



THE UNIVERSITY OF
MELBOURNE

Melbourne
Graduate School
of Education



AN MGSE INDUSTRY REPORT #3

Supporting student
and teacher wellbeing
after a crisis

NATURAL DISASTERS AND PANDEMICS

Professor Helen Cahill +
Dr Babak Dadvand + Keren Shlezinger +
Katherine Romei + Anne Farrelly



About the authors

Professor Helen Cahill

Director of the Youth Research Centre, Graduate School of Education, the University of Melbourne

Professor Helen Cahill leads a body of research using poststructural theory to inform approaches to transformative education in wellbeing. She is a leading innovator of wellbeing education interventions addressing gender-based violence, mental health, social and emotional learning, sexuality and drug education.

Dr Babak Dadvand

Research fellow, lecturer at the Youth Research Centre

Dr Babak Dadvand's research addresses questions of equity, diversity and inclusion in teaching as they relate to the work of teachers, as well as the experiences of marginalised students.

Keren Shlezinger

Research fellow, teacher at the Youth Research Centre

Keren Shlezinger has particular interests in design, delivery and implementation of evidence-based, social and emotional learning, and gender and sexuality education.

Katherine Romei

Research assistant at the Youth Research Centre

Katherine Romei has experience in the design and delivery of gender-based violence education, social and emotional learning programs and comprehensive sexuality education in Australia and internationally.

Anne Farrelly

Research fellow, tutor at the Youth Research Centre

Anne Farrelly contributes research expertise in teacher wellbeing, social and emotional learning, and working with children affected by trauma.

Contents

- 03 Executive summary
- 07 Introduction
- 09 Impacts of emergencies**
- 10 Economic impacts of emergencies
- 10 Mental health and wellbeing in the context of emergencies
- 10 Emergencies and increased rates of family violence
- 11 Emergencies have the greatest impact on those already marginalised
- 14 The role of schools and supporting teachers**
- 15 Key contributions of schools in emergency preparedness, relief and recovery
- 17 Social and emotional learning programs contribute to recovery and prevention
- 23 Supporting teacher learning and wellbeing
- 24 Evidence-based interventions**
- 25 Using arts-based interventions to promote recovery post disaster
- 27 Using evidence-informed frameworks to guide a whole of school approach to student support post disaster
- 27 Using existing policies, and curriculum to inform provision of student wellbeing education post emergency
- 28 References

Executive summary

In recent months, Australia has experienced a series of catastrophic events, including the 2019–2020 bushfires, and the COVID-19 pandemic.

The twin economic and health crisis resulting from both events has led to concerns about the wellbeing of children and young people who have experienced unprecedented disruptions to everyday life and exposure to traumatic events.

Teachers and schools often contribute as first responders in emergencies, and are adept at providing immediate care, despite themselves also being significantly affected by such emergencies. However, teachers often feel unsure about how best to provide psycho-educative support in the immediate aftermath and via longer-term recovery efforts.

This report presents an overview of research outlining effective approaches to the promotion of student and staff wellbeing during periods of emergency and recovery.

Exposure to emergencies such as bushfires and pandemics can be traumatic and cause major disruptions to families and to their livelihoods. Rates of family violence, sexual violence and mental health problems typically increase during and in the post emergency periods. During emergencies, women, girls and those already experiencing disadvantage are at much greater risk of violence and victimisation, and of the likelihood of developing post traumatic stress disorder (PTSD).

Emergencies disproportionately affect those already experiencing social or economic disadvantage, with poverty a major risk factor for increased risk of social, material and psychological harm. While most children and young people are resilient and recover well post emergency, some experience long-lasting mental health distress, including PTSD, anxiety disorders and depression. Common reactions that children and young people have include heightened anxiety even after the threat has gone, difficulty sleeping, difficulty concentrating on learning, problems with regulating behaviour and expressing emotions, challenges in managing frustration and conflict, anxiety about the effects on their own and their family's future, and difficulties in getting along with others.

Earlier models of research investigating the wellbeing of those affected by emergencies focused on understanding the effects of direct exposure to the traumatic events. However, more recent research shows that distress can also be caused and intensified by high exposure to media recounting traumatic events, material deprivation, exposure to high levels of parental distress, and family violence. These stressors may be sustained once the immediate emergency has passed, with continued negative impact on children's wellbeing and learning.

Research demonstrates that schools can make a major contribution to the prevention of mental health problems and to the promotion of resilience post emergency. Participation in sustained school-based social and emotional learning programs can help to mitigate the mental health effects of exposure to traumatic events, and lead to reduced rates of depression, anxiety and post traumatic stress disorder. They also help students to develop the key life skills needed to deal with the stressors and challenges of everyday life. These programs can also help schools fulfil their curriculum requirements in developing students' personal and social capabilities, and benefit all students, regardless of their exposure to trauma.

A number of evidence-informed programs are available to guide teachers in adopting best practices both during the immediate aftermath of emergencies and in longer-term recovery. Schools can benefit from being made aware of existing teaching and wellbeing resources and services, and of the routine good practices they can continue to use effectively in the post emergency period.

Schools benefit from clear guidance about effective response strategies to adopt post emergency. The following advice is derived from a summary of the available international research investigating effective approaches to promoting student wellbeing post exposure to a range of emergencies, including natural disasters, armed conflict and epidemics.

Key messages



Children and young people may be more psychologically vulnerable to the effects of emergency-related trauma than adults as they may have less-developed coping strategies and are dependent on others for social and emotional support at this developmentally sensitive period in their lives.



Rates of family violence and mental health problems tend to increase at the time of and following an emergency.



While most children and young people are resilient and will recover in time, many will experience symptoms of post traumatic stress after an emergency, and some may display mental health symptoms years beyond the initial event.



Children and young people already in more vulnerable circumstances are more adversely affected than others during emergencies and are at higher risk of developing post traumatic stress disorder (PTSD).



Teachers are also affected by emergency-related trauma and need additional support following traumatic events, particularly when they face increased workloads and challenges in response to heightened needs among their students.



School leadership, and a culture of collegial support is crucial in addressing the professional and wellbeing needs of teachers as first responders in post emergency situations.



Schools play a crucial role in supporting young people and their communities post emergency as they can provide a place for connection, routine and care.



School-based social and emotional learning programs develop student resilience and school connectedness and contribute to longer-term recovery. They help to reduce the prevalence of PTSD, depression and anxiety post emergency.



Teachers benefit from professional learning which helps them understand how emergencies can affect student wellbeing, learning and behaviour, and which support them to provide social and emotional learning programs.



Many of the wellbeing practices routinely provided by schools continue to be important post emergency, including use of trauma-informed approaches, positive approaches to behaviour management and opportunities to connect and contribute.

10 strategies to promote student and teacher wellbeing post emergency



01

Promote connectedness to school for students and families



02

Re-establish routines and a focus on learning



03

Teach skills for self-care to teachers and students



04

Establish realistic expectations for teachers and students



05

Notice, support and refer those with higher needs



06

Provide professional learning to help teachers respond effectively



07

Provide social and emotional learning to aid long-term recovery



08

Provide opportunities for expression through the arts



09

Make time for collaborative fun and play



10

Acknowledge and partner with those who can provide support



01



Introduction

Schools and teachers are often among the first responders during and post emergencies, providing practical care and psychosocial support, as well as maintaining a consistent learning program for students.¹

This report aims to provide a summary of research-informed approaches that schools can use to support student and teacher wellbeing post emergency. It contains a summary of the common impacts on mental health and learning that children and young people might experience as a result of exposure to emergencies. The report examines research findings about the positive impact that wellbeing programs can make towards mitigating the risks of negative mental health effects in post emergency contexts. It demonstrates that rigorously implemented evidence-informed

Social and Emotional Learning (SEL) programs are among the most effective universal approaches to student wellbeing, contributing both in prevention and recovery phases post emergency.

This report also examines research about the importance of using trauma-informed and culturally-responsive practices in the design and delivery of educative interventions and the need for support structures for teachers and educational staff who are often on the front line of dealing with emergency situations.

Introduction

Different emergencies, similar impacts

Emergencies and disasters are events which pose immediate risk to health, life, property or the environment. They not only require urgent intervention to mitigate their impacts, but also short-term strategies to aid in the immediate aftermath, and longer-term strategies to enable full recovery.²

Some disasters are relatively short in duration, such as natural disasters, or industrial accidents. Other emergencies, such as pandemics and armed conflicts, tend to be sustained over months and years. Some regions are simultaneously affected by multiple types of emergencies.

Whether short term or sustained in duration, emergencies can have lasting social, economic, health and educational impacts.³

Emergencies are expected to increase in frequency and severity as a result of climate change.⁴ Emergency preparedness and response thus needs to be a key area of focus for governments. It also has implications for all sectors of society and industry.

In Australia, bushfires and other disasters are expected to increase over the coming years and to become a recurring event for those communities most vulnerable to high-risk conditions.⁴ In 2019–2020 a series of catastrophic bushfires burnt across a large proportion of Australia's south-east, affecting an unprecedented number of communities, resulting in loss of life, homes, livelihoods, assets, farmlands, wildlife and natural flora.

The catastrophic 2019–2020 bushfires were closely followed by the onset of the COVID-19 pandemic, which led to unprecedented measures and impacts, both globally and in Australia. The impact of the response measures, including self-isolation and social distancing mandates to protect public health, has been extensive, leading to historic job losses and affecting the livelihood and wellbeing of many Australians.

Emergencies lead to increases in other forms of trauma

Earlier models of understanding the impact of emergencies on children and young people focused on the effects of direct exposure to the traumatic events. However, more recent research shows that distress can also be caused by high exposure to media recounting of traumatic events.⁵ In addition, lack of a positive family context pre, during and post emergency is associated with higher levels of negative effects. Children and young people who find it more challenging to recover from the effects of exposure to emergencies are those also affected by material deprivation, exposure to high levels of parental distress, harsh or violent parenting styles, as well as those witnessing intimate partner violence,⁶ and those who find their parents are unable to help them discuss what happened during the emergency.⁷

Pre-existing adversities at home tend to increase in rate and severity due to the material and psychological stressors experienced by parents during and post emergency, and may continue to escalate even when the immediate emergency has passed.

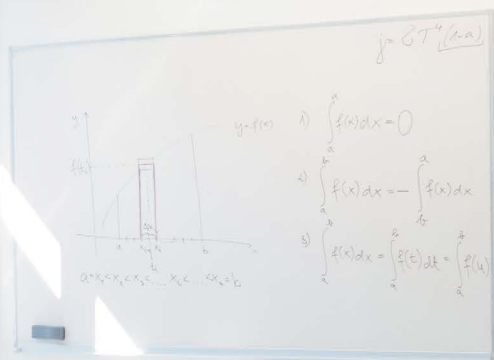


02



Impacts of emergencies

- 10 Economic impacts of emergencies
- 10 Mental health and wellbeing in the context of emergencies
- 10 Emergencies and increased rates of family violence
- 11 Emergencies have the greatest impact on those already marginalised



Economic impacts of emergencies

Natural disasters and emergencies, such as pandemics, can place significant social and economic stress on communities. Conflict, natural disasters and pandemics often have severe and ongoing economic impacts on communities which can lead to the loss of jobs, and financial inflation placing additional strains on the welfare system and health systems.⁸

Children and young people may be as adversely affected by the financial situation in their family and the associated distress on their caregivers as by the immediate impacts of the emergency.^{8,9}

Parental economic stress can affect the physical and psychological health of young people. Economic recessions are often associated with increased rates of depression, trauma and alcohol use among caregivers.¹⁰ These factors can negatively affect parenting behaviour, with parents being more likely to resort to the use of violence and harsh discipline in these situations.^{11,12}

Young people who are transitioning to adulthood during times of emergency and subsequent economic upheaval such as recessions can face additional pressures as they seek to establish their post-school pathway or careers.⁸ Research with Australians aged 19–22 has shown that navigating these challenges during times of recession has a negative impact on life satisfaction, career satisfaction, future work prospects and general wellbeing, even three years after the recession.⁸

Mental health and wellbeing in the context of emergencies

Major emergencies such as pandemics and events such as fires, floods, earthquakes or cyclones can be stressful for children and young people, and can affect their mental health, wellbeing and learning.

Children and young people may be more vulnerable to the effects of emergency-related trauma than adults, as they may have less-developed coping strategies, are dependent on others for social support, and are at a developmentally sensitive period in their lives.^{13–15}

Along with the hardship and stress that families and communities endure during and after emergencies, children and young people can also be negatively affected by events as exposure to media reporting can cause increased anxiety.¹⁶ At the same time, other hardships including job losses, poverty and adult distress that follow emergencies can cascade down into family units, and tend to have the greatest impact on young people and children within affected households.⁸

Those exposed to multiple forms of trauma and disadvantage are the most likely to experience PTSD.¹⁷ Children who are bereaved as a result of emergency events face additional emotional burdens. Some may develop Childhood Traumatic Grief, a condition in which children develop trauma symptoms that prevent them from moving through the grieving process in ways that can help them move on with their lives.¹⁸ Childhood Traumatic Grief, if not identified and adequately addressed, can lead to more severe psychological and emotional problems.

Emergencies and increased rates of family violence

Rates of Violence Against Children (VAC) and Intimate Partner Violence (IPV) tend to increase at the time of and following an emergency.^{10,12,19} Sexual violence against girls is one of the most common forms of violence in emergency contexts. The need for emergency housing, coupled with the absence of adequate reporting mechanisms, increases the risk of sexual abuse.²⁰ Research shows that VAC is experienced differently by boys and girls during and post emergencies, with boys reporting higher rates of physical violence and girls reporting higher rates of sexual violence.^{12,19} Rates of sexual violence can also increase during the post emergency period.²¹

Economic impacts of emergencies, including unemployment and poverty, and increased use of drugs or alcohol, have been identified as key drivers of violence against women and children²⁰ with children from families affected by poverty being at an increased risk.¹²

Pressures caused by food and housing insecurity, and changes to gender roles that occur during periods of instability, can also increase the likelihood of violence occurring at home.¹²

Research shows that confinement placed on families during times of emergency or conflict prevents family members from leaving the home to access social support. Prolonged lockdowns can cause psychological stress and increase the likelihood of family violence.^{12,22}

During and following an emergency, Violence Against Children (VAC) is more likely to go unnoticed. In a meta-analysis of 11 studies investigating VAC in emergency, disaster and conflict settings, not only were rates of VAC higher in these contexts, but also reporting of violence was significantly less likely to occur.²⁰ Inadequate reporting mechanisms, decline in availability of medical, legal and social support services and lower expectations that reports of violence would receive an appropriate response can lead to reduced likelihood that violence would be reported.²⁰



When violence against children and young people goes unreported, victims of violence are less likely to get support and this places them at greater risk of long-term negative health impacts including trauma, PTSD and psychological distress.^{10,12,19}

Emergencies have the greatest impact on those already marginalised

Those already at risk or in more vulnerable circumstances are typically more adversely affected than others by emergencies. Children and young people from complex home backgrounds are less likely to have access to the necessary social support in their home environments during and post emergency and are therefore at much higher risk of developing PTSD.²³

Vulnerable families, which include marginalised groups, or those who are already experiencing disability or financial hardship, are particularly susceptible to poverty during financial recessions caused by prolonged emergencies or pandemics.⁹

In Australia and globally, the 2020 school closures to curb the spread of the COVID-19 pandemic put additional demands on families to provide at-home education for their children. Those without sufficient resources, access or support at home thus faced additional inequity.

Mental health and social effects in the immediate aftermath of emergencies

The majority of children and young people will recover from trauma post emergency without requiring specialised support or intervention.²⁴ However, in the immediate aftermath of emergencies, it is normal for children and young people to experience and show signs of distress. This distress is more intensive and long-lasting for some than others.

Research shows that around one in four young people directly exposed to an emergency such as a disaster still have post trauma symptoms three months after the event.²⁵

Others may experience less-severe effects that are nonetheless disruptive and distressing.

Post trauma symptoms may include:

- Increased peer conflict or problems within social relationships
- Behavioural changes (withdrawal, 'acting out' or behaving aggressively)
- Preoccupation with re-enacting negative events in plays and stories
- Difficulty concentrating on learning
- Difficulty talking about traumatic events
- Anxieties about safety even when threats are no longer evident²⁵⁻²⁹

These responses can negatively affect students' relationships and academic achievement, as well as their physical and mental health.

Natural disasters and violence against women and children

Students may experience changed home and family environments in post emergency circumstances, which in turn may affect their wellbeing and behaviour. Research shows that rates of family violence tend to increase in disaster-affected communities. For example, police reported a 53 per cent rise in family violence following the Canterbury earthquake in New Zealand.

In Victoria, researchers found strong evidence of increased family violence followed the 2009 bushfires.³⁰ Early research on the effects of the COVID-19 pandemic points to increased rates of violence against women and children, and reduced access to reporting mechanisms, and to safe spaces in communities and schools.²²

Post traumatic stress and post traumatic stress disorder

'Post traumatic stress' is the term used to describe the normal response to trauma whereby people experience the intrusion of distressing thoughts, feelings and memories as they come to terms with their experience. The term 'post traumatic stress disorder' (PTSD) is used when the reaction has become a severe anxiety disorder which may include continuing to re-experience the original trauma(s) through flashbacks

or nightmares, a strong need to avoid images, sounds or places associated with the trauma, increased arousal and hyper-vigilance or the need to keep checking for safety, difficulty falling or staying asleep, anger, and numbing. The term 'disorder' is used when these symptoms persist over time and are severe enough to cause significant impairment in relationships, work, or other important areas.

Impacts of exposure to traumatic events on mental health

Children and young people commonly experience symptoms of post traumatic stress in post emergency situations. While research shows that most children and young people are resilient and will recover with time, some may display chronic stress reactions or other mental

health symptoms years beyond the initial event.⁵⁰ Those with pre-existing mental health problems, those with heightened risk factors in their home lives, and those who experience multiple losses or inadequate support are more likely to be in this category.⁵¹

Medium to long-term mental health and social effects

An estimated 30 per cent of children and young people will experience lasting mental health effects for many years post emergency.^{13,31} Mental health problems may include post traumatic stress disorder (PTSD), re-experiencing symptoms, sleep problems, avoidance behaviours, and depression or anxiety.^{32,33} Those with pre-existing mental health problems are more likely to experience PTSD following exposure to a disaster.³⁴ A British study conducted in late March 2020 during the social isolation period of the COVID-19 pandemic found that of those aged 13–25 years already experiencing mental health distress, 32 per cent reported that the experience of the pandemic had made their mental health much worse and 51 per cent reported that it had made their mental health a bit worse.³⁵

For some children and young people, the most serious mental health impacts do not manifest until a considerable time after the emergency. It is at this time that longer-term changes accrue in impact, and typically post emergency social and infrastructure support becomes less available as the initial aftermath response diminishes in intensity.^{3,26,36}

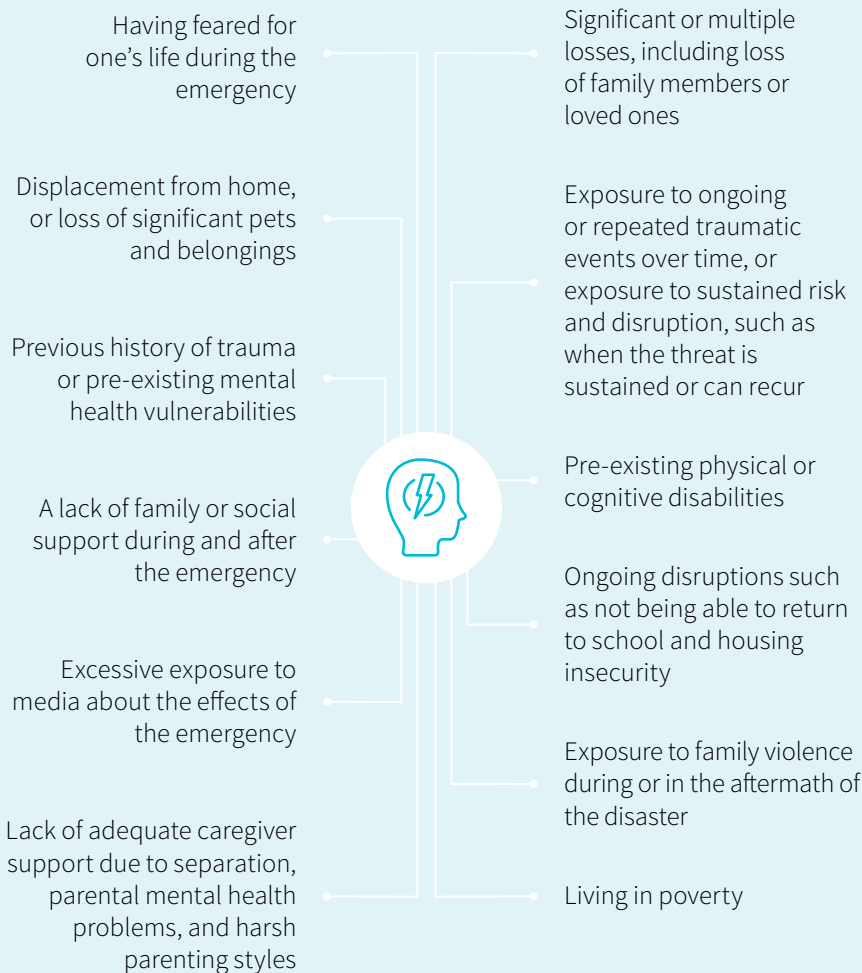
Many studies have examined the long-term mental health effects of natural disasters on children and adolescents.^{37–45} Australian studies following the 2009 Victorian bushfires found that, although rates of mental health problems diminished over time, the rates nonetheless remained higher than national levels.^{28,46,47}

Risk factors relating to post traumatic stress disorder

The risk of developing post traumatic stress disorder (PTSD) post emergency varies depending on individual, familial and community contexts. The severity and context of people's exposure to traumatic events, alongside the presence of other risk factors in individuals' lives, can influence whether they will experience mental health problems or social difficulties.^{14,15,17,24,28,30,34,46–48} Children with disabilities are more likely than their peers to experience PTSD in response to emergencies.⁴⁹ This may manifest as a loss of emotional control or increased aggressive behaviour, which can place additional stress on carers and teachers.

Risk factors of ongoing psychological distress

Risk factors associated with more severe or ongoing psychological distress after emergency situations may include:



Impacts on learning and classroom behaviour

Exposure to traumatic events can negatively affect learning and academic performance. Disruptions to learning may occur when school facilities are damaged, for instance during natural disasters, when teachers become unavailable or preoccupied with dealing with the impacts of emergencies in their own lives, or when children are withheld from school or need to be relocated due to school closures. Students may find it harder to concentrate and engage with challenging tasks while dealing with emotional impacts, when not supported by the presence of their teachers or the encouragement of their parents.

At the classroom level, increased absenteeism and behavioural problems during or post emergency may also affect learning. In the 18 months following the 2011 Christchurch earthquakes, teachers reported that student behavioural problems more than doubled.¹⁵ In another study investigating the impacts of the 2014 Hazelwood mine fire in Victoria, teachers reported that learning was disrupted by decreased engagement and difficulty concentrating, heightened anxiety, increased peer conflict, and challenges associated with increased exposure to family violence and instability.⁴⁶ While longitudinal studies have been rare, one 20-year follow-up of bushfire-affected children found that they were less likely than the comparison group to progress through their education and careers.³³ Another study found that in areas of high bushfire impact, student literacy and numeracy development were negatively affected in the years following the emergency situations.²⁶ The impact on learning was more significant in learning areas such as maths and reading.²⁶

Natural disasters and pandemics:

Supporting student and teacher wellbeing after a crisis

03

The role of schools and supporting teachers

- 15 Key contributions of schools in emergency preparedness, relief and recovery
- 17 Social and emotional learning programs contribute to recovery and prevention
- 23 Supporting teacher learning and wellbeing

Key contributions of schools in emergency preparedness, relief and recovery

Schools can contribute to emergency preparedness, relief and recovery in a range of ways. Affected communities may have limited resources to provide specialised trauma and relief programs. At this time, schools play a crucial role in supporting young people and their communities through 'practical, feasible and scalable' mental health interventions.⁵²

The model on page 16 identifies key contributions that schools can make in the areas of preparedness, prevention, response and recovery.

Schools can be effective providers of emergency preparedness education that teaches students how to deal with the immediate and practical challenges faced in emergency situations, such as teaching students how to stay safe in fires or floods, or how to work with their family to develop and practise a family response plan in the face of pandemics.

Emergency preparedness: When young people play an active role in strategies used to reduce risk or to cope with adversity, they are less likely to experience anxiety. Research indicates that appropriately timed school-based emergency preparedness training can help to alleviate fears of vulnerability, reduce physical risks by helping people to recognise signs of danger and take appropriate action, lead to better decision-making and use of hazard minimisation strategies, and promote a sense of control in an emergency situation

by improving coping mechanisms.^{42,53,54} Emergency preparedness may best be provided as part of a routine curriculum, rather than in a reactive way during or immediately post emergencies.

First responders: Schools and teachers are often called on to play a key role as first responders during or in the immediate aftermath of emergencies. For example, schools played an effective role in keeping students safe and calm when earthquakes struck during the school day in New Zealand.⁵⁵ They may also be called on to continue to educate and care for students during a sustained period of threat, such as during armed conflict or a pandemic. School sites are also often used as a community resource during or after an emergency.

Security and support: Schools are an important source of continuity in young people's lives. They can provide a secure environment which helps students to settle and engage in activities to take their minds off the trauma, and provide hope and a structure through which things can return to a more predictable or normal routine. Teachers make a significant contribution by providing familiar routines, consistent rules, emotional support and engaging learning activities. Teachers can also help to normalise and model appropriate social and emotional responses such as care for others, and management of one's own frustrations.⁵⁶

Referral: Schools are an important setting in which to notice and refer students or families who need more specialised support during and post emergencies.⁵⁷ The knowledge teachers have of their students positions them well to notice behavioural changes or symptoms of post traumatic stress, and to monitor and support recovery.^{24,56,58} Research shows that while affected students

are often reluctant to seek help, schools can assist by being a proactive part of the referral process.⁵⁶

Psycho-educational support in the immediate aftermath: Schools make a major contribution in the early aftermath when they provide learning activities designed to help students to understand the range of responses people can have to traumatic events, and to process and express their emotions.⁵⁶ In delivering these programs, teachers can teach self-calming and coping skills, correct myths and misinformation, facilitate student interaction and peer connectedness, and play a role in de-stigmatising mental health distress and help-seeking.⁵⁹

Supporting longer-term recovery and prevention:

Along with the education and support provided in the early phases, schools are ideally positioned to provide long-term psycho-educational support in the form of social and emotional learning programs. These programs help students to develop resilience to deal with the challenges of life. Research shows social and emotional learning programs are an effective way to provide the longer-term support that students need as they recover over time.

Students who do these programs are less likely to suffer from post traumatic stress disorder.⁶⁰ Additionally, those who receive social and emotional learning programs before emergencies are less likely to develop post traumatic stress disorder.⁶⁰

Figure 1: Key contributions of schools in emergency preparedness, relief and recovery



System-level advice

Education and health systems provide advice and resources to help schools and families deal with the impact of emergencies on learning and wellbeing. For example, the Victorian government [Bushfire Education website](#) and the Victorian Department of Education [pandemic response website](#) provides teaching and learning resources to support responses in early childhood settings, primary schools, secondary schools and home environments.

Resources to guide trauma-informed practice

Schools seeking direction about the use of trauma-informed practices can access their education system frameworks and guidelines to support their approaches. Two available resources include: [Calmer Classrooms: A guide to working with traumatised children](#)⁶⁶ and [Making Space for Learning: Trauma Informed Practice in Schools](#).⁶⁴

Using trauma-informed approaches

Children already affected by trauma have heightened vulnerability to psychological distress following exposure to a traumatic situation. Exposure to trauma does not only happen during emergencies or disasters. Trauma can be interpersonal, such as when a child is exposed to ongoing violence. Sustained exposure to traumatic events can result in a low sense of self-worth, difficulty trusting others, and misperception of the intentions behind other people's actions.⁶¹ Up to 40 per cent of Australian students have been exposed to, or witness to, traumatic stressors, including family violence, forced migration, bereavement and exposure to natural disasters.⁶² While dealing with normal levels of stress helps children to build resilience, traumatic stress can lead to a sense of helplessness, which can lead to poor wellbeing and learning problems.^{56, 63} Children who have experienced trauma may continue to experience a heightened state of alarm, even in the absence of a specific threat.

Teachers can contribute to student wellbeing in post emergency situations by adopting trauma-informed practices that are guided by the understanding that trauma can significantly alter the baseline physiological arousal levels, impairing people's capacity to use logic and reasoning, form positive relationships, solve problems effectively, manage behaviour, regulate emotions, concentrate on learning, or recall learning.⁶⁴

Trauma-informed approaches place emphasis on developing the routines, relationships and activities that make school responsive and flexible to the needs of all children and young people, including those affected by traumatic experiences. Trauma-informed practices support children and young people to reset their baseline internal stress level. This helps them to settle, and become more able to engage and concentrate on learning and relate well with others.⁶⁴ Regardless of their exposure to trauma, all students benefit from working within trauma-informed learning environments.⁶⁵

Considering equity, inclusion and cultural responsiveness in school-based emergency responses

Responses to emergency situations and traumatic events can vary between cultures, as can coping styles and preferred modalities for emotional expression and regulation. Cultural and ethnic groups, including First Nations peoples and Traditional Owners, may perceive natural disasters and respond to warnings in different ways, and the psychological manifestations of disaster exposure may vary between groups during periods of disaster, relief and recovery.⁶⁷ Other population groups may be more vulnerable to impacts due to language backgrounds, housing stress, access to resources, community isolation, experiences of discrimination and racism.^{67, 68}

Research shows that students in the same classroom can have different perspectives on whether they feel supported, safe and included. For example, those who experience ethnic or gender discrimination, economic inequities, and other forms of social marginalisation can experience exclusion and additional distress at school.

In post emergency situations, students who have not previously experienced their schools as an inclusive and supportive space can find it harder to engage in school-based response activities. In addition, the programs provided may not be well-attuned to respond to their needs. Evidence suggests that schools should respond in a way that recognises diverse cultural strengths and capitalises on cultural assets within the school community.⁶⁹

Social and emotional learning programs contribute to recovery and prevention

Social and Emotional Learning (SEL) programs explicitly teach the skills, attitudes and behaviours for emotional regulation, critical and creative thinking, problem-solving and positive relationships. They develop the key skills of self-awareness, self-management, social awareness and focus on relationship skills and responsible decision-making.⁶⁹ These are important life skills. When these social and emotional competencies are taught from a young age, they can positively affect the lives and wellbeing of young people.⁷⁰

Students who participate in research-informed and well-implemented SEL programs demonstrate:

- Improved mental wellbeing and reduced anxiety, depression and suicidality⁷¹⁻⁷⁵

- Improved emotional regulation and self-perception⁷⁶

- Improved social and classroom behaviour⁷⁷

- Reduced bullying and gender-based harassment^{78, 79}

- Reduced school drop-out⁷¹

- Improved connectedness to learning, to teachers and to school⁸¹⁻⁸³

- Improved academic achievement in the range of 5–11 per cent^{76, 80, 84}

- Improved employability in rapidly changing workplaces and labour markets⁸⁵

- Reduced prevalence of post traumatic stress disorder post exposure to emergency situations³²

Natural disasters and pandemics:

Supporting student and teacher wellbeing after a crisis

School-based emergency response interventions can differ in purpose, reach, focus and duration

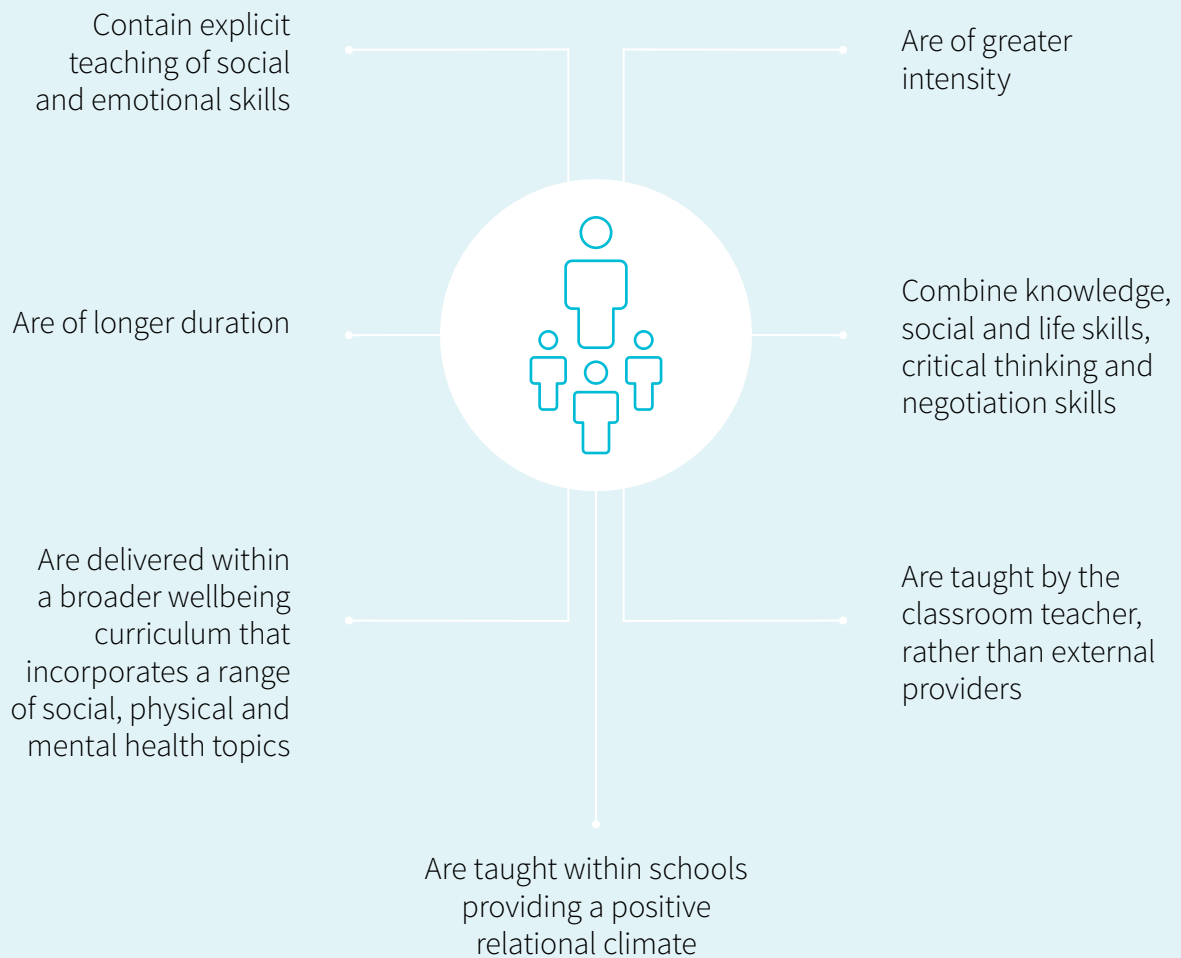
Schools can provide a range of interventions as part of their emergency preparation and recovery efforts. Interventions will vary according to who they target, what they focus on, and when and for how long they are delivered, and the skills of those providing them.

- » **Universal interventions** are delivered to all students in a school.
- » **Specialised or targeted interventions** are additionally delivered to students who have been identified to be at higher risk.
- » **Short-term** post disaster interventions are delivered in the immediate aftermath and typically happen in the first few weeks to support students as they make sense of the event and begin the work of a return to the routines of normal life. They typically focus on understanding responses to the traumatic events, and learning skills for emotional regulation, peer support and help-seeking.
- » **Long-term post emergency** interventions (four to six months or longer) focus on building coping skills and resilience and advancing social and emotional learning. They are designed to build resilience for life challenges in general, as well as to mitigate against the potential long-term social and mental health effects of a traumatic event. They are also provided as part of prevention education as they improve people's capacity to cope with emergencies, traumas and disasters.
- » **Prevention interventions** are universal interventions. They are designed to build resilience for everyday life and can help people cope with the psychological and social effects of traumatic events.
- » **Preparedness interventions** are universal interventions implemented before traumatic events and emergencies occur. They focus on teaching the skills that people need to plan for and keep themselves safe during an emergency.

Effective SEL classroom programs



Several longitudinal studies have documented the way in which SEL initiatives provided in the primary years can have a lasting effect, promoting resilience and school connectedness well into the high school years.^{86,87} The most effective SEL programs are those that:



SEL interventions contribute as prevention against the onset of PTSD following emergencies

Studies have investigated the contribution of SEL programs in enhancing the resilience of students before exposure to chronic or sustained emergencies, such as while living in conflict zones. These findings may be relevant to the experience of living through pandemics as students can also face sustained periods of threat, intensive coverage of the threat in the media, social isolation, disruptions in access to education, and negative impacts on family livelihoods during a pandemic.

An Israeli study that investigated the impact of prevention education programs in supporting post emergency resilience found that those Israeli primary students who had participated in a 14-week SEL prevention program before rocket attacks were significantly less likely to develop PTSD following the attacks.⁶⁰ This highlights the role that SEL-based prevention education can play in preventing the onset of trauma following emergencies, as well as developing the skills and strategies that young people need to cope with the daily stressors and challenges in their lives.

Social and emotional learning programs in emergency relief and recovery

In addition to the general benefits of SEL programs, these programs have been shown to be effective as part of longer-term support for student wellbeing and mental health post emergencies.³² Further, SEL programs provided before exposure to emergency situations can equip students with skills to cope better with challenge and adversity, leading to reductions in subsequent rates of mental health disorders.³²

Post emergency programs

Universal wellbeing programs provide support to all students in the affected community including those who are not perceived to be at direct or elevated risk.⁵⁷ Post emergency programs aim to reduce the risk and severity of mental health effects following an emergency or disaster. These programs can include both universal prevention programs that target all children in a school in the immediate aftermath, and during more sustained support for recovery. Programming can also include specialised interventions that target smaller groups of students who have been identified to be at increased risk of developing a mental health problem.⁵² These interventions involve activities aimed at building the social and emotional climate of the school and enhancing student ability to cope with adversities.⁵²

Programs provided in the immediate aftermath

Programs provided in the initial aftermath commonly focus on assisting students to make sense of what has happened, and to understand and manage their responses. They typically include a focus on self-calming and coping strategies to help them to manage frustration, anxiety and conflict. They raise awareness of available supports and services and promote help-seeking, peer support and peer referral.

Long-term social and emotional learning interventions provide sustained support for recovery

While research shows the importance of including long-term (six months or longer)

prevention and mental health programming post emergency, services are often only geared towards interventions in the immediate aftermath. Although these emergency intervention services are necessary for mitigating post traumatic stress symptoms, they often focus specifically on responses to the emergency situation.^{3, 32, 88} Longer-term interventions, ideally delivered by the classroom teacher, focus on emotional responses and coping strategies for use in everyday life as well as those used to deal with loss, disruption, and the recurring threat that the traumatic event may happen again.⁸⁹ They build protective factors such as social support and coping skills, which are essential both for disaster recovery and for navigating the challenges of life.⁹⁰

Post emergency programs that address social and emotional competencies have been shown to improve child and adolescent mental health outcomes. One review of research studies investigated the impact of 22 different school-based interventions targeting negative mental health outcomes as a result of exposure to conflict or natural disasters. Findings showed that 55 per cent of these programs had positive impacts, reducing the occurrence and severity of post traumatic stress disorder (PTSD), depression, and behaviour and conduct disorders.⁵² This review of research found that structured, longer-term programs were more likely to be effective in mitigating the negative mental health and social effects of conflict or disaster.⁵²

A study investigating a universal, curriculum-based SEL program implemented following a natural disaster in Oklahoma, US, found that the program contributed to improved communication skills, ability to manage conflict, resilience, and emotional regulation.³² A Turkish school-based resilience intervention provided after exposure to conflict found that those who received the intervention continued to display lower levels of PTSD, grief and dissociation than the control group, even three years after the intervention.⁹¹ Similarly, a study with Israeli secondary students returning to school after conflict found that those who received the 12-session SEL program over six weeks were better able to seek support from others, had greater confidence in their own self-efficacy and showed reduced rates of psychological distress.⁵ However, those in the

control group had increased rates of distress and lower levels of social support over time. The return to school post crisis brought new challenges, including reduced perceptions of safety and social support in comparison to that experienced when sheltering from the war at home.

These findings highlight the importance of providing universal programs that are sustained over time, and which focus on enhancing resilience factors, rather than just on debriefing or reducing direct symptoms of anxiety in the immediate aftermath. It also alerts teachers and carers to the possibility that distress levels may increase post emergency, when the challenge of a return to normal presents, atop the previous trauma. While the immediate danger of the emergency may have passed, the longer-term effects on family and community functioning may mean that children continue to be affected by multiple forms of trauma, including dislocation, loss of loved ones, exposure to poverty, family violence, and sexual violence.

Supporting teachers to provide social and emotional learning

Research demonstrates that some teachers feel reluctant to facilitate social and emotional wellbeing education due to lack of training or a belief that it is not a good fit with their professional role.²⁴ They may also find it challenging to engage in the associated emotional and pedagogical labour involved in facilitating discussions about coping with stress, or conflict or violence.⁹²

Teachers benefit from a combination of support measures including:⁹³

- » provision of well-developed and explicit teaching resources to guide their approach
- » professional learning which allows them to sample the learning activities devised for their students
- » collegial support during preparation and delivery, including mentoring, shared planning or team teaching
- » support from specialised wellbeing staff
- » visible school leadership support including provision in the timetable for the SEL intervention to be delivered
- » clear schoolwide approaches for making referrals.⁹⁴

General advice to guide teachers' responses in the immediate aftermath of a crisis:

- » Establish and maintain normal classroom routines
 - » Build positive relationships between students and staff
 - » Remain calm and optimistic
 - » Convey a clear message that the threat/danger is over or will be over soon and that good things will continue to happen
 - » Practise self-care and seek support for self, colleagues and students
 - » Use trauma-informed practices to help students settle and focus
 - » Provide structured but limited opportunities for voluntary talk, writing or drawing about what has happened
 - » Avoid asking students to re-tell and dwell on the trauma, and encourage them to think of the strengths people and communities have used to respond well and to help each other
 - » Share the positive coping strategies that people have or can use to help them deal with traumatic events
 - » Provide space and time to focus on techniques for self-calming and emotional expression and regulation skills through mindfulness, circle time, relaxation activities, arts and non-competitive games and sports
 - » Provide some activities just for fun or to lift the mood, such as via music and play
 - » Anticipate situations which may trigger distress, such as alarms, hot and windy weather, fog or smoke, and reassure and inform students about what is happening
 - » Use positive discipline strategies which favour heightened use of positive formative feedback and recognition of effort
 - » Scaffold challenging or sustained learning tasks to foster a sense of moving forward
 - » Arrange brain breaks during tasks requiring higher levels of concentration
 - » Provide students with additional notice and reminders of changes to scheduled events or routines
 - » Monitor students for symptoms of trauma or behaviour change over time, and refer as warranted.
- For further advice see the Australian Institute for Disaster Resilience www.aidr.org.au.

Social and Emotional Learning programs play a key role in supporting wellbeing in all stages of post emergency work in schools

Psycho-educational programs can be used to assist in the immediate aftermath of an emergency and as part of a longer-term focus on recovery and prevention. Tailored programs focusing on initial recovery are usually offered in the immediate short term. Longer-term social and emotional learning programs are provided to assist with longer-term recovery. They focus on building resilience and life skills rather than just on responding to trauma. These programs help to develop the social and personal capabilities which equip people to deal with adversity and the challenges of everyday life. Delivered before a disaster, SEL programs can also help to mitigate the impact of trauma and disaster. Teachers benefit from access to evidence-informed programs and professional learning that allows them to learn via sampling of the learning activities devised for their students.



Natural disasters and pandemics:

Supporting student and teacher wellbeing after a crisis

Where to find an open-access evidence-informed social and emotional learning program for Australian primary and secondary schools

Schools value open access to comprehensive evidence-informed social and emotional learning programs, particularly when they are endorsed by their education system and are mapped to their curriculum.

The Resilience, Rights and Respectful Relationships program is an example of a comprehensive, evidence-informed universal social and emotional learning program. The Resilience, Rights and Respectful Relationships learning materials have been designed for teachers in primary and secondary schools to develop students' social, emotional and relationship skills. Efforts to promote social and emotional skills and positive gender norms in children and young people have been shown to improve mental and social health and to reduce antisocial behaviours including bullying and gender-related violence.

The Resilience, Rights and Respectful Relationships learning materials are provided for all levels of primary and

secondary education. They are mapped to the Victorian curriculum, which is closely aligned with the Australian curriculum. The teacher manuals provide detailed age-appropriate and sequenced learning activities addressing eight topics: Emotional Literacy; Personal Strengths; Positive Coping; Problem Solving; Stress Management; Help Seeking; Gender and Identity; and Positive Gender Relationships.

The [Resilience Rights and Respectful Relationships](https://www.vic.gov.au/ResourcePackage/ByPin?pin=2JZX4R) resources are open access on the Victorian Department of Education Fuse website: [fuse.education.vic.gov.au/ResourcePackage/ByPin?pin=2JZX4R](https://www.vic.gov.au/ResourcePackage/ByPin?pin=2JZX4R)

The [Resilience Rights and Respectful Relationships](https://www.vic.gov.au/ResourcePackage/ByPin?pin=2JZX4R) online learning program provided by the Victorian Department of Education is available to support teachers. It can be accessed by those with a university or education system email address.

Routine school practices that support teachers and students in emergency response and recovery

A number of routine school practices are well-suited for continued use post emergency. They include:

- » Whole school approaches to trauma-informed practice
- » School-wide positive behaviour support
- » Mental health promotion and provision for social and emotional learning
- » Engagement in strong partnerships with parents and community agencies
- » Provision of well-structured pastoral care and wellbeing support systems and services.

Teachers benefit from additional support in times of emergency

Teachers and their families are commonly affected by the emergencies and disasters that affect their students. They benefit from collegial, pedagogical and psychological support designed to help them understand how the emergency may affect their own wellbeing and capacity, as well as how to understand and respond to the escalated wellbeing and learning needs of their students. They also benefit from guidance, training and resources designed to help them to provide wellbeing education to aid in the process of recovery.

Supporting teacher learning and wellbeing

Many teachers report that they feel under-prepared to respond to trauma.²⁴ They can experience tension between attending to their own emotional needs and those of their families, and responding to the multiple and complex needs of their students.

As well as being personally affected by the emergency, teachers may experience heightened professional anxiety due to the increased care expectations placed upon them.⁹⁵ Levels of stress experienced by teachers can be particularly high in under-resourced schools serving marginalised communities which have greater needs and less access to resources.⁹⁶ The work of exerting a sustained response to trauma can have a cumulative effect on teachers, with more intensive experience of burnout manifesting after the initial emergency has passed.⁴⁹

A review of research investigating impacts of trauma on teachers working in conflict-affected zones found that they are called on to manage a number of interconnected professional challenges. These challenges include managing children with escalated emotional, behavioural and learning needs, in the face of insufficient resources, escalated and unrealistic work responsibilities, lack of administrative support, and reduced parental or community support.

These stressors can lead to teacher fatigue, burnout, stress, and a desire to leave the profession.⁹⁷ However, in the face of these challenges, a sense of purpose, contribution, and appreciation for work in emergency response can be protective for teachers.⁹⁷

Well-designed professional learning can help teachers to make sense of and adjust to presenting challenges and changed circumstances.⁹⁷ However, it is also important to encourage teachers' use of self-care practices, as they are essential to the wellbeing of all emergency first-responders, including teachers. An important aspect of self-care is awareness and management of one's own emotional responses to traumatic events.

Professional learning that focuses on introducing teachers to strategies they can use to process their experiences and emotions post emergency has been shown to improve teacher wellbeing and improve their capacity to address student needs.⁹⁸

In post emergency contexts, teachers also benefit from in-school support structures that recognise the challenges they face, address expectations to ensure they are realistic, and empower them to address new responsibilities.⁵⁶ A school-wide approach to teacher support may include providing opportunities for teachers to learn about how trauma might affect them and their students, facilitating teacher relaxation and practices of self-calming and expectation management, along with mobilisation of school and community-based resources to support staff.⁵⁶

Despite provision of these kinds of additional support, some teachers may be unable to perform their regular teaching duties. They may need to be assigned alternative responsibilities and provided with access to specialised psychological services.⁵⁶



04



Evidence-based interventions

- 25 Using arts-based interventions to promote recovery post disaster
- 27 Using evidence-informed frameworks to guide a whole of school approach to student support post disaster
- 27 Using existing policies, and curriculum to inform provision of student wellbeing education post emergency

Using arts-based interventions to promote recovery post disaster

Arts, sports and leisure programs can be used post disaster to provide young people with a voice and an opportunity to enhance connectedness and relationships. While these programs can provide therapeutic benefits, they should not be confused with therapy provided by trained professionals for those with high needs. Rather, they are most effectively used as part of broader education, community building and psychosocial endeavours.²¹

Arts-based interventions provide a powerful mode for collective expression. They may use a range of mediums including conversations, drama, drawing, storytelling, music-making, dance, circus and expressive play to support students to explore emotions and connect with others in the aftermath of a disaster.⁵⁵

Research shows that arts-based wellbeing interventions can positively affect children's ability to process their experiences following a disaster, to manage post traumatic stress, and to build self-confidence.^{55, 99}

Arts-based interventions have been shown to be most effective when created in consultation with children as this helps to create a sense of agency, authenticity and ownership.⁵⁵ While students also need opportunities to individually process disaster-related events, collaborative engagement in arts-based activities can help them to understand that others may have experienced similar traumas, and that together they are a source of resilience and strength.⁹⁹

Undue focus on re-telling the disaster story may be unhelpful and this can best be left to more therapeutic endeavours. Rather, metaphors, analogies, traditional songs, dances, myths and stories can be used to provide a form of protective distancing and function as motifs through which to explore concepts of resilience and integrity in the face of adversity.¹⁰⁰⁻¹⁰⁴

Arts-based interventions

Following the 2010–2011 New Zealand earthquakes, a UNESCO-funded project supported a range of schools to record their earthquake stories using arts-based practices. In one school, children, families, teachers and the principal all contributed to an illustrated book of their experiences. In another school, children became documentary-makers and interviewed other children about their earthquake experiences. In a third school, children worked with teachers, artists and community members to create a sequence of detailed mosaic panels representing the community's story before, during and after the earthquakes. In all cases, children reported their projects to be positive and helpful, and felt that the expressive power of the arts had supported their social connectedness and emotional processing of the experience.^{55, 59}

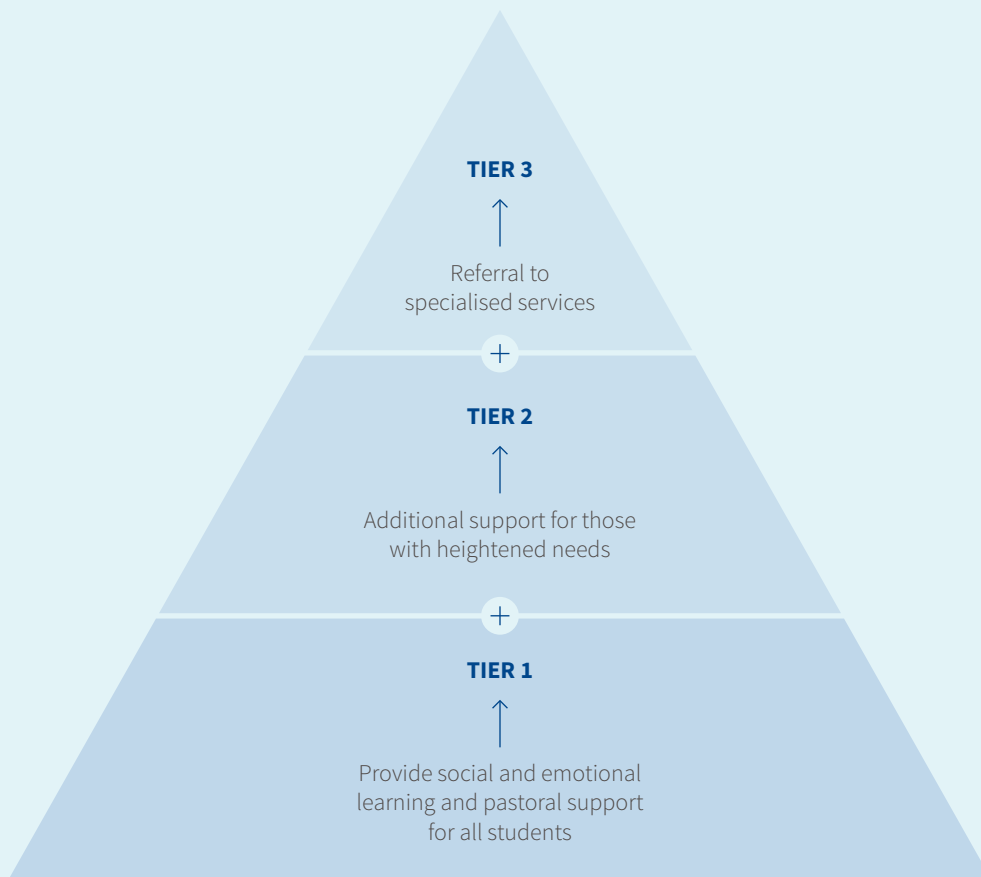
After the 2009 Black Saturday fires in Victoria, a therapeutic music program was developed that used song writing and the sharing and discussing of songs to support emotional processing and connection among young people.¹⁰⁶ Participants valued the experience of playing music with others who had been through similar experiences and who understood them. The collaborative musical experiences helped people to empathise and form connections with others who had experienced loss and regain confidence in their capacities to grow and learn.

For further Arts resources and examples see [The Arts Health Network](#), and [The Creative Recovery Network](#).

↓ School-based arts-based interventions can contribute during disaster recovery

Arts-based interventions can play a valuable role in narrating the community's response to disaster, and in rallying strengths in moving towards recovery. They offer a range of expressive and restorative modes for collaborative engagement with what has happened and can contribute towards regeneration of social capital in affected communities.

Figure 2: A framework to guide school-wide approaches to supporting student wellbeing post emergency



Arts-based interventions can be used along with SEL programs to support recovery in post disaster settings. In general, both draw on collaborative and capacity-building activities as part of their approach.

Arts-based projects may be provided by arts educators within the school, or with the support of community artists working closely with teachers. Both SEL and arts-based interventions prioritise student wellbeing and safety, use strengths-based approaches, and work to ensure that students are working within a safe space and supportive environment.^{99,105}

Using evidence-informed frameworks to guide a whole of school approach to student support post disaster

Schools are advised to take a whole of school approach to the promotion of mental health.¹⁰⁷ A number of frameworks are available to guide such approaches.¹⁰⁸⁻¹¹¹ They commonly advise the importance of considering the spectrum of activity from prevention to intervention and referral. Such approaches highlight the importance of providing universal prevention education for all students, while also providing additional support for those with indicated needs, and referral for specialised support for those whose level of need is beyond the expertise of educators.

A study of secondary students affected by sustained exposure to conflict in Bosnia showed the effectiveness of a three-tiered school mental health support program which included a) provision of social and emotional learning for all as the Tier 1 intervention; b) additional participation in a trauma and grief support intervention for those assessed as severely traumatised or bereaved; and c) referral of those most acutely affected for further support from specialised mental health services.¹¹² Even those with heightened needs who did not have access to Tier 2 or 3 additional support, showed reductions in PTSD symptoms, depression and grief as a result of the Tier 1 universal prevention education program.

The findings of this research in conflict-affected areas have relevance for understanding the needs of students returning to schools post pandemic, as in both the conflict zone and during the social isolation phases of the pandemic, exposure to the threat is sustained, awareness of risk is heightened through exposure to media, access to schooling is disrupted, economic livelihoods and lives are threatened, and children are contained for long periods within their homes or shelters.

This three-tier framework can potentially be integrated by schools as it is consistent with those used in school settings to inform holistic approaches to promotion of student mental health,¹⁰⁷ and positive approaches to management of student behaviour.¹¹³

Using existing policies, and curriculum to inform provision of student wellbeing education post emergency

Australian schools are provided with numerous policies, frameworks and curricula to support student wellbeing. The Australian Curriculum requires all teachers to play a role in developing students' personal and social capabilities. Approaches to advancing the personal and social capabilities involve students in a range of practices including learning to recognise and regulate emotions, developing empathy for others, establishing and building positive relationships, making responsible decisions, working effectively in teams, handling challenging situations constructively and developing leadership skills.

Education systems commonly provide policies and resources in the area of student wellbeing, as well as curriculum frameworks which inform the need for an educative response.

Curriculum frameworks and evidence-based resources

[The Australian Student Wellbeing Framework](#) supports Australian schools to be learning communities that promote student wellbeing, safety and positive relationships so that students can reach their full potential. The Framework is based on evidence that demonstrates the strong association between safety, wellbeing and learning.

[The Australian Institute for Disaster Resilience](#) provides a range of disaster response and education resources for primary and secondary schools and an overview of how they link to the Australian Curriculum.

[The Phoenix Australia — Centre for Posttraumatic Mental Health](#) has a range of resources for mental health support during the [Covid-19 pandemic](#) and the [Australian Bushfires](#).

References

- Mutch, C., *Quiet heroes: Teachers and the Canterbury, New Zealand, earthquakes*. Australasian Journal of Disaster and Trauma Studies, 2015. **19**(2): p. 77-85.
- WHO, *Definitions: Emergencies*. 2020 [cited 2020 31 March]. Available from: <https://www.who.int/hac/about/definitions/en/>.
- Gibbs, L., et al., *Research with, by, for and about children: Lessons from disaster contexts*. Global Studies of Childhood, 2013. **3**(2): p. 129-141.
- IPCC, *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. 2019.
- Slone, M., A. Shoshani, and T. Lobel, *Helping youth immediately following war exposure: A randomized controlled trial of a school-based intervention program*. The journal of primary prevention, 2013. **34**(5).
- Miller, K. and M. Jordans, *Determinants of children's mental health in war-torn settings: Translating research into action*. Current psychiatry reports, 2016. **18**(6): p. 58.
- Garfin, D., et al., *Children's reactions to the 2010 Chilean earthquake: The role of trauma exposure, family context, and school-based mental health programming*. Psychological Trauma: Theory, Research, Practice, and Policy, 2014. **6**(563-573).
- Parker, P.D., J. Jerrim, and J. Anders, *What effect did the global financial crisis have upon youth wellbeing? Evidence from four Australian cohorts*. Developmental psychology, 2016. **52**(4): p. 640.
- Edwards, J.B., M. Gomes, and M.A. Major, *The charged economic environment: Its role in parental psychological distress and development of children, adolescents, and young adults*. Journal of human behavior in the social environment, 2013. **23**(2): p. 256-266.
- Becker-Blease, K.A., H.A. Turner, and D. Finkelhor, *Disasters, victimization, and children's mental health*. Child development, 2010. **81**(4): p. 1040-1052.
- Conger, K.J., M.A. Rueter, and R.D. Conger, *The role of economic pressure in the lives of parents and their adolescents: the family stress model*. 2000.
- Rubenstein, B.L. and L. Stark, *The impact of humanitarian emergencies on the prevalence of violence against children: an evidence-based ecological framework*. Psychology, health & medicine, 2017. **22**(sup1): p. 58-66.
- Le Brocq, R., et al., *Schools and natural disaster recovery: the unique and vital role that teachers and education professionals play in ensuring the mental health of students following natural disasters*. Journal of psychologists and counsellors in schools, 2017. **27**(1): p. 1-23.
- Grolnick, W.S., et al., *Improving adjustment and resilience in children following a disaster: Addressing research challenges*. American Psychologist, 2018. **73**(3): p. 215.
- Liberty, K., et al., *Behavior problems and post-traumatic stress symptoms in children beginning school: a comparison of pre- and post-earthquake groups*. PLoS currents, 2016. **8**.
- Murray, C.J.S., *A collaborative approach to meeting the psychosocial needs of children during an influenza pandemic*. Journal for Specialists in Pediatric Nursing, 2010. **15**(2): p. 135-143.
- Layne, C.M., et al., *Effectiveness of a school-based group psychotherapy program for war-exposed adolescents: A randomized controlled trial*. Journal of the American Academy of Child and Adolescent Psychiatry, 2008. **47**(9): p. 1048-1062.
- Cohen, J.A. and A.P. Mannarino, *Supporting children with traumatic grief: What educators need to know*. School Psychology International, 2011. **32**(2): p. 117-131.
- Stark, L. and D. Landis, *Violence against children in humanitarian settings: a literature review of population-based approaches*. Social Science & Medicine, 2016. **152**: p. 125-137.
- Seddighi, H., et al., *Child abuse in natural disasters and conflicts: a systematic review*. Trauma, Violence, & Abuse, 2019: p. 1524838019835973.
- Cahill, H., et al. *Adolescents in Emergencies*. 2012. 37.
- Campbell, A., *An increasing risk of family violence during the Covid-19 pandemic: Strengthening community collaborations to save lives*. Forensic Science International: Reports, 2020. **2**(100089): p. 3.
- Garfin, D.R., et al., *Children's reactions to the 2010 Chilean earthquake: The role of trauma exposure, family context, and school-based mental health programming*. Psychological Trauma: Theory, Research, Practice, and Policy, 2014. **6**(5): p. 563.
- Alisic, E., et al., *Teachers' experiences supporting children after traumatic exposure*. Journal of Traumatic Stress, 2012. **25**(1): p. 98-101.
- Neria, Y., A. Nandi, and S. Galea, *Post-traumatic stress disorder following disasters: a systematic review*. Psychological medicine, 2008. **38**(4): p. 467-480.
- Gibbs, L., et al., *Delayed disaster impacts on academic performance of primary school children*. Child development, 2019.
- Spurrell, M. and A.C. McFarlane, *Post-traumatic stress disorder and coping after a natural disaster*. Social Psychiatry and Psychiatric Epidemiology, 1993. **28**(4): p. 194-200.
- Weems, C.F. and R.A. Graham, *Resilience and trajectories of posttraumatic stress among youth exposed to disaster*. Journal of child and adolescent psychopharmacology, 2014. **24**(1): p. 2-8.
- Garrison, C.Z., et al., *Post-traumatic stress disorder in adolescents after a hurricane*. American Journal of Epidemiology, 1993. **138**(7): p. 522-530.
- Parkinson, D. and C. Zara, *The hidden disaster: Domestic violence in the aftermath of natural disaster*. The Australian Journal of Emergency Management, 2013. **28**(2): p. 28.
- Bonanno, G.A., et al., *Weighing the costs of disaster: Consequences, risks, and resilience in individuals, families, and communities*. Psychological science in the public interest, 2010. **11**(1): p. 1-49.
- Powell, T. and T. Bui, *Supporting social and emotional skills after a disaster: Findings from a mixed methods study*. School Mental Health, 2016. **8**(1): p. 106-119.
- Van Hooff, M., *The impact of childhood exposure to a natural disaster on adult mental health: a 20-year longitudinal follow-up study of children exposed to a major Australian bushfire*. 2010.
- Pfefferbaum, B., et al., *Youth's Reactions to Disasters and the Factors That Influence Their Response*. Prev Res., 2008. **15**(3): p. 3-6.
- YoungMinds, *Coronavirus: impact on young people with mental health needs*, YoungMinds, Editor. 2020: London.
- Kessler, R.C., et al., *Trends in mental illness and suicidality after Hurricane Katrina*. Molecular psychiatry, 2008. **13**(4): p. 374.
- Yelland, C., P. Robinson, C. Lock, A.M. La Greca, B. Kokegei, V. Ridgway, and B. Lai, *Bushfire impact on youth*. Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies, 2010. **23**(2): p. 274-277.
- Gibbs, L., K. , et al., *Children and young people's wellbeing post-disaster: Safety and stability are critical*. International Journal of Disaster Risk Reduction, 2015. **14**: p. 195-201.
- Dean, J.G. and H.J. Stain, *Mental health impact for adolescents living with prolonged drought*. Australian Journal of Rural Health, 2010. **18**(1): p. 32-37.
- Durkin, M.S., et al., *The effects of a natural disaster on child behavior: evidence for posttraumatic stress*. American Journal of Public Health, 1993. **83**(11): p. 1549-1553.
- Furr, J.M., et al., *Disasters and youth: a meta-analytic examination of posttraumatic stress*. Journal of consulting and clinical psychology, 2010. **78**(6): p. 765.
- Peek, L., *Children and disasters: Understanding vulnerability, developing capacities, and promoting resilience—An introduction*. Children Youth and Environments, 2008. **18**(1): p. 1-29.
- McFarlane, A.C., *Posttraumatic phenomena in a longitudinal study of children following a natural disaster*. Journal of the American Academy of Child & Adolescent Psychiatry, 1987. **26**(5): p. 764-769.
- Burke Jr J. D., et al., *Emotional distress in fifth-grade children ten months after a natural disaster*. Journal of the American Academy of Child Psychiatry, 1986. **25**(4): p. 536-541.
- Lonigan, C., et al., *Children's reactions to a natural disaster: Symptom severity and degree of exposure*. Advances in Behaviour Research and Therapy, 1991. **13**(3): p. 135-154.
- Berger, E., et al., *Disaster impacts on students and staff from a specialist, trauma-informed Australian school*. Journal of Child & Adolescent Trauma, 2018. **11**(4): p. 521-530.

47. Bryant, R.A., et al., *Longitudinal study of changing psychological outcomes following the Victorian Black Saturday bushfires*. Australian & New Zealand Journal of Psychiatry, 2018. **52**(6): p. 542-551.
48. Osofsky, H.J., et al., *Posttraumatic stress symptoms in children after Hurricane Katrina: Predicting the need for mental health services*. American Journal of Orthopsychiatry, 2009. **79**(2): p. 212-220.
49. Berger, E., Carroll, M., Maybery, D., & Harrison, D., *Disaster impacts on students and staff from a specialist, trauma-informed Australian school*. Journal of Child & Adolescent Trauma, 2018. **11**(4): p. 521-530.
50. Sagy, S. and O. Braun-Lewensohn, *Adolescents under rocket fire: when are coping resources significant in reducing emotional distress?* Global Health Promotion, 2009. **16**(4): p. 5-15.
51. La Greca, A. and W. Silverman, *Treatment and Prevention of Posttraumatic Stress Reactions in Children and Adolescents Exposed to Disasters and Terrorism: What Is the Evidence?* Child Development Perspectives, 2009. **3**(1): p. 4-10.
52. Fazel, M., et al., *Mental health interventions in schools in low-income and middle-income countries*. The Lancet Psychiatry, 2014. **1**(5): p. 388-398.
53. Morris, K.A.N. and M.T. Edwards, *Disaster risk reduction and vulnerable populations in Jamaica: Protecting children within the comprehensive disaster management framework*. Children Youth and Environments, 2008. **18**(1): p. 389-407.
54. Ronan, K. and D. Johnston, *Promoting community resilience in disasters: The role for schools, youth, and families*. 2005: Springer Science & Business Media.
55. Mutch, C. and E. Gawith, *The New Zealand earthquakes and the role of schools in engaging children in emotional processing of disaster experiences*. Pastoral Care in Education, 2014. **32**(1): p. 54-67.
56. Wolmer, L., *School Reactivation Programs after disaster: Could teachers serve as clinical mediators?* Child and Adolescent Psychiatric Clinics of North America, 2003. **12**: p. 363-381.
57. Fu, C. and C. Underwood, *A meta-review of school-based disaster interventions for child and adolescent survivors*. Journal of Child & Adolescent Mental Health, 2015. **27**(3): p. 161-171.
58. Rolfsnes, E.S. and T. Idsoe, *School-based intervention programs for PTSD symptoms: A review and meta-analysis*. Journal of Traumatic Stress, 2011. **24**(2): p. 155-165.
59. Prinstein, M.J., La Greca, A. M., Vernberg, E. M., & Silverman, W. K., *Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster*. Journal of Clinical Child Psychology, 1996. **25**(4): p. 463-475.
60. Wolmer, L., D. Hamiel, and N. Laor, *Preventing children's posttraumatic stress after disaster with teacher-based intervention: A controlled study*. Journal of the American Academy of Child & Adolescent Psychiatry, 2011. **50**(4): p. 340-348.
61. Cook, A., et al., *Complex trauma in children and adolescents*. Psychiatric annals, 2017. **35**(5): p. 390-398.
62. Australian Bureau of Statistics, *Australian social trends (Cat. No. 4102.0)*, ABS, Editor. 2011. Canberra.
63. van de Kolk, B., *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. 2014. New York, NY: Penguin Publishing Group.
64. Australian Childhood Foundation, *Making SPACE for Learning: Trauma Informed Practice in Schools*. 2010. Australian Childhood Foundation: Ringwood, VIC.
65. Walkley, M. and T.L. Cox, *Building trauma-informed schools and communities*. Children & Schools, 2013. **35**(2): p. 123-126.
66. Downey, L., *Calmer classrooms: A guide to working with traumatised children*, Child Safety Commissioner, Editor. 2007. Victorian Government: Melbourne, Victoria, Australia.
67. Fothergill, A., E.G. Maestas, and J.D. Darlington, *Race, ethnicity and disasters in the United States: A review of the literature*. Disasters, 1999. **23**(2): p. 156-173.
68. Attiwill, P.M. and M.A. Adams, *Mega-fires, inquiries and politics in the eucalypt forests of Victoria, south-eastern Australia*. Forest Ecology and Management, 2013. **294**: p. 45-53.
69. Collaborative for Academic Social and Emotional Learning [CASEL], *Effective social and emotional learning programs: Preschool and elementary school edition*. 2013.
70. Weissberg, R.P., *Promoting the social and emotional learning of millions of school children*. Perspectives on Psychological Science, 2019. **14**(1): p. 65-69.
71. Wang, H., et al., *Can Social-Emotional Learning Reduce School Dropout in Developing Countries?* Journal of Policy Analysis and Management, 2016. **35**(4): p. 818-847.
72. Horowitz, J. and J. Garber, *The Prevention of Depressive Symptoms in Children and Adolescents: A Meta-Analytic Review*. Journal of Consulting & Clinical Psychology, 2006. **73**(3): p. 401-415.
73. Merrell, K.W., et al., *Social and Emotional Learning in the Classroom: Evaluation of Strong Kids and Strong Teens on Students' Social-Emotional Knowledge and Symptoms*. Journal of Applied School Psychology, 2008. **24**(2): p. 209-224.
74. Payton, J.W., et al., *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. 2008. Collaborative for Academic, Social, and Emotional Learning: Chicago.
75. Stockings, E.A., et al., *Preventing depression and anxiety in young people: A review of the joint-efficacy of universal, selective and indicated prevention*. Psychological Medicine, 2016. **46**: p. 11-26.
76. Durlak, J.A., et al., *The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions*. Child Development, 2011. **82**(1): p. 405-32.
77. Durlak, J.A., et al., *The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions*. Child Development, 2011. **82**(1): p. 405-432.
78. Ttofi, M. and D. Farrington, *Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review*. Journal of Experimental Criminology, 2011. **7**(1): p. 27-56.
79. Hong, S.J. and D.L. Espelage, *A review of research on bullying and peer victimization in school: An ecological system analysis*. Aggression and Violent Behavior, 2012. **17**: p. 311-22.
80. Sklad, M., et al., *Effectiveness of School-Based Universal Social, Emotional and Behavioural Programs: Do They Enhance Students' Development in the Area of Skill, Behaviour and Adjusted?* Psychology in the Schools, 2012. **49**(9): p. 892-909.
81. Catalano, R.F., et al., *The Importance of Bonding to School for Healthy Development: Findings from the Social Development Research Group*. Journal of School Health, 2004. **74**(7): p. 252-261.
82. McCormick, M., et al., *Social-emotional learning and academic achievement: Using causal methods to explore classroom-led mechanisms*. AERA Open, 2015. **1**(3).
83. Hagelskamp, C., et al., *Improving classroom quality with the ruler approach to social and emotional learning: Proximal and distal outcomes*. American Journal of Community Psychology, 2013. **51**: p. 530-543.
84. Durlak, J.A., *Programme Implementation in Social and Emotional Learning: Basic Issues and Research Findings*. Cambridge Journal of Education, 2016. **46**(3): p. 333-345.
85. OECD, *Skills for Social Progress: The Power of Social and Emotional Skills*, in *OECD Skills Studies*. 2015. OECD Publishing.
86. Blum, R., *School connectedness: Improving students' lives*. 2005. John Hopkins Bloomberg School of Public Health. Baltimore, MD.
87. McNeely, C.A., Nonnemaker, J. M., & Blum, R. W., *Promoting school connectedness: Evidence from the national longitudinal study of adolescent health*. Journal of school health, 2002. **72**(4): p. 138-146.
88. Sims, A.J., et al. *School dissatisfaction in a post-disaster environment: The mediating role of posttraumatic stress symptoms in Child & Youth Care Forum*. 2015. Springer.
89. Nastasi, B.K., Overstreet, S., & Summerville, M., *School-based mental health services in post-disaster contexts: A public health framework*. School psychology international, 2011. **35**(5): p. 533-552.
90. Salloum, A. and S. Overstreet, *Grief and trauma intervention for children after disaster: Exploring coping skills versus trauma narration*. Behaviour research and therapy, 2012. **50**(3): p. 169-179.


References

91. Wolmer, L., et al., *Teacher-mediated intervention after disaster: a controlled three-year follow-up of children's functioning*. *Journal of Child Psychology and Psychiatry*, 2005. **46**(11): p. 1161-1168.
92. Cahill, H. and B. Davdand, *Triadic Labour in Teaching for the Prevention of Gender-based Violence*. *Gender and Education*, 2020.
93. Davdand, B. and H. Cahill, *Structures for care and silenced topics: accomplishing gender-based violence prevention education in a primary school*. *Pedagogy, Culture & Society*, 2020. p. 1-15.
94. Davdand, B. and H. Cahill, *Structures for Care and Silenced Topics: Accomplishing Gender-Based Violence Prevention Education in a Primary School*. *Pedagogy, Culture and Society*, 2020.
95. Wood, L. and L. Goba, *Care and support of orphaned and vulnerable children at school: helping teachers to respond*. *South African Journal of Education*, 2011. **31**(2).
96. Bhana, D. and R. Morrell, *The hidden work of caring: teachers and the maturing AIDS epidemic in diverse secondary schools in Durban*. *Journal of Education*, 2006. **38**(1): p. 5-24.
97. Sharifian, M. and P. Kennedy, *Teachers in War Zone Education: Literature Review and Implications*. *International Journal of the Whole Child*, 2019. **4**(2): p. 9-26.
98. Brunzell, T., H. Stokes, and L. Waters, *Why Do You Work with Struggling Students? Teacher Perceptions of Meaningful Work in Trauma-Impacted Classrooms*. *Australian Journal of Teacher Education*, 2018. **43**(2): p. 116-142.
99. Mutch, C. and L. Latai, *Creativity beyond the formal curriculum: arts-based interventions in post-disaster trauma settings*. *Pastoral Care in Education*, 2019. **37**(3): p. 230-256.
100. Cahill, H., *Sensitive Issues: Supportive Structures*. *Drama Australia Journal (NJ)*, 2006. **30**(1): p. 7-22.
101. Cahill, H., *Resisting Risk and Rescue as the Raison d'être of Arts Interventions, in The Arts and Youth At Risk: Global and Local Challenges*, A. O'Brien and K. Donelan, Editors. 2008. Cambridge Scholars Publishing: Newcastle upon Tyne, U.K. p. 12-31.
102. Chinyowa, K.C., *Frames of Metacommunication: Examples from African Theatre for Development*. *Drama Australia Journal (NJ)*, 2007. **31**(1): p. 33-44.
103. Kershaw, B., *Pathologies of Hope in Drama and Theatre in Research in Drama Education*. *Research In Drama Education*, 1998. **3**(1).
104. Krusic, V., *Escapism? Why Not!, in Drama, Culture and Empowerment: The IDEA Dialogues*, J. O'Toole and K. Donelan, Editors. 1996. IDEA Publications: Brisbane.
105. Williams, M., *Social And Emotional Learning Strategies In The Elementary Classroom And Their Impact On Student Success*. 2018.
106. McFerran, K., and Kate Teggelove, *Music therapy with young people in schools: After the Black Saturday fires*. In *Voices: A World Forum for Music Therapy*, 2011. **11**(1).
107. Wyn, J., et al., *MindMatters, a whole-school approach promoting mental health and wellbeing*. *Australian and New Zealand Journal of Psychiatry*, 2000. **34**: p. 594-601.
108. Bond, L., et al., *Building capacity for system-level change in schools: lessons from the Gatehouse Project*. *Health Education & Behavior*, 2001. **28**(3): p. 368-383.
109. Dix, K., et al., *Implementation quality of whole-school mental health promotion and students' academic performance* *Child and adolescent mental health* 2012. **17**(1): p. 45-51.
110. Payton, J.W., et al., *Social and Emotional Learning: A Framework for Promoting Mental Health and Reducing Risk Behavior in Children and Youth*. *Journal of School Health*, 2000. **70**(5): p. 179.
111. Weare, K. and M. Nind, *Mental health promotion and problem prevention in schools: what does the evidence say?* *Health Promotion International*, 2011. **26**(S1): p. i29-i68.
112. *School-Based Interventions to Prevent Eating Problems: First Do No Harm*. *Eating Disorders*. **8**: p. 123-30.
113. Sugai, G. and R. Horner, *A Promising Approach for Expanding and Sustaining School-Wide Positive Behavior Support*. *School Psychology Review*, 2006. **35**(2): p. 245-259.






Contact us

Melbourne Graduate School of Education

 education.unimelb.edu.au

Connect with us

-  [mgseunimelb](https://www.facebook.com/mgseunimelb)
-  [EduMelb](https://twitter.com/EduMelb)
-  [EducationMelbourne](https://www.youtube.com/educationmelbourne)

234 Queensberry Street
Kwong Lee Dow Building
The University of Melbourne
Victoria 3010 Australia

ISBN: 978-0-6488556-1-3

Republish this report

This work is licensed under a Creative Commons Attribution-No Derivatives 3.0 Australia (CC BY-ND 3.0 AU).

Any republishing of this report must be attributed in the following way: This report *Natural disasters and pandemics: supporting student and teacher wellbeing after a crisis* was first published by the Melbourne Graduate School of Education. Authors: Professor Helen Cahill, Dr Babak Davdand, Keren Shlezinger, Katherine Romei and Anne Farrelly.

Disclaimer

The University endeavours to ensure that information contained in this publication is current and correct at the time of printing.

CRICOS Provider Code: 00116K

Printed on paper from responsible sources.

Published: July 2020

Contact

Youth Research Centre (yrcc-info@unimelb.edu.au)
Melbourne Graduate School of Education,
The University of Melbourne

Web: web.education.unimelb.edu.au/yrcc/

Phone: (03) 8344 9633

@YRCunimelb

The views expressed in this paper are those of the authors. They do not necessarily reflect the views of the University of Melbourne.

Melbourne
Graduate School
of Education



THE UNIVERSITY OF
MELBOURNE