also use relaxation techniques, calming strategies, anger management, reframing, mindfulness, growth mindset, developing empathy, and journaling (Brown, 2015; Brunzell et al., 2019; Herrenkohl et al., 2019, Minahan, 2019).

Building Resilience

Much of the literature highlights the need for students to be resilient after experiencing trauma. The American Psychological Association (APA) defines resilience as the "process of adapting well in the face of adversity, trauma, tragedy, threats or significant source of threats" (American Psychological Association, 2021). Drawing on the APA definition of resilience, in short form, resilience is about being able to "bounce back" from hardship and having the drive to move forward and focus on the end goal or result. Resilience helps students to face the future with confidence after experiencing trauma, hardship, loss, or setbacks. It is important that teachers foster and facilitate resilience in the classroom. Brown (2015) emphasises that teaching resilience is valuable, not just when trauma occurs, but in preparing students to cope with everyday setbacks and in reframing their failures as learning opportunities. As resilience is not something that is embedded in students, teachers need to find strategies for teaching resilience to students. Brown's analysis of strategies that could be adopted by classroom teachers include self-regulation, growth mindset, an optimistic explanatory syle, and an internal locus of control (2015). Similarly, The Education Hub's key principles for teaching resilience are: supporting students to know who to talk to and seek help from if they need it; providing opportunities for students to recognise and manage their own emotions; developing strong relationships that foster self-efficacy and agency; (4) providing experiences that challenge students and providing the necessary guidance through these; and supporting students to build a growth mindset (The Education Hub, 2021). In addition, In Brown's (2015) review of the resilience literature, he noted that approaches trialled in the UK, such as SEAL (Social and Emotional Aspects of Learning) and the UK Resilience Programme, met with the most success when the teaching of resilience was sequenced, active, focused and explicit. In addition, Jennings (2019) recommends teachers build strong relationships with children's parents or caregivers as part of their overall strategy.

Designing a Framework

Establishing Principles

Herrenkohl et al. (2019) note that it is important to find programmes that are based on sound research, have been evaluated for efficacy, are age and developmentally appropriate, and sensitive to the cultural nuances of the context. Combining our research findings, the feedback from teacher workshops and webinars, and a synthesis of the literature, we distilled a set of key principles for preparing pre-service teachers for trauma-informed teaching and supporting the efficacy of the work that practising teachers are currently involved with.

Our first principle revolves around the idea of 'doing no harm.' In our interviews with teachers, we became aware that many of them had personal stories of grief, tragedy, and trauma and that these were not always resolved. It was important that we did not begin our work with the assumption that pre-service or in-service teachers were clean slates. Carello and Butler (2014) highlight the importance of not retraumatising. They recommend that "a

trauma-informed approach to pedagogy—one that recognizes these risks and prioritizes student emotional safety in learning—is essential, particularly in classes in which trauma theories or traumatic experiences are taught or disclosed" (p. 153).

Our next principle is the importance of a sound grounding of theory, research, and knowledge. Understanding the effects of trauma on the brain, for example, and how this impacts social, emotional, and educational progress, would help our pre-service teachers understand that these are physiological, as well as psychological, issues. Other important ideas are causes and manifestations of trauma, risk factors, and protective factors, and the justifications from the research literature for the importance of trauma-informed teaching.

From our work in New Zealand and Australia, we came to understand that there are many other approaches already in schools, such as SEL (social and emotional learning), PB4L (Positive Behaviour for Learning), *Mana Ake*, and Sparklers. Our introduction needs to be clear that we were not advocating that schools stop these approaches in favour of what we are presenting. We want to clarify that this is not a new fad but a distillation of learning from a range of evidence-based sources. We see that trauma-informed teaching has a two-fold purpose, (a) for children who are victims of trauma so they can regain a sense of trust and safety to engage in learning, while at the same time, (b) enhancing resilience for all students to better cope with everyday setbacks and in preparation for major crises. Strategies that teachers might already be familiar with can be incorporated into trauma-informed teaching approaches. The idea is to focus on and improve the coherence of these strategies. For our pre-service and in-service teachers in New Zealand, it is essential to connect to the values of our diverse cultural groups. The Treaty of Waitangi upholds the rights of our Indigenous people, Māori, and invites Pakeha (New Zealanders of mainly European extraction) to live and work in partnership, including with our expanding multi-cultural population. There are important holistic models of social and emotional well-being that can be embedded into a distinctively New Zealand approach to trauma-informed teaching. One example is *Te Whare Tapa Wha* (Durie, 2001), a strategy that promotes Māori values of *taha tinana* (physical health), *taha wairua* (spiritual health), *taha whānau* (family health), and *taha hinengaro* (mental health). Another example is the *Te Kotahitanga* culturally responsive teaching approach (Bishop & Berryman, 2010).

Our next principle is contextualising the approach to the school community, especially when working with practising teachers. In the New Zealand education system, while there are overarching curriculum guidelines, autonomy is given to schools to create a school-based curriculum that draws on the history, location, and cultural make-up of the school's community when choosing curriculum content, resources, and programmes. While we can provide models, we need to ensure that there is flexibility in the implementation of such models to meet the needs and aspirations of each school community.

While overarching frameworks provide the big picture, busy teachers also need a range of well-prepared and easily accessible strategies, resources, and lesson plans. In a shorter workshop, we can provide exemplars and links, but in longer courses, we would encourage collaborative designing and sharing of such resources and plans.

It is not enough to simply deliver a programme; it is also important to ensure that it makes a difference. We would build the skills of the teachers to undertake personal reflective practice to increase awareness of how teaching in this manner changes their pedagogy. Alongside observing their own personal professional development, we would use the literature to support them to find or design evaluative tools to discover whether there are shortvand long-term benefits to the children they are targeting and their classes as a whole.

Our final principle highlights the importance of recognising that teachers cannot make change by themselves. A school-wide approach that provides a compassionate and consistent environment for students will support not only traumatised students, but all students and teachers. How do we assist teachers to advocate for school-wide uptake of such programmes? How do we assist them to bring all the relevant parties together to work together on the solutions – school leaders, counsellors, social workers, consultants, parents, and local agencies? And how might we go wider – to influence district and national policies and practices?

Preparing a Trauma-informed Programme

After designing the principles, we planned a set of logical steps. We wanted to create a framework that would work, regardless of whether it was a two-hour seminar, a whole day workshop, or a longer course of study. The difference would be the level of detail and depth.

Figure 1

A proposed programme for teaching trauma-informed approaches to pre-service teacher

education students in New Zealand

Step	Matters to cover
1. Preparing	Prepare teachers to engage in trauma-informed teaching by first
the ground	understanding how their own grief and trauma might surface in the work
	they are about to undertake.
2. Knowing	Help teachers understand important concepts and ideas, such as what
the field	trauma is, how it is caused, how it manifests itself, and what the impacts
	are on children and young people's development, behaviour,
	relationships, and learning.

3. Linking to	Discuss what trauma-informed teaching is, what it aims to do, how it is
what we know	different from traditional approaches, and yet, how it borrows from and
	overlaps with other pedagogical approaches they might be familiar with.
4. Connecting	Develop a set of principles for their particular context based on cultural or
to the context	other context-related values.
5. Designing a	Build a framework to guide their practice that covers the important
framework	elements outlined in the literature and/or different approaches yet allows
	for flexibility and adaptation as the need arises.
6. Building a	Collate and explore a range of strategies and resources that are the
tool kit	beginnings of their personal and collegial toolkit.
7. Taking	Teach ways to reflect on their own learning and evaluate the success of
stock	the programmes, strategies, and/or resources that they use.
8. Joining the	Promote the need to advocate for wider school, family, and community
dots	uptake of the principles and practices to provide a more coherent and
	consistent context for the children and young people involved.

We began our planning over the New Zealand 2020-2021 summer break and will return to it when the new semester begins. We already have plans to trial a one-day workshop for practising teachers and propose a longer pre-service course to our faculty Board of Studies. Will our commitment and enthusiasm change policy and practice? Only time will tell.

Conclusion

This chapter outlines how the lead author's personal experiences and professional life became intertwined as her research led her to identify a gap in the provision of pre-service and in-service teacher education around trauma-informed practices in New Zealand. The chapter shares insights from research into the role of schools in complex emergencies across almost a decade and in six different countries, including the COVID-19 pandemic that is currently impacting all corners of the globe. These experiences and insights have led to designing a set of principles for a training package for the New Zealand teaching context that might resonate with a broader audience, as teachers around the world grapple with preparing the next generation with the confidence and skill to cope with trauma and face the future with critical hope.

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