

Pre-publication version.

Creativity beyond the formal curriculum: Arts-based interventions in post-disaster trauma settings

Abstract

Schools regularly find themselves dealing with the aftermath of family, community and national tragedies. In this article, two university-based educators share their experiences of working with schools to engage children in arts-based activities to support the processing of the traumatic events they endured. In both cases, children in local schools had been traumatised by natural disasters and needed support to enable them to make sense of what had happened and to begin to absorb these events into their own personal histories. The article summarises the relevant literature on the importance of post-traumatic processing and the use of arts-based methods for this purpose. The two case studies, one from the 2010-2011 New Zealand earthquakes and the other from the 2009 Samoan tsunami, are described separately before common themes are drawn from both cases. The joint findings are discussed using a framework proposed by Appleton (2001), which brings arts-based interventions and post-trauma processing together. The article concludes with the lessons learned from these experiences that might have broader applicability in other pastoral care contexts.

Authors

Author 1: Carol Mutch, The University of Auckland

Author 2: Leua Latai, The National University of Samoa

Dr Carol Mutch, Associate Professor
Critical Studies in Education,
Faculty of Education and Social Work,
Epsom Campus, The University of Auckland,
Private Bag 92601, Symonds St, Auckland, 1150, NEW ZEALAND
Ph +64 9 623 8899 Ext 48257, Cellphone +64 27 836 5150
Email: c.mutch@auckland.ac.nz

Matatumua Maluiao Leua Latai
Senior Lecturer Visual Art & Education
Teacher Education Department
Faculty of Education
Lepapaigalagala Campus, Apia, Samoa
P.O. Box 1622, Apia, Samoa
Ph +685 20072 x 349
Email : l.leonard@nus.edu.ws

Creativity beyond the formal curriculum: Arts-based interventions in post-disaster trauma settings

Introduction

More and more, schools find themselves dealing with the aftermath of family, community and national tragedies. One such tragedy is the physical destruction and personal loss caused by disasters. Not only are natural disasters regular events across the globe but scientists are predicting that the effects of climate change will result in more extreme weather events, rising sea levels and the loss of further natural and built environments. As nations and communities are impacted by such calamities, schools will be again called upon to assist the children in their care to respond to and recover from these events so that they can return to normal functioning. In this article, two university-based educators share their experiences of working with schools to engage children in arts-based activities to support the processing of the traumatic events they endured. In both cases, children in local schools had been traumatised by natural disasters and needed support to enable them to make sense of what had happened and to begin to absorb these events into their own personal histories.

The article begins by summarising relevant literature on the importance of post-traumatic processing and the use of arts-based methods for this purpose. The two case studies, one from the 2010-2011 New Zealand earthquakes and the other from the 2009 Samoan tsunami, are described separately before common themes are drawn from both cases. The joint findings are discussed using a framework proposed by Appleton (2001), which brings arts-based interventions and post-trauma processing together. The article concludes with the lessons learned from these experiences that might have broader applicability in other pastoral care contexts.

Children and disasters

Children and young people can face a range of life-changing experiences from personal trauma, such as losing a family member or being subject to physical or sexual abuse (Visser & du Plessis, 2015; Lyshak-Stelzer et al., 2007) to disasters that affect whole communities such as floods, fires, tornadoes, tsunami and earthquakes (Mutch, 2014; Boume Hulsey, 2015; Peek et al, 2016; Mitchell, 2015; O'Connor & Takahashi, 2014). Psychologists and researchers studying the impacts of disasters note that children and young people can be affected in a range of ways and to varying extents (Bonanno et al., 2010; Cahill et al., 2010; Norris et al., 2002; Sagy & Braun-Lewensohn, 2009). Children and young people might experience loss of security, safety and predictability (Betancourt and Kahn, 2008; Gordon, 2002; McDermott & Palmer, 2002). They might feel guilty, helpless, vulnerable or without hope (Betancourt and Kahn, 2008; Orr, 2007). They might experience nightmares, bedwetting or clinginess (Prinstein et al., 1996). They might exhibit behavioural changes, such as withdrawal, depression, anxiety, irritability, hyperactivity, poor impulse control or heightened aggression (Bonanno et al., 2010; Cahill et al., 2010; Orr, 2007, Prinstein et al., 1996).

Around 16 percent of children or young people develop serious and chronic symptoms that manifest themselves in post-traumatic stress disorder (PTSD) from negative life events (Alisic et al., 2018) but this mostly affects children with high exposure to the events and pre-existing risk or resilience factors (Alisic, et al., 2018; Bonanno et al., 2010; Cahill et al., 2010; La Greca and Silverman, 2009). Most children and young people will have some adverse symptoms for the first few months but, unless there are secondary stressors arising from the events, most recover within a year or two (Bonanno et al., 2010; La Greca and Silverman, 2009; Visser & du Plessis, 2015).

For children and young people without high levels of trauma, research on helping children adjust after trauma suggests that emotional processing (Mutch, 2013a; Caruana, 2010; Gordon, 2002; Prinstein et al., 1996) is an important post-trauma activity. Emotional processing is defined as “a diverse set of physical, cognitive and affective actions that lead to absorption of emotional disturbances” (Prinstein et al., 1996, p. 464). Without appropriate absorption or opportunities to put events into perspective, reminders of the event can interfere with normal functioning. Carefully managed and repeated exposures through calm rehearsals, safe conversations, or arts-based activities contribute to appropriate absorption (Mutch, 2013a; Cahill et al., 2010; Gibbs et al., 2017; Gordon, 2002; 2007; Prinstein et al., 1996).

Using the arts for post-trauma emotional processing

Using the arts as a form of emotional processing is increasingly recognised as a useful treatment to help children and young people suffering from mild trauma (Gordon, 2002; 2007; Orr, 2007; Prinstein et al., 1996). The arts have proved to be a useful tool in reducing trauma symptoms across different types of events and in enabling children and young people to begin to process and absorb these experiences in a way that helps restore their emotional equilibrium (Mutch, 2013a; Mutch & Gawith, 2014; Latai & McDonald, 2016, 2017; Gibbs et al, 2013; Orr, 2007).

The arts have been used to help children and young people affected by trauma in a range of settings, including in both developed and developing countries (Mutch, 2013a; Latai & McDonald, 2016, 2017; Mitchell, 2015, Peek et al., 2016). Often, however, only selected groups of children and young people receive this opportunity, even when a disaster affects the whole community. Boume Hulseley (2015) implemented a therapeutic art programme which included all the primary school aged children in the US city of Joplin following a major tornado in 2011. She argues that to only treat some children is inequitable, it should be made available to all affected children.

As verbal expression can be difficult because of the language development of a child or because of the emotional pain of recall, arts-based activities provide a safe vehicle through which thoughts and emotions can be approached (Gibbs et al., 2013; Orr, 2007; Visser & du Plessis, 2015). Orr (2007, p. 351) states, “Art is a way to provide distance from the intense affect associated with the disaster and a way to work around and through the natural defenses that arise when trying to link affect with cognition.”

A wide range of materials can be used to undertake this task. Materials have ranged from paper and colouring pens (Mitchell, 2015) to making a model city out of large cardboard

boxes (Boume Hulsey, 2015). Activities have included photography, computer animation, music, drama, experiential games, jewellery making, collage, and poetry (Brown & Mackie, 2015; Cahill et al., 2010; Fothergill & Peek, 2015; Peek, et al, 2016; Visser & du Plessis, 2015). The key element in all of these arts-based programmes was bringing children together to undertake activities for exploring, processing and moving on from the traumatic event.

Two strengths of arts-based interventions highlighted in the literature are the ways in which children benefit individually and collectively. First, the arts assist individuals with the inability to process trauma themselves to have a medium through which begin to do so. Orr (2015) explains that, "The ability to create art about threatening thoughts and feelings channels the child's energy...into a positive task, which can then be explored safely" (p. 351). Similarly, Mitchell (2015) observed during her work, "that some children strained to express their emotions and traumatic memories verbally, but on paper, where anything was fair game, they vividly, graphically showed their experiences in drawings" (p. 191). Arts-based activities were not only powerful but essential in enabling the children and young people in these contexts to begin to process and recover from their traumatic experiences.

The second strength is the group context in which most arts-based activities take place. Alongside the therapy, the activities provide the chance for children to their share experiences with like-minded others. Finding empathy and commonality was consistently highlighted as an important contributor to the reduction of trauma symptoms. Those affected no longer felt like they were alone but could also share coping strategies (Visser & du Plessis, 2015). In post-disaster situations, activities which contributed to the rebuilding of the community were also highly valued by the young people involved (Mutch, 2013b; Gibbs et al, 2013; Peek et al., 2016). Researchers often found that young people, in particular, felt ignored in the disaster recovery process – considered not old enough to help with the recovery, but too old to need to be looked after as children (Cahill et al., 2010; Gibbs et al., 2013; Peek et al., 2016). In Peek et al.'s study (2016), young people welcomed the opportunity to use their art projects to voice their ideas on how to rebuild their communities. Likewise, the children in Joplin, Missouri, were excited at being able to share their thoughts on how to redesign their city (Boume Hulsey, 2015).

Promising results are emerging from recent research. In a review of the international evidence of the impact of the arts on health and wellbeing, Bidwell (2014) found that engagement in the arts increases well-being, self-confidence and social cohesion. Murphy's (2014) research found that participants in post-disaster group arts therapy increased in feelings of hope, safety, psychosocial wellbeing and confidence. Community arts projects in Christchurch post-earthquake resulted in physical and mental health benefits for those participating and the arts contributed to post-disaster community resilience (Lesniak, 2016).

However, despite these positive results, arts-based post-trauma activities remain understudied, under-tested, and under-theorised (Orr, 2007; Huss et al., 2016; Reynolds, Nabors & Quinlan, 2000). Orr (2007) argues that research is vital "so that art therapists are working from what is known to be valuable, rather than what is thought to be useful" (p. 356). Sanders (2015) echoes this call, arguing that we need to know more about how and why arts-based methods work in order to improve theory and practice. There are, however, barriers to researching such interventions, particularly when working with children and young people in

disaster situations. These barriers include the immediate focus on physical needs like food, water and housing in the aftermath of disaster (Sanders, 2015) and getting consent from parents and caregivers who are often worried about the possibility of re-traumatisation (Peek et al, 2016; Mutch, 2017).

The literature also raises a number of considerations when providing arts-based activities following disasters. One such consideration is how ideas of art and trauma vary between cultures. Huss et al. (2016) highlight the importance of avoiding “Western imposition” (p. 285), especially when working in disaster-stricken non-Western contexts. Another consideration is the need for art therapists working in disaster relief to practice self-care in order to process the trauma they are constantly encountering (Sanders, 2015). Yet another consideration, especially for those studying as well as practising arts-based therapy, is the long-term impact on the community involved. Mitchell (2015) reflected on how her project with Nigerian children traumatised by war was effective, but ultimately, unsustainable. Once the funding moved, the community was unable to sustain the art therapy programme, despite it being well-received. Working with young people in Canada and the United States, Peek et al. (2016) were also concerned about working in vulnerable communities for only a short period. They actively looked for ways to work within existing community structures and ensure there were longer term benefits for both the wider community and the young people directly involved in the project.

In summary, the literature highlights that arts-based post-trauma activities conducted sensitively and appropriately have the potential to be powerful tools in helping children and young people in disaster situations process their experiences and reduce trauma. However, little is yet known about what is most effective, why it is effective and how it can best be carried out in different post-disaster contexts. Nor is the field sufficiently conceptualised or theorised. This article aims to add to the field by drawing on the literature already available, combined with the data from the two case studies presented, to offer a possible way of conceptualising and theorising the emerging practices in post-disaster arts-based emotional processing in order that it can be more widely recognised.

The case studies in this article were based on two different post-disaster experiences – a tsunami in Samoa (a developing country) and an earthquake in New Zealand (a developed country). As each case study was conducted independently, they are described separately before common themes are explored in the discussion section.

Case study 1: A “river of emotions” in Canterbury, New Zealand

On 4 September, 2010, the city of Christchurch and surrounding districts in Canterbury, New Zealand were hit by a powerful 7.1 magnitude earthquake. Buildings, transport links and infrastructure were destroyed. Schools were closed for several weeks as they were assessed, repaired or alternative accommodation was found. The September earthquake was followed by thousands of aftershocks over several years. The most damaging, a 6.3 magnitude aftershock, struck on 22 February, 2011. Located much closer to the city, it led to 185 deaths as well as major devastation in the centre of the city and nearby suburbs (Canterbury Earthquakes Royal Commission, 2012; Potter et al, 2015). Much has been written about the stoicism, resilience and creative problem solving of the people of the city (Mutch, 2013b, Education Review Office, 2013; Morgan et al., 2014). In this case study, the

focus is on the ways in which schools displayed a “pedagogy of care” (O’Connor & Takahashi, 2014) as they supported students, their families and communities through the response, recovery and reconstruction stages. In particular, the focus is on the ways in which schools used creativity to support children’s emotional processing and recovery. Carol Mutch was the lead researcher in a study that followed five Christchurch schools as they came to terms with the enormity of the earthquakes and began to absorb the events into their personal and collaborative histories (see, Mutch, 2013a; Mutch & Gawith, 2014).

From children’s immediate return to school in the Canterbury region after the major earthquakes, through yearly remembrance ceremonies, to reaching a stage where the events were assimilated into the fabric of the region’s collective history, arts-based and creative activities played a part. Teachers reported getting children to respond to their emotions through talking, drawing, painting, writing, making cards, building, designing, acting, singing or dancing (O’Connor & Takahashi, 2014; Gibbs et al, 2013; Mooney et al., 2017). Some activities were at the classroom level, others were school-wide or were conducted by professional art therapists, musicians or drama companies across multiple schools.

Mutch’s study included a range of school-based projects from compiling an illustrated book, to making a video and creating a website – but the activity discussed here was the most comprehensive. It involved every child in the school, their teachers, the principal, dozens of local community members, an artist who acted as project manager and several researcher-facilitators. The following section outlines the genesis of the project, its implementation and the culmination of the community’s combined focus on helping children come to terms with their trauma.

Mutch wanted to make sure that she covered a range of earthquake experiences in her study and therefore contacted the principal of a school in a small town north of Christchurch which had lost one third of its houses and much of its town centre in the September 2010 earthquake. On their first meeting, the principal and Mutch realised that they knew each other – the principal had been a student in Mutch’s teacher education classes. This link proved invaluable because they were able to start the joint project from a place of trust and respect. Mutch had already received ethical approval from her university for the wider project and therefore ensured that the teachers, students and parents understood their rights before they agreed to the project (see, Mutch, Yates & Hu, 2015). During a discussion between Mutch and the principal, he expressed his wish for the project to create a place of contemplation, where school and community members could come and sit quietly while they reflected on the enormity of the events.

The first step was to bring together a cross-section of students from the school to give shape to the project. Mutch and a colleague used a carefully structured process that enabled the students to focus on the bigger messages they wanted the project to portray. The students said they wanted “to remind people in the future of what had happened”; “of what was there in the past and what has been lost”; “we want to remind them of what we went through”; of “how we stayed together and worked it out” and to remember “the people who died.” When asked how they might do this, one student said, “to make something out of the broken bits of our homes.” From this image, the idea of a mosaic arose.

The students were encouraged to capture their ideas on paper, in words and pictures. They wrote the words, “courage”, “stay strong”, “community”, “band together” and “*kia kaha*” [stand tall]. They drew pictures of important icons – the cathedral in the centre of Christchurch that was badly damaged, a local historical building that was destroyed, and a bridge that was twisted with the earthquake’s force. One boy drew a picture of a sailing ship. When asked why he chose that image, he said it was the Tuhoe, a ship moored in the nearby river, and it was “sailing through a river of emotions”. We agreed that this idea would make a perfect title for our project.

From these initial ideas we drafted a set of mosaic panels that would tell the community’s story from (a) the early Māori (indigenous people) and the first European settlers, to (b) life before the earthquakes, (c) what it was like during the earthquakes and (d) what the students hoped for the future. The four panels would sit in a circular shape with a seat in the middle in a quiet corner of the school playground.

Mutch returned a few weeks later to work with students, a class at a time, to build up a cache of images that could be incorporated into each panel. With the teachers’ help, we tried to match the sophistication of ideas with the student’s levels of skill and understanding. This meant that the older students focused on historical images and the youngest children were asked to draw things that represented the days before the earthquakes. In between, the middle classes prepared images for the earthquakes themselves and their hopes for the future. Figure 1 represents some of these original images.

Figure 1: During the earthquakes

Figure 2: Paper mosaic

An artist with links to the town was engaged to manage the practicalities of building the mosaic foundations and creating the artwork. She took the sketches and showed the students how to cut up paper to get a sense of what each image would look like as a mosaic (see Figure 2)

Figure 3: Individual images transferred to panel Figure 4: An image prepared for transportation

The school made an unused classroom available as the project base. Classes were cycled through the different steps of the project. The next step was to choose where to put the images on each of the relevant panels. These paper panels became the blueprint for the mosaic layout. Each paper mosaic image was then scanned as a guide to be used to transfer the image to the correct position on the final panels (see Figure 3).

While some classes were working on the paper mosaics, others were shattering crockery (many pieces from the remains of their own homes) and cutting up donated tiles. Several children remarked on the cathartic value of “smashing” the crockery and tiles into tiny pieces. The mosaic pieces were then selected to best match copies of the paper mosaics and placed on stiff board to support their transport to the outside site where they would be placed onto the prepared mosaic foundation (Figure 4). Each of the steps along the way

provided data in the form of video recordings of art sessions, drawings, individual and group interviews with children, photographs of images and the development of the mosaic itself.

Outside, the site was being prepared by community volunteers, who dug the site, laid gravel for drainage, poured concrete and cleaned bricks from demolished buildings for the base. Local businesses also gave staff time off to volunteer to assist with the mosaic. From here, groups of children were cycled through the different aspects of spreading tile adhesive, placing the mosaic pieces, adding grouting, and finally, painting with protective gloss. The last piece of the mosaic was laid by a local Member of Parliament at a community ceremony to launch the mosaic and thank everyone involved.

Now completed, the set of mosaic panels sits in the playground with a hexagonal bench in the middle made by a local men's group. Children and adults alike return to the mosaic to sit quietly, find the image they made or set into the mosaic, or which was made of something from their homes. Some children, who feel especially attached to the mosaic, come and talk to it, saying good morning when they arrive at school and goodbye when they leave. Each year, the mosaic is the site of the school community's remembrance service.

The four panels tell much about the children's experiences of the earthquakes and their processing of the events. In the historical panel (Figure 5), the children portrayed the ideas that represented their past and the environment they lived in (with some liberty as there is a dinosaur included in the panel). They drew the mountains, the forests, ferns and birds, including the iconic kiwi. They drew a Māori *whare* (meeting house) and buildings representing the coming of the European. The historical panel was deemed a "happy panel", which meant that the colours were happy colours – yellow, blue and green.

Figure 5: The early history of the town

The panel representing life before the earthquakes (Figure 6) is the most stylised, perhaps because the youngest children contributed to this one. There are rainbows, children playing, brightly coloured houses and the cathedral in its original splendor. A feature of all the panels, which can be clearly seen in this one, is the river that winds through the town. The river was made from broken mirror tiles because the children explained that their river was always changing and the mirror tiles would reflect the sky and the clouds and make the river come alive.



Figure 6: Before the earthquakes

The colours change dramatically in the earthquake panel (Figure 7). The children wanted black and red to be the predominant colours, as those colours represented fear, danger and death. The images are of broken buildings, children crying, cars falling into chasms in the road, the ruined cathedral, and ambulances and fire engines racing to the rescue. One dramatic feature is very obvious. The seismic reading for the February 22 earthquake, as recorded in their town, is the centre piece of this panel. Another feature is that the river changes for a time to solid grey to represent the liquefaction that bubbled up from underneath the ground and spread inches thick throughout the town.

Figure 7: During the earthquakes

In the final panel (Figure 8), the colours return to blue and yellow and green. There are butterflies and animals, hearts and suns, children playing rugby, repaired houses and roads, and in the top right, the Tuhoe, sailing "to calmer seas".



Figure 8: Hopes for the future

Case study 2: Creating safe spaces through expressive arts in Samoa

A large earthquake of more than 8.3 on the Richter scale hit Samoa in 2009, creating a catastrophic tsunami wave which destroyed the southern side of the island of Upolu. Over 500 homes were completely destroyed with several hundred more badly damaged. Community buildings such as churches, schools and health centres were also damaged (Talbot et al., 2011).

The tsunami resulted in 143 lives being lost, including children. A concern that arose from the disaster was the impact that it had on the children who witnessed and experienced this event. The Moving on: Art-as-Therapy Programme was developed in 2010 to create a safe space that used the arts to assist with the healing process for the children of the Aleipata School District. Six Art-as-Therapy workshops were conducted over a period of six months. The programme offered an opportunity for the children and community to lessen their anxiety and improve their well-being through a self-exploration of the aftermath of the tsunami. Leua Latai from the National University of Samoa developed the research project and led the implementation of the Moving on: Art-as-Therapy programme. There was a tremendous outpouring of support from the community at large and approval was granted by the Ministry of Education, Sports, and Culture. The programme was supported by Lex McDonald a child psychologist with experience of many years, who also contributed to the research project.

The Moving on: Art-as-Therapy programme was implemented at three sites: Aleipata Secondary School, Satitua and Lalomanu Primary Schools. When the tsunami arrived, the children were either at school or on their way to school. The art activities were designed to provide emotional support for the children. They consisted of creative story writing, poetry in the style of *sa'afiafiga* (Samoan lamenting poetry), creative movement to music, drawing, painting and puppetry.

The Moving on: Art-as-Therapy programme followed a consistent but flexible format:

1. **Warm up:** welcome using movement to music. Lots of noise and laughter was encouraged, winding down involving relaxing stretches and deep breaths to soft classical music;
2. **Sharing “mood” sessions:** students were asked to share how they felt at the time (eg., sad, happy, angry);
3. **Art-as-therapy activity:** creative writing, story books, *sa'afiafiga*, painting and drawing to music and drama (puppetry) to capture their feelings in regard to upsetting concerns;
4. **Warm down:** After the art activities, children were asked to talk about their artwork and share their thoughts and feelings. The artworks were then displayed on the classroom walls and used for family healing exhibitions at the end of each session.

One of the most important components of the programme was the reflection time where students shared their artworks with each other, the facilitators, their teachers and their families.

The research study that ran alongside the programme involved 177 children and young adults (ranging from 5-18 years old.) They had all experienced the tsunami and were greatly

affected by it. Latai was the programme facilitator and was supported by principals and teachers from the local community. Data were also collected from the parents and teachers who collaborated with the children. The artefacts collected included creative stories, drawings and paintings, and *sa'afiafiga*. The sessions were photographed and recorded on video. Later, structured group and individual interviews were undertaken with the children to collect data concerning the overall impact of the programme. These group sessions not only provided information on the programme but also became a means of peer support for the children.

Responses resulted in rich data that was most useful for assessing the impact of the programme (Latai & McDonald, 2016). A simplified thematic analysis (see Miles, Huberman and Saldana, 2010) was used to capture dense data insights. All the artefacts collected (drawings, paintings, written work and interviews) were analysed by two researchers who jointly allocated codes. These codes were then grouped into categories and on interpretation of these, key themes were detected. Themes were identified by examining the codes and patterns, and if there was concrete evidence of repetitiveness of ideas presented across the different genres then a theme was noted. Information was also collected from the sharing sessions and interviews. To ensure consistency, the process was repeated several weeks later but no significant differences were detected (Latai & McDonald, 2016). The trustworthiness of the qualitative data was ensured by the range of student responses, the careful analysis of student artefacts, joint evaluation of the data and the fidelity of the overall research plan and implementation. Ethical clearance and approval for this research was acquired from the Ethics Committee of the National University of Samoa.

During the facilitation of the programme, the feelings and behaviours displayed by the children and others (parents, teachers and community supporters) provided insights into the emotional impacts of the tsunami. It was observed, for example, how stress impacted on the children – some of them developed *diurnal enuresis* (day wetting) which continued for several months. Participants often wept as they voluntarily shared their stories.

Despite the programme targeting children's responses, a number of parents, teachers and other community members personally engaged in and benefitted from it. Some parents became involved in the story book project and shared their emotions and feelings of despair. During family healing exhibitions, parents viewed their children's artworks solemnly and commented on them emotionally. When stories were read aloud by the children, there was physical acknowledgement, such as the comforting and embracing of each other.

After several weeks of sharing sessions, a close bond developed between the children, teachers, parents and the research team. Great interest was shown by many of the children who were not part of the programme. They developed a curiosity, peering through the windows of the art room, indicating their wish to participate. Due to this overwhelming interest from other students, the programme was opened up to all.

The intention of the programme was to facilitate emotional responses and this was achieved – a variety of emotions and thoughts were disclosed. In the analysis of the data, many themes were revealed – fear, death, destruction, spirituality, heroes, and moving forward. The most powerful and most haunting themes were the children's fear of the tsunami

returning, and the death and destruction they witnessed. These are the three themes highlighted here.

Theme 1: Death

Many of the children, through their drawings, paintings and stories, revealed a pre-occupation with death and dying. Some children reported the horrific scenes of naked corpses strewn around their villages and the overwhelming stench of death. One high school student described death: "I witnessed the death of the elderly and the young. Their mouths and faces were covered with mud and dirt. Bodies were bloated and swollen from swallowing sea water and had started to smell." Another student described pleas for help and drew a picture of the tsunami: "...for thirty minutes I was floating around, when I heard a voice crying out, 'I want to live.' There was nothing I could do."

Other verbal and written descriptions included the arrival of the wave as death. A high school student wrote: "I ran as fast as I could towards the mountains, the cry of death was everywhere but there was nothing I could do. I just kept running and running." Another student said: "Please God, I don't want to die." Another wrote: "I heard and saw death take children and old people from my village with no mercy. It was a frightening day as I stood there and witnessed it all." Observations of death and an overwhelming sense of helplessness dominated the children's drawings, paintings and written accounts. Figures 9 and 10 reveal experiences of death by the children.

*Figure 9: Funeral of tsunami victims
Year 9 student, Aleipata, 2010.*

*Figure 10: Illustration depicting death (drowning) by
Year 5 student, Aleipata, 2010.*

Other concerns, apart from death, were anxiety related to fear of the *aitu* (monster wave), its effects and possibility of the tsunami returning (see Figures 11 and 12). The descriptions of the wave referred to *aitu*, *temoni* (monster), *sauai* (giant), *manu feai* (wild animal), *foliga e pei o se temoni* (face of demonic evil), *foliga sauva* (face of rage), and blood wave (*galu toto*). In the sharing sessions, where the participants were interviewed, the younger children described the wave as a monster (*aitu*), whilst the older children's verbal accounts referred to the wave as destruction. Some children expressed the cause of the wave as a *mala* (an ill omen) and consequence of God's wrath upon them for the defilement of their land due to modern changes or not abiding by God's law. A Year 10 student wrote:

*"I have witnessed God's wrath
It is God's will."*

Another student wrote:

*"Samoa, prepare for the day of reckoning
Honour the Sabbath."*

*Figure 11: Illustrations of fear depicted by a
Year 10 student, Aleipata, 2010.*

*Figure 12: Drawing portraying children on trees
clambering to safety Year 9 student, Aleipata,
2010.*

Theme 3: Destruction of the environment

From the drawings, paintings and story books, a third theme that arose was the children's awareness of the obliteration and damage caused by the tsunami. Extensive documentation of the devastation of their surroundings and homes was depicted. For example, the destruction caused to the landscape, churches, homes and school buildings were portrayed in their artworks. A student wrote:

We saw our entire village depleted. People's homes were uprooted and demolished. Cars were smashed and thrown around. People's personal belongings were scattered everywhere. There were piles of dead bodies everywhere.

Figures 13 and 14 depict the destruction of their environment by the tsunami.

Figure 13: Depiction of the destructive tsunami by Year 9 student, Aleipata, 2010.

Figure 14: Illustration showing the full force of the wave by Year 9 student, Aleipata, 2010.

Other themes that came out of the programme included heroes, support (such as foreign aid), the importance of spirituality, rebuilding and moving forward. After several months, it was noted that the responses of the children, teachers and parents started to focus on the future. There was an energy that promoted resistance and empowered people to promote development and regain stability. Sorrow and grief were important as they provided for the beginnings of hope, rebuilding and moving forward. The colours of the children's paintings revealed lighter tones and the dark expressions started fading away. For example, a Year 9 student wrote:

If you look at our village now everyone has everything in their homes... houses are built, electricity restored and installed to our new location. The only sad part is that no one lives where we used to live... where our village used to be. In the evenings there are volley ball games and the young and old hang out in the evenings. (Latai & McDonald, 2016)

The images drawn after several months into the programme began to focus on rebuilding and restoration of the environment. The colours are brighter, the mood is lighter, the island is getting back to normal (Figures 15 and 16).

Figure 15: A tractor ploughing the road by Year 3 student, Aleipata, 2010.

Figure 16: Year 3 student home having been restored, Aleipata, 2010.

Discussion

There were many common themes to arise from analysis of the processes used and the products created across the two cases studies. The processes involved facilitators with a mixture of educational, arts-based and psychological backgrounds coming together to design programmes that would enable children experiencing post-disaster trauma to process the events they had experienced. Neither programme followed a rigid formula. They each

developed as relationships of trust and familiarity were built with the school communities and as the needs and interests of the children and young people became apparent. This approach is entirely consistent with the literature in the field that suggests successful arts-based interventions use multi-methods (Fothergill & Peek, 2015), semi-structured activities, including spontaneous elements (Gibbs et al, 2013; Orr, 2007) in collaborative groups (Huss et al., 2016; Murphy, 2014; Visser & du Plessis, 2015) in safe environments (Gibbs et al., 2013; Orr, 2007) that are contextually and culturally appropriate (Huss, et al., 2016) with the focus on emotional processing and positive reframing (Gordon, 2002; Prinstein et al., 1996; Visser & du Plessis, 2015).

The products, in both the artworks and the data collected from observations, interviews and visual analysis, provided stark insights into children's initial emotions and their first attempts to understand the situation, through to children beginning to absorb the events into their own personal and community histories. The artworks charted the move from shock and helplessness to hope and a more positive outlook. In searching the literature to find a conceptual model that might help us explain our findings and provide a useful framework to support educators in other post-trauma contexts, we discovered Valerie Appleton's "Avenues of hope" (Appleton, 2001). Appleton drew on Lee's (1970) four stages of psychosocial transition from trauma and incorporated these stages into her post-trauma art therapy approach with child burn victims. The approach has four stages – impact, retreat, acknowledgement and reconstruction. Each of these stages has psychosocial issues that need to be addressed from shock and withdrawal to mourning and mastery. Appleton included a goal for each of the four stages – (1) creating continuity, (2) building alliances, (3) overcoming social stigma and (4) fostering meaning. In her study, Appleton was able to detail the themes in the children's artwork and the art processes they used at each stage to achieve the expression of their emotions. We have adapted this model to relate more specifically to our own studies. We have kept the four stages and sets of issues, only slightly renaming the goals that we were attempting to achieve. We have then focused on a comparison of the four stages across the two settings (see Figure 17).

Psychosocial Stages	Possible psychosocial issues to address	Examples of themes and phases (New Zealand)	Examples of themes and phases (Samoa)
Stage 1: Impact			
<i>Goal: Creating continuity</i>	Trauma Loss Denial Shock	"Broken pieces of our homes" Colours of red and black Buildings and roads destroyed	Monster wave Dead bodies Coffins Memories Tears
Stage 2: Retreat			
<i>Goal: Building alliances</i>	Regression Dependence Withdrawal Resistance	Meeting the facilitators Designing the images Creating the panels Giving shape to the narrative	Beginning the art programme Building relationships between children and facilitators Engaging teachers and parents

Stage 3: Acknowledgement			
<i>Goal: Overcoming anxiety</i>	Mourning Interactions Reflections	Smashing the tiles Selecting the pieces to recreate the images Preparing the images for setting into the panels The community coming together to fill in the blank mosaic panels	Completing and sharing artworks, stories, poems and puppets Family and community healing sessions where children shared their work Extending the programme to all children
Stage 4: Reconstruction			
<i>Goal: Fostering meaning</i>	Clarification Mastery Independence Future	Completing the mosaic Hopes for the future “Sailing to a better place” Holding a community celebration	Changing nature and content of artworks Publishing the story books Looking to the future

Figure 17: Comparison of the two programmes using Appleton's (2001) framework

Stage 1 Goal: Creating continuity

In the first stage of the model, children are still in shock. They might display heightened fear, anxiety or sorrow. They might also disassociate, that is, completely disconnect from what is going on around them. At this stage, they need comfort and reassurance from trusted adults or peers (Bonanno, et al., 2010; Gordon, 2002; Prinstein et al., 1996). One commonly suggested strategy is returning to regular roles and routines, such as mealtimes or bedtimes, and as schools reopen, returning to school. Familiarity and regularity help children recognise that within the disruption will be some people or activities that can be relied upon. Distracting children from ruminating on the things that upset them is another important strategy (Bonanno, et al., 2010; Prinstein et al., 1996). While it is important to acknowledge the event that happened, going over the upsetting details is not helpful. It is better to try to find some good in the situation – that they survived, that people came to help, that the major event is over, or at least there is some respite from it. The third strategy is finding a safe way to begin to process the events and the emotions that are associated with the event and its aftermath (Bonanno, et al., 2010; Cahill et al., 2010; Gibbs et al., 2013; Prinstein et al., 1996).

In both case studies described in this article, arts-based methods were used in schools to provide reassurance, familiarity, distraction and emotional processing. While the programmes were run with outside assistance, they were on the school site and run in conjunction with teachers, parents and community members. The New Zealand case study was approached in an open-ended way, which drew on the children's ideas to create a larger collaborative community project. The Samoan case study used a format that focused first on children coming to terms with their own experiences and emotions using arts-based activities, which then enabled them to gain the confidence to share these feelings with their peers, teachers and families.

Death, destruction, loss, danger, anxiety and fear were common emotions expressed in artworks and interviews. Children and young people's descriptions of their experiences and emotions were vivid, from the student who talked of the bodies that were "bloated and swollen from swallowing sea water and had started to smell" to the earthquake mosaic images of people screaming and cars falling into holes. The Samoan students found many ways to portray the tsunami wave metaphorically and literally. The New Zealand students associated the earthquakes, which were a constant in their lives over several years, with the colours of death and destruction, which for them, were red and black.

Stage 2 Goal: Building alliances

In the second stage, as children come to recognise what has happened, they can begin to display behaviours that are out of character for them – bedwetting (or day wetting), clinginess, withdrawal, listlessness, hyperactivity, impulsivity or anger (Bonanno et al., 2010; Cahill et al., 2010; Norris et al., 2002; Orr, 2007; Prinstein et al., 1996; Sagy & Braun-Lewensohn, 2009). Teachers in New Zealand were thankful for psychosocial support guidelines that helped them to recognise these symptoms. They learned to see children as not being "naughty" but as being unable to process how they were feeling. In Christchurch, however, psychosocial services were spread thinly and withdrawn too soon (Meier, 2017). Teachers were left with a wide range of issues to deal with on an on-going basis. In both the New Zealand and Samoan case studies, we can see that arts-based projects helped fill the vacuum of limited psychosocial support. These programmes gave teachers respite as well as providing them with strategies to help their students and themselves. Both programmes only succeeded because the facilitators were committed to long term involvement with the schools and their communities. Building trusting relationships, negotiating roles and responsibilities and collaborative problem solving were all key ingredients to the success and longevity of the programmes.

At this stage in their recovery, children were familiar with routines of each of the programmes. The Samoan programme used relaxation techniques to prepare children for the art sessions and ended with opportunities for parents to listen to and view their children's work. This feature proved to be important for everyone involved and created a strong bond between all participants. Building a sense of a community story of the disaster event is one of the findings that is common to both case studies. The local artist who became the project manager of the earthquake mosaic, noted that every child, even those who arrived at school just before the mosaic was completed, had a role somewhere in its production. She also kept a record of all the community volunteers and said there were 72 people from outside the school who donated their time, goods or services to complete the mosaic.

Stage 3 Goal: Overcoming anxiety

By this stage of the model, children have acknowledged the nature of the event and are finding ways to manage their fears. Research on children in Christchurch post-earthquake found that children used three strategies to help them cope: emotional regulation, positive reframing and problem solving (Mooney et al., 2017). These strategies could be clearly seen in the development of the mosaic. The tears and emotions as the children first talked about what they wanted the mosaic to represent turned to more pragmatic conversations as they worked alongside the artist and community volunteers, chatting away about the practicalities

of fitting shapes and coloured tiles into the correct places. As they looked at their handiwork, they remarked on the earthquake or their memories but they had already achieved a sense of distance from the major earthquakes and had begun to turn their experiences into a narrative that could be absorbed into their personal histories (Gibbs et al., 2013). The Samoan children also became more confident and self-assured as their houses and schools were rebuilt on sites further away from the beach and their lives settled into new routines. New themes emerged in their Samoan students' stories and artworks that focused on heroes and those that came to help. They began to portray the rebuilding efforts and their colours became brighter and the content lighter.

Stage 4 Goal: Fostering meaning

As each programme came to an end, they provided the communities, in some small way, with a sense of closure, of at least that phase of the disaster event. The Samoan programme finished with a major community exhibition and the artworks were published in book form. So many people had heard about the programme and were keen to come and see for themselves. The New Zealand programme ended with a community launch and celebration. There were speeches, *waiata* (songs) and a *haka* (Māori action chant). The project leader and artist were presented with flowers and the local Minister of Parliament laid the final tile with assistance from one of the students. It is important that significant events in a community are recognised with commemorations (Cassim, 2013) as it is all part of the healing and community rebonding process (Gordon, 2002; 2007).

Both of the programmes left their marks on their communities. In Samoa, the stories of the programme are still being talked and read about. In New Zealand, as children move on to high school, new student ambassadors are appointed so that the story of the meaning of the mosaic can be passed on to newly arriving students and to visitors. What is more important is the mark they left on students, individually and collectively. The Samoan programme was formally evaluated (Latai & McDonald, 2016) and was deemed a success because it achieved its aim of providing a safe space for children to express and process their feelings and to move forward with their lives. That New Zealand students still wanted to say hello and goodbye to the mosaic years later gives an indication of the impact that the making of the artwork had on the students involved. A later project at the same school, which turned the mosaic story into an interactive website, confirmed that children had found the process helpful in their recovery and called the mosaic making "comforting".

It is important to note, however, that in both countries there were children and young people who went on to have significant psychosocial issues, and we do not claim that arts-based methods will cure major trauma. For children outside the category of clinical diagnosis, however, it proved a very helpful tool for engaging children in emotional processing and allowing them to begin to come to terms with the enormity of what they had experienced.

Conclusion

The two case studies in this article outlined the way the programmes were designed and developed, and described how the arts-based activities were used to support children's post-trauma emotional processing. The illustrations included in the article clearly show how

children's expression of initial emotions were vivid and horrific, yet over time, they were able to come to terms with the events and express their hopes for a more positive future.

The case studies were discussed using a framework designed by Valerie Appleton (2001) which incorporates posttrauma psychosocial stages with arts-based intervention goals. It is this framework that the authors feel will be of use to others working with children and young people, such as teachers, whose focus is not on children with severe trauma but who want to support children's emotional well-being as part of their pastoral care programmes.

From our experiences, we suggest that understanding the stages that children and young people might go through post-trauma, the symptoms that they might exhibit, and possible strategies that might alleviate distress will be useful for planning appropriate programmes. Using arts-based activities to explore the feelings that children are finding hard to express, will be helpful to begin the recovery process. It is important, however, that whatever approach is selected is gentle, supportive and empathetic. Activities should be voluntary and allow for creativity, choice and a range of methods. Approaching difficult topics obliquely through literature, dance or drama might be ways to stimulate ideas before thoughts or images are put on paper. Children initially might not want to share their thoughts but if they are in a place where relationships are trusted and the atmosphere is safe and supportive, they will begin to open up. As they gain confidence, their creative and artistic expressions will enable them to turn their experiences into a narrative that gives them a sense of control over their own personal histories (Cassim, 2013; Gibbs et al., 2013). As Orr (2007, p. 351) writes:

Creating art after disaster offers a way for children to make sense of their experiences, to express grief and loss, and to become active participants in their own process of healing, beginning the process of seeing themselves as 'survivors' rather than 'victims'.

References

- Alisic, E., Zalta, A., van Wesel, F. & Larsen, S. (2018). Rates of post-traumatic stress disorder in trauma-exposed children and adolescents meta-analysis. *The British Journal of Psychiatry*, 205(5), 335-340.
- Appleton, V. (2001). Avenues of hope: Art therapy and the resolution of trauma. *Art Therapy Journal of the American Art Therapy Association* 18(1), 6-13.
- Betancourt, T. & Kahn, K. (2008). The mental health of children affected by armed conflict: protective processes and pathways to resilience. *International Review of Psychiatry* 20(3), 317-328.
- Bidwell, S. (2014). *The arts in health: Evidence from international evidence*. Christchurch: Pegasus Health.
- Bonanno, G., Brewin, C., Kaniasty, K. and La Greca, A. (2010). Weighing the costs of disaster. Consequences, risks, and resilience in individuals, families and communities. *Psychological Science in the Public Interest* 11(1) 1-49.

Boume Hulsey, M. (2015). Expression and healing. *Natural Hazards Observer*, XXXIX (6), 4-7.

Brown, A., & Mackie, V. (2015). Introduction: Art and activism in post-disaster Japan. *The Asia-Pacific Journal* 13(7), 1.

Cahill, H., Beadle, S., Mitch, J., Coffey, J. and Crofts, J. (2010). *Adolescents in Emergencies*. Parkville, Vic: Youth Research Centre, The University of Melbourne.

Canterbury Earthquakes Royal Commission. (2012). *Final report. Volumes 1-7*. Canterbury Earthquakes Royal Commission: Christchurch, New Zealand.

Caruana, C. (2010). Drawing on research-informed clinical wisdom to guide interventions with trauma survivors. *Family Relationships Quarterly* 15, 8–11.

Cassim, S., 2013. *Remembering those lost: The role of materiality in narrative repair following a disaster*. Unpublished masters thesis. The University of Waikato, New Zealand.

Education Review Office. (2013). *Stories of resilience and innovation in schools and early childhood services. Canterbury earthquakes: 2010-2012*. Wellington: Education Review Office.

Fothergill A. & Peek, L. (2006). Surviving catastrophe: a study of children in Hurricane Katrina. *Learning from catastrophe: quick response research in the wake of Hurricane Katrina*. Boulder, Colorado: Institute of Behavioral Science.

Gibbs, L., MacDougall, C., Mutch, C., & O'Connor, P. (2017). Child citizenship in disaster risk and affected environments. In D. Paton & D. Johnston (Eds.) *Disaster Resilience: An integrated approach* (2nd ed.) (pp.138-157). Springfield, Ill, USA: Charles C. Thomas.

Gibbs, L., Mutch, C., MacDougall, C. and O'Connor, P. (2013). Research with, by, for, and about children: lessons from disaster contexts. *Global Studies of Childhood* 5(3) 129-141.

Gordon, R. (2002). When children won't talk about trauma. *Psychotherapy in Australia* 8(4) 14-20.

Gordon, R. (2007). Thirty years of trauma work: clarifying and broadening the consequences of trauma. *Psychotherapy in Australia* 13(3) 12-19.

Huss, E., Kaufman, R., Augar, A., & Shuker, E. (2016). Arts as a vehicle for community building and post-disaster development. *Disasters* 40(20), 284-303.

La Greca, A. (2006). School based studies of children following disasters. In Norris, S., Friedman, M. & Watson, P. (Eds), *Methods for Disaster Mental Health Research*. (pp. 141-156). New York, NY: Guilford Press.

La Greca, A. and Silverman, W. (2009). Treatment and prevention of posttraumatic stress reactions in children and adolescents exposed to disasters and terrorism: what is the evidence? *Child Development Perspectives*, Vol. 3(1) 4-10.

Latai, L. & McDonald, L. (2017). Evaluation of an expressive art as therapy program undertaken in Sāmoa. *Journal of Samoan Social Sciences*, 17(3), 63-74

Latai, L. & McDonald, L. (2016). Expressive arts as a therapeutic intervention: A Sāmoan case study. *The Journal of Samoan Studies*, 6, 21-40.

Lesniak, M. (2016). *Gauging the impacts of post-disaster arts and culture initiatives in Chrstchurch: A literature review for the Ministry of Culture and Heritage*. Christchurch: Life and Vacant Spaces Trust.

Lyshak-Stelzer, F., Singer, P., Patricia, S., & Chemtob, C. M. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy* 24(3), 163-169.

McDermott, B. and Palmer, L. (2002). Post-disaster emotional distress, depression and event related variables: findings across child and adolescent developmental stages. *Australian and New Zealand Journal of Psychiatry* 36, 754-761.

Meier, C. (2017). *Hurt and hope: Is Canterbury in the grips of a mental health crisis?* Retrieved from: <https://www.stuff.co.nz/national/health/96838469/hurt--hope-is-canterbury-in-the-grips-of-a-mental-health-crisis>

Mitchell, G. V. (2015). "What I see in my dreams": Using art to heal invisible wounds. *Natural Hazards Observer XXXIX* (6), 14-20.

Mooney, M., Tarrant, R., Paton, D., Johal, S., & Johnston, D. (2017). Getting through: Children's effective coping and adaptation in the context of the Canterbury, New Zealand, Earthquakes of 2010-2012. *Australasian Journal of Disaster and Trauma Studies* 21(1), 19-30.

Morgan, J., Begg, A., Beaven, S., Schluter, P., Jamieson, K., Johal, S., Johnston, D., & Sparrow, M. (2015). Monitoring wellbeing during recovery from the 2010–2011 Canterbury earthquakes: The CERA wellbeing survey. *International Journal of Disaster Risk Reduction* 14, 96–103.

Murphy, C. (2014). *Post-disaster group art therapy treatment for children*. A Master of Arts dissertation. Loyola Marymount University and Loyola Law School, USA.

Mutch, C. (2013a). "Sailing through a river of emotions": Capturing children's earthquake stories. *Disaster Prevention and Management* 22 (5) 445-455.

Mutch, C. (2013b). Citizenship in action: Young people's responses to the Canterbury earthquakes. *Sisyphus: Journal of Education* 1 (2) 76-99.

Mutch, C. (2014). The role of schools in disaster settings: Learning from the 2010-2011 New Zealand earthquakes. *International Journal of Educational Development* 41(March), 283-291.

Mutch, C. (2017). Children researching their own experiences: Lessons from the Canterbury earthquakes. *SET: Research Information for Teachers* (2), 3-8.

Mutch, C., & Gawith, L. (2014). The role of schools in engaging children in emotional processing of disaster experiences. *Pastoral Care in Education* 32 (1) 54-67.

Mutch, C., Yates, S., & Hu, C. (2015). Gently, gently: Undertaking participatory research with schools post-disaster. *Gateways: International Journal of Community Research and Engagement* 8 (1) 79-99.

Norris, F.H., Friedman, M.J., Watson, P., Byrne, C.M., Diaz, E. and Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry: Interpersonal and Biological Processes* 65(3), 207-239.

O'Connor, P., & Takahashi, N. (2014). From caring *about* to caring *for*: case studies of New Zealand and Japanese schools post disaster. *Pastoral care in education*, 32(1), 42-53.

Orr, P. (2007). Art therapy with children after a disaster: A content analysis. *The Arts in Psychotherapy* 34, 350-361.

Peek, L., Tobin-Gurley, J., Cox, R. S., Scannell, L., Fletcher, S., & Heykeep, C. (2016). Engaging youth in post-disaster research: Lessons learned from a creative methods approach. *Gateways: International Journal of Community Research and Engagement* 9(1), 89-112.

Potter, S., Becker, J., Johnston, D., & Rossiter, K. (2015). An overview of the impacts of the impacts of the 2010-2011 Canterbury earthquakes. *International Journal of Disaster Risk Reduction* 14(1) 6-14.

Prinstein, M.J.L.G., La Greca, A.M., Vernberg, E.M. and Silverman, W.K. (1996). Children's coping assistance: how parents, teachers, and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology* 25(4) 463-475.

Reynolds, M., Nabors, L., & Quinlan, A. (2000) The effectiveness of art therapy: Does it work? *Art Therapy*, 17(3) 207-213.

Sagy, S. and Braun-Lewensohn, O. (2009). Adolescents under rocket fire: when are coping resources significant in reducing emotional distress? *Global Health Promotion*, Vol. 16 (4) 5-15.

Sanders, A. (2015). *Exploring the art therapist's perspective of working with victims of disasters*. PhD, Florida State University.

Talbot, J., Tuiloma-Su'a, D., Tofilau, L., & Viscard, L. (2011). *Samoa Red Cross Society Response to 29 September, 2009, Earthquake and Tsunami*. Geneva: International Federation of the Red Cross and Red Crescent Societies.

Visser, M., & du Plessis, J. (2015). An expressive art group intervention for sexually abused adolescent females. *Journal of Child and Adolescent Mental Health*, 27(3), 199-213,