Student participation in school bushfire planning

An emergent framework for action in
Victorian secondary schools

ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

BACKGROUND AND CONTEXT

Across Victoria, approximately 40 secondary schools and 90 combined primary and secondary schools are listed on the Department of Education's (DoE) Bushfire At-Risk Register (BARR).[1] Inclusion on the BARR requires a school to pre-emptively close on catastrophic fire danger days, develop bushfire emergency management plans and undertake other bushfire preparedness activities.[6]

Reflecting developments in child- and youth-centred disaster risk management, both in Australia[2,3] and globally,[4,5] the DoE's policy guidance for BARR schools explicitly recognises that actively involving students in school bushfire planning will increase their capacity to cope in the event of a bushfire emergency.[6] This policy guidance represents a valuable opportunity to promote genuine student participation in school bushfire planning and, by extension, increase capability for bushfire emergency response in school communities around Victoria.

However, research on student participation in school bushfire planning is lacking and this has impeded the development of evidence-based approaches to policy implementation. While recent research has clearly demonstrated the important contributions children and young people can make to bushfire planning and preparedness in their households,[7,8] there are currently no published studies on the contributions they can make to bushfire planning in their schools. As a result, the issue of student participation in school bushfire planning represents a major gap in the policy-research-practice nexus that must be addressed.

RESEARCH AIMS AND STRATEGY

The aim of this research project was to design an evidence-based conceptual framework that can support the genuine participation of Victorian secondary school students in the development and implementation of their school bushfire plan. The project employed a participatory action research methodology which allowed for an iterative process of systematic investigation, critical dialogue and collaborative problem solving with the school leadership, teachers, students and emergency management personnel.

The research was conducted at Upwey High School in the Yarra Ranges, Victoria, Australia. It involved three key phases. The first phase involved interviews and focus groups with four key stakeholder groups: school leadership, teachers, students, and local emergency management personnel. The aim of these interviews and focus groups was to provide the research team with a clear understanding of the school's bushfire plan and stakeholders' views on student involvement in the development and implementation of the plan.

The data gathered in the interviews and focus groups was used to inform the objectives and design of the second phase of the research process, which involved a participatory workshop for students. This workshop was conducted to provide students with the knowledge and skills they needed to critically evaluate the school bushfire plan from their own perspectives and develop recommendations regarding student involvement in the development and implementation of the plan. In the third phase, the research team planned and executed a bushfire planning forum at Upwey High School. The goal of this forum was to provide an opportunity for the students to present the recommendations they developed in the participatory workshop to key stakeholders (i.e., school leadership, teachers, and local emergency management personnel) and engage those stakeholders in a critical dialogue about student involvement in school bushfire planning.

Qualitative data analysis methods were used to organise and analyse all data gathered during the project, including transcripts of interviews and focus groups, field notes, and paper materials and photographs from student activities. As a first step to analysing the

transcript / textual data, the team developed an initial set of codes that were used to tag the data. After completing the initial round of coding, the team reviewed the data collected within each code and identified overarching themes.The themes, their associated codes and archetypal quotes from participants were then used to build the component parts of the emergent framework.

AN EMERGENT FRAMEWORK FOR STUDENT PARTICIPATION IN SCHOOL BUSHFIRE PLANNING

The emergent framework presented in this report represents a first step towards involving Victorian secondary school students as genuine participants in the development and implementation of their school bushfire plans.

The Framework is characterised as 'emergent' because it represents a model that will continue to evolve over time in response to emerging insights, needs and challenges. By allowing for continuous learning and adaptation, it is hoped that the framework can foster innovative and experimental approaches to addressing complex challenges.

The overarching goal of the framework is to build capability and capacity for bushfire emergency response in Victorian secondary schools by including students as genuine participants in the development and implementation of school bushfire plans.

The Framework is comprised of three main priorities for action: 1) Build knowledge and understanding; 2) Promote voice, agency and leadership; and 3) Support innovation and change. Each priority includes four core tasks for effective implementation.

The priorities and core tasks comprising this iteration of the Framework are offered as a starting point for ongoing discussion, debate and problem-solving. As work in this area progresses, the priorities will be redefined, core tasks will be revised and new agendas will emerge. Critical, responsive and reflexive approaches to

the ongoing development and implementation of the framework will help to ensure it is achieving desired outcomes and goals.

PRIORITY 1: BUILD KNOWLEDGE AND UNDERSTANDING

It is essential that all students attending secondary schools on the Bushfire-At-Risk Register have access to quality education that builds their knowledge and understanding of their school's bushfire emergency plan. This will require authentic teaching and learning approaches that situate the school's bushfire plan within the broader context of local bushfire risks and the bushfire safety options that are available to the school community. The role of students as educators should also be recognised and they should be provided with the resources they need to fulfill that role.

Core task 1.1. Develop curriculum-aligned teaching and learning resources

The development of curriculum-aligned teaching and learning resources will provide schools with a systematic, evidence-based strategy for educating students about their school bushfire plan. A rigorous approach to this task will involve the production of an intensive integrated unit of study for Year 7 students, as well as additional teaching and learning resources that enable students to remain informed and up-to-date on the school plan as they progress through secondary school.

Core task 1.2. Increase student involvement in emergency drills and exercises

Emergency drills and exercises are essential for testing school bushfire plans and improving the bushfire response capabilities of school communities. They can help identify strengths and weaknesses, enhance coordination and communication, and build confidence and trust among staff, students and families. Increasing the active involvement of students in emergency drills will not only enhance their understanding of the plan, it will also provide valuable opportunities for them to develop their critical-thinking, problem-solving and decision-making skills.

Core task 1.3. Engage students as educators
Students have deep and embedded knowledge of their peers, their households and their wider community. When combined with a technical understanding of bushfire hazards, risks and safety options, this makes them powerful risk communicators and educators. Providing students with resources and support to exercise their unique capabilities for educating others can help to increase understanding of the school bushfire plan across the school community.

Core task 1.4. Explore opportunities for co-curricular activities
Co-curricular activities can provide opportunities for students to extend their involvement in school bushfire planning beyond the traditional realms of curriculum-based learning and school drills. Co-curricular activities can also enable the active involvement of students who are less inclined to engage in a traditional classroom setting, but have important contributions to make to the planning process.

PRIORITY 2: PROMOTE VOICE, AGENCY AND LEADERSHIP
Student voice, agency, and leadership in school bushfire planning positions students as genuine partners in school safety and affords them opportunities to influence decision-making and action. When students are engaged as genuine partners, they are more likely to take ownership of the plan and actively support its implementation. Promoting voice, agency and leadership in school bushfire planning will not only enhance the quality of plans, it will also foster a sense of empowerment amongst students and build a culture of inclusive risk management across the school community.

Core Task 2.1. Position students as genuine partners in school bushfire planning
Once viewed as passive victims of hazards and disasters, who are entirely dependent on adults for their safety and wellbeing, children and youth are now viewed as agents of change who have valuable contributions to make to disaster risk management. This shift in the narrative has been written into numerous policy frameworks and

strategies, which can be harnessed to position students as genuine partners in school bushfire planning.

Core Task 2.2. Create time and space for students to form their views
For students to become genuine partners in school bushfire planning, they need to be able to form their views on matters that affect them and they must be afforded safe and inclusive spaces in which to do so. This requires that students are given the time and support they need to understand the key elements of the school bushfire plan and their role in it. It also requires the provision of appropriate and accessible resources to support student wellbeing.

Core Task 2.3. Embed mechanisms for students to share their views with decision-makers
Once students have had the opportunity to form their views, they should be provided with mechanisms for sharing their views with decision-makers, including teachers, school leaders, school emergency management practitioners and local emergency services. By fostering an environment where students' views are valued and respected, and where decision-makers actively listen and respond to their input, schools can cultivate a culture of genuine student participation in school bushfire planning.

Core Task 2.4. Establish leadership positions for students
Establishing leadership positions for students will amplify the impact they can have on policies and activities for school bushfire planning within their school community. By leveraging existing leadership positions and creating new ones, schools will be providing students with valuable opportunities to contribute positively to school bushfire planning and the broader school environment.

PRIORITY 3: SUPPORT INNOVATION AND CHANGE
The genuine participation of students in school bushfire planning represents a significant paradigm shift in current policy and practice. Enabling this shift to take hold will require a strong commitment to innovation and change. It will also require the development of collaborative partnerships and clear lines of accountability,

underpinned by an ethos of shared responsibility. Meanwhile, ongoing monitoring, evaluation and research that supports school communities and partner organisations to identify and promote evidence-based practice will be crucial to the scaled implementation of change processes, from the local to the state level.

Core task 3.1. Establish and strengthen collaborative partnerships

The importance of collaborative partnerships for innovation and change is consistently emphasised in emergency management policies and guidance from the international to the local level. Collaborative partnerships enable the sharing of resources and expertise and the coordination of effort, which increases capability and capacity for effective planning and response. It also fosters the trusted relationships and mutual support upon which responsive, inclusive and equitable emergency management depends.

Core task 3.2. Ensure transparency and accountability in decision-making

Transparent and accountable decision-making procedures are crucial components of genuine student participation. In the context of school bushfire planning, transparency and accountability in decision-making will demonstrate to students that their views and perspectives are valued and taken seriously. It will also provide students with valuable opportunities to learn about democracy, governance and their rights and responsibilities as citizens.

Core task 3.3. Invest in evaluation and research

Evaluation and research will be essential for enhancing the effectiveness and sustainability of programs and initiatives aimed at increasing student participation in school bushfire planning. This investment will enable continuous improvement, evidence-based decision-making, informed policy development and strategic advocacy. Importantly, the data and evidence generated through evaluation and research will also provide a strong foundation for the development of programs and initiatives that can be sustainably implemented at scale.

3.4. Share learning and celebrate success

Supporting innovation and change, over time and at scale, will require the design and delivery of professional learning opportunities that build capability and capacity in both the emergency management and education sectors. Recognising, celebrating and amplifying the successful programs and initiatives led by school communities will further augment a culture of innovation and change.

BUILDING ON A STRONG FOUNDATION

This Emergent Framework for Student Participation in School Bushfire Planning demonstrates the critical value of engaging students as genuine partners in disaster risk management. Not only to ensure that plans and procedures meet their needs, priorities and expectations, but to capitalise on the knowledge, skills, enthusiasm, creativity and ethic of care that they bring to the task. Students in this project have shown that when they are afforded the time, resources and support they need to form and express their views, they can make significant contributions to policy and practice. With this Framework, it is hoped that more students across Victoria will have the opportunity to actively participate in the development and implementation of their school bushfire plans and, by extension, reduce disaster risk and increase resilience in their school communities.

This project has achieved its stated aim of designing a conceptual framework that can support the genuine participation of Victorian secondary school students in the development and implementation of school bushfire plans. However, it is the trusted relationships that have been forged through the research process that will enable it to have an impact beyond the school community from which it has emerged. These relationships, which span the emergency management, education, local government and research sectors will be essential for the socialisation of the Framework and the scaled expansion of the programs and initiatives that come from it.

INTRODUCTION

Across Victoria, there are approximately 40 secondary schools and 90 combined primary and secondary schools listed on the Department of Education's (DoE) Bushfire At-Risk Register (BARR).[1] Inclusion on the BARR requires a school to pre-emptively close on catastrophic fire danger days, develop bushfire emergency management plans and undertake other bushfire preparedness activities.[6] Reflecting developments in child- and youth-centred disaster risk management, both in Australia[2,3] and globally,[4,5] the DoE policy guidance for BARR schools explicitly recognises that actively involving students in school bushfire planning will increase their capacity to cope in the event of a bushfire emergency.[6] This policy guidance represents a valuable opportunity to promote genuine student participation in school bushfire planning and, by extension, increase capability for bushfire emergency response in school communities around Victoria.

However, research on student participation in school bushfire planning is lacking and this has impeded the development of evidence-based approaches to policy implementation. While recent research has clearly demonstrated the important contributions children and young people can make to bushfire planning and preparedness in their households,[7,8] there are currently no published studies on the contributions they can make to bushfire planning in their schools. As a result, the issue of student participation in school bushfire planning represents a major gap in the policy-research-practice nexus that must be addressed.

By engaging with students as active citizens and valued partners in disaster risk management, this project has sought to increase understanding of the roles they can play in school bushfire planning. It has also sought to increase understanding of the structures, systems and cultures that promote or constrain their participation in the planning process. In doing so, it provides a solid foundation upon which to build sustainable and scalable programs and initiatives that will meet the needs, priorities and expectations of students and school communities.

Using a participatory action research methodology at Upwey High School on Melbourne's bushfire prone peri-urban fringe, this project began with an investigation of students' existing knowledge of their school bushfire plan and the extent to which they had been involved in the design and implementation of that plan. It then engaged students in a participatory workshop where they evaluated the school bushfire plan from their own perspectives, identified the benefits and challenges of involving students in school bushfire planning, and developed their own recommendations for policy and practice.

The project culminated in a school bushfire planning forum where the students presented their recommendations to an audience of adult subject matter experts and decision-makers, including teachers, school leaders, emergency management practitioners and disaster risk scientists. This forum provided an opportunity for the students and adults to engage in critical dialogue about student participation in school bushfire planning and develop a shared understanding of the key issues. It also created an opportunity for students and adult to collectively identify priorities for action in policy and practice, as well as the potential barriers and obstacles to change.

The empirical data generated over the course of the project, combined with an extensive analysis of current policy in both disaster risk management and education, has enabled the development of an emergent framework for student participation in school bushfire planning in Victorian secondary schools. Importantly, the adoption of a participatory, multidisciplinary, cross-sectoral approach has ensured that the framework is consistent with existing legislative and regulatory frameworks, accommodates the needs and priorities of those with a delegated responsibility for school emergency management, and respects the knowledge, perspectives, and experiences of students themselves.

BACKGROUND AND CONTEXT

Victorians live in one of the most bushfire-prone regions in the world. While fire is a natural part of many Victorian ecosystems, major bushfires in populated areas have had devastating impacts. For example, the Black Saturday bushfires in February 2009 resulted in 173 fatalities and the destruction of over 2000 homes.[9] More recently, the Black Summer bushfires of 2019-2020 burned over 1,500,000 hectares across the eastern and north-eastern parts of the state, causing immense damage to communities, infrastructure, cultural heritage and the natural environment.[10]

The State's diverse landscapes, ranging from dense forests and woodlands to grasslands and coastal scrub, contribute to the complexity of managing bushfire hazards and risks. Settler colonialism and the forced removal of Aboriginal people from their sovereign lands has also severely limited the Indigenous fire stewardship practices that have been used to manage the landscape for tens of thousands of years, further exacerbating the risks for people, places and environments.[11,12] Meanwhile, climate change is increasing the length of fire seasons and the number of extreme fire weather days, which is leading to more frequent and intense bushfire events.[13]

To prevent and mitigate the damaging impacts of bushfire hazards, the Victoria Government has implemented various strategies, including hazard reduction burning, community education, emergency response planning and preparedness, and land-use planning.[14] State fire agencies, such as the Country Fire Authority (CFA) and the Department of Environment Energy and Climate Change (DEECA) work collaboratively to monitor fire conditions, issue warnings, and respond to bushfire events.[14,15] Meanwhile, increased recognition of the value and importance of Aboriginal cultural burning in fire management policy and practice is supporting the return of cultural fire onto Country.[16] Despite these efforts, bushfire risk remains a significant concern in Victoria and ongoing risk management efforts are essential, especially in this era of rapid social and environmental change.

Across Victoria, approximately 430 schools (government, catholic and Independent) are listed on the Department of Education (DoE) Bushfire At-Risk Register (BARR).[1] Around 40 of those schools are secondary schools and another 90 are combined primary and secondary schools. To support effective bushfire risk management in BARR schools, the DoE has a *Bushfire and Grassfire Preparedness Policy*, which outlines the actions schools must take in relation to bushfire and grassfire risk.[6] Key elements of this policy can be summarised as follows:

- All registered schools, as a component of their registration, must comply with the Victorian Registration and Qualifications Authority (VRQA) Guidelines on Bushfire Preparedness;

- Schools must ensure they understand their bushfire and grassfire hazard exposure, their risk and the actions that they need to take for their emergency management planning, preparedness, ongoing situational awareness and response;

- Schools on the department's Bushfire At-Risk Register (BARR) and assessed to be at the greatest risk of fire need to understand the corresponding pre-emptive actions that are required on days of elevated fire danger (High or Extreme fire danger rating (FDR) based on risk categorisation) in their local government area;

- All schools on the BARR, and schools and early childhood services considered at risk of bushfire or grassfire (Category 4), must close on all days forecasted by the Bureau of Meteorology to be Catastrophic FDR in their fire weather district;

- Schools must cancel all bus routes which travel through fire weather districts that are forecasted to be Catastrophic FDR; and

- In the event of exposure to an immediate bushfire or grassfire threat, all school principals and approved providers/facility managers (or their delegates) have the authority to enact their Emergency Management Plan (EMP).

To support the implementation of this policy, the DoE has drawn on subject matter expertise from the CFA and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to develop guidance that can assist BARR schools to prepare for the risk of bushfire and grassfire.[6] The guidance covers a range of topics including, pre-emptive school closure, community bushfire safety options on school premises, bushfire safety information and vegetation management. Significantly, the guidance also includes the following statement on student participation in school bushfire planning: [6]

> Research indicates that when students have access to accurate knowledge and information about bushfires and are provided with opportunities to actively participate in bushfire planning activities, they can make a valuable contribution to risk reduction at home, at school, and in the broader school community. By actively involving your students in the school's emergency planning, they will also be better equipped to follow the necessary procedures in the event of a bushfire emergency.

This recognition of the children and youth as active participants in school bushfire planning reflects a major shift in disaster risk management policy and practice, both in Australia and internationally. Whereas children and youth were once conceived as passive victims of disasters, a concerted research and advocacy effort over the last 15 years has seen them repositioned as agents of change.[17,18,19] For example, the *Sendai Framework for Disaster Risk Reduction 2015-2030,*[20] to which Australia is a signatory, includes the following statements on children and youth:

> Governments should engage with relevant stakeholders, including women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards (p.10).

> A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted (p.13).

> Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula (p.23).

Child and youth participation in disaster risk management is also a guiding principle of the *Comprehensive School Safety Framework for Child Rights and Resilience in the Education Sector 2022 - 2030,*[21] which asserts that,

> Children and youth are the rights-holders and primary beneficiaries of all the work duty-bearers do for sustainable development, disaster, climate and conflict risk reduction. However, far from being helpless victims, they are already active contributors to risk reduction, peace-building, and climate action. Gender transformative, fully inclusive, and developmentally appropriate approaches anchor best practices in child-and youth-centred risk reduction and resilience. There is much more than can be done to engage them fully as participants in these processes (p.17).

Here in Victoria, the language and spirit of these international frameworks has exerted a strong influence on the State Government's *Education and Training Climate Change Adaptation Action Plan 2022–2026,*[22] which articulates a strong commitment to child and youth participation. For example, the Plan's priorities for climate change adaptation over the next 5 years include the following focus area and action:

> Focus area: Improve understanding of climate change risks and vulnerabilities, and build capability to embed climate change adaptation, where relevant, into decision making, policy and processes > Action 4: Support the establishment and evaluation of mechanisms for the participation of children and young people in the design and implementation of policies, plans and standards for climate change adaptation and disaster risk reduction (p.31).

The plan also recommends that the Department of Education

"*works with children, young people, parents and employee organisations to ensure stakeholders are valued contributors to policy and program design*" (p.19). On this point, the plan includes the following short-term objective for 2026:

> Incorporate climate change adaptation – supported by appropriate training, guidance and evidence – into decision making processes and practices, and across the emergency management cycle, including by: developing age-appropriate approaches to engage and empower children and young people to understand their role and take action on climate change (p.10).

It is important to recognise that the practice of involving children and youth as active participants in disaster risk management is not a gift bestowed upon them by adults, but a legal imperative of the international child rights architecture. The main legally-binding international instrument that deals specifically with children's rights is the *United Nations Convention of the Rights of the Child* (CRC).[23] Built on varied legal systems and cultural traditions, the CRC is a near-universally ratified set of standards and obligations that set minimum entitlements and freedoms that should be respected by its signatory governments, of which Australia is one. By agreeing to undertake the obligations of the CRC, the Australian Government has committed itself to "*protecting and ensuring children's rights and is obliged to develop and undertake all actions and policies in the light of the best interests of the child*".

Historically, the CRC has predominantly been applied to the protection of children's rights in political, legal, and community development contexts. However, it also deals with matters of particular relevance to children's rights to protection from natural hazards and disasters.[17] For example, Article 3 of the CRC requires signatory states to "*ensure the child such protection and care as necessary for his or her well-being… and to this end should take all appropriate legislative and administrative measures*". The experience of disaster can affect children in a way that severely undermines their physical and psychosocial wellbeing.[24,25] As such, signatory states are required to

take all appropriate measures to ensure their protection from natural hazards and to provide adequate resources for relief when a disaster does occur.

There are also provisions in the CRC[23] that protect a child's right to access information about disaster risk management. Article 13.1, for instance, relates to a child's right to freedom of expression which includes "*the right to seek, receive, and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice*". Additionally, Article 12.1 requires that signatory states will "*assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child*". Thus, the CRC not only requires States Parties to take all necessary steps to mitigate or prevent the impacts of natural hazards and disasters on children's safety and wellbeing, it also assures a child's right to access information regarding disaster risk management and to actively participate in decision-making that affects them.

Taken together, the current policy frameworks and plans for disaster risk management and climate change adaptation, combined with the international child rights architecture, provide a solid justification for engaging Victorian students as genuine participants in the development and implementation of school bushfire plans. As climate change, population growth and environmental degradation continue to exacerbate bushfire risks across the state, building an evidence-base that can inform the development of effective and sustainable approaches to student participation is both necessary and urgent.

RESEARCH AIMS AND STRATEGY

RESEARCH AIMS

The aim of this project was to design an evidence-based conceptual framework that can support the genuine participation of Victorian secondary school students in the development and implementation of the school bushfire plans.

METHODOLOGY

The project employed a participatory action research methodology [26] which allowed for an iterative process of systematic investigation, critical dialogue and collaborative problem solving with the school leadership, teachers, students and emergency management personnel. This methodology is also consistent with international and National policies for disaster risk management, including the *Sendai Framework for Disaster Risk Reduction*,[20] which states that young people should be consulted in the design and implementation of policies, plans and standards.

METHODS

The research was conducted at Upwey High School in the Yarra Ranges, Victoria (Australia). This school was chosen because of its location within Melbourne's bushfire-prone peri-urban fringe. The research team also had pre-existing relationships with school leadership, as well as emergency management officials at Yarra Ranges Municipal Council.

The research was conducted in three phases. The first phase involved interviews and focus groups with four key stakeholder groups: school leadership, teachers, students, and local emergency management personnel. The aim of these interviews and focus groups was to provide the research team with a clear understanding of the the school's bushfire plan and stakeholders' views on student involvement in the development and implementation of the plan.

The data gathered in the interviews and focus groups was used to inform the objectives and design of the second phase of the research process, which involved a participatory workshop for students. This workshop was conducted to provide students with the knowledge and skills they needed to critically evaluate the school's bushfire plan from their own perspectives and develop recommendations regarding student involvement in the development and implementation of the plan.

In the third phase, the research team planned and executed a bushfire planning forum at Upwey High School. The goal of this forum was to provide an opportunity for the students to present the recommendations they developed in the participatory workshop to key stakeholders (i.e., school leadership, teachers, and local emergency management personnel) and engage those stakeholders in a critical dialogue about student involvement in school bushfire planning. Each of these phases will be described in more detail, below.

Phase 1: Interviews and Focus Groups

From February to November 2023, six semi-structured interviews were conducted with Upwey school leadership and teachers, as well as local emergency officials. School leadership and local emergency officials were recruited for their interviews via email, and teachers were recruited via the school leadership and the Year 7 Coordinator (who also served as the school's liaison for this project). Interviews were conducted either in-person or online (via MS Teams). Interviews ran from for approximately 30 to 60 minutes.The interviews explored different aspects of bushfire emergency management and planning in schools, with specific questions being tailored to the professional role of the interviewee. The school leadership (i.e., Principal and Assistant Principal) and teachers were asked questions about the school's bushfire risk, the school's bushfire plan, the development and implementation (or socialisation)

of the plan, and their views and perspectives on increased student involvement in the development and implementation of the plan. Interviews with local emergency officials covered topics including school bushfire planning (in general) and their views and perspectives on student involvement in school bushfire planning. All interviewees provided both written and verbal consent for their interview to be audio recorded and the recordings were transcribed by either a professional transcription company or a member of the research team to assist with data analysis.

During July and August 2023, five focus groups were conducted with a total of 22 students from Years 7 to 10; i.e., one focus group comprised of Year 7 students, two focus groups comprised of Year 7 and 8 students, and two focus groups comprised of Year 10 students. Students for the focus groups were carefully selected by members of the school leadership based on levels of student interest in the project and other considerations relating to student safety and wellbeing; i.e. a history of fire-related trauma. Students who wished to participate in a focus group interview were provided with a Participant Information Sheet and Consent (PISC) form that needed to be signed by the student and their parent/guardian. The focus groups were conducted in-person at the school. Each focus group ran for approximately 60 minutes. At the beginning of each focus group, the researcher briefed the students on the principles of informed consent and their rights as participants. Students were also advised that if, at any point, the focus group discussions caused them any distress, they were free to take a break or withdraw. Students were also reminded of the web address for Headspace and the school's student support services. Throughout the focus group interview, the researcher carefully monitored students for any signs of emotional or psychological distress or upset, and there was always a school staff member in close proximity so that students would have immediate access to tailored support if the need arose. During

the focus groups students were asked about their perceptions of the local bushfire risk, their existing knowledge of the school's bushfire plan, current levels of student involvement in the development and implementation of the school bushfire plan, and their views and perspectives on increased student involvement in the future. All students provided both written and verbal consent for their focus group to be audio recorded and written consent was also obtained from the parent or guardian. The recordings were transcribed by a professional transcription company or a member of the research team to assist with data analysis.

Phase 2: Participatory Student Workshop
In October 2023, Upwey students participated in a participatory workshop in which they were given the opportunity to critically evaluate their school's bushfire plan from their own perspectives and dentify the benefits and challenges of involving students in school bushfire planning. A total of 20 students took part in the workshop: 12 students from Year 7, 5 from Year 8, and 3 from Year 10. Students who engaged in the workshop were recruited by Upwey's Year 7 Coordinator. In the recruitment process, students who originally engaged in the focus groups (Phase 1) were provided with a PISC form that needed to be signed by them and a parent or guardian if they wished to participate in the workshop. Before commencing the workshop, one of the students formally acknowledged the Wurundjeri People of the Kulin Nation as the Traditional Owners of the land upon which the workshop was conducted. The research team and the student participants then introduced themselves and the workshop activities were conducted, as outlined below.

Looking after ourselves and each other. This 20 minute activity involved asking the students, in groups of 6, to spend time brainstorming ways that they could manage any worries or anxieties that might emerge during or after the workshop (since thinking and talking about bushfires can cause worry or anxiety). The students were asked to write each idea (anonymously) on a sticky note and invited to share their ideas with the group, if they felt comfortable

to do so. Students were also informed of the designated support people and services that were available to them should they require any assistance. All ideas were then collected and added to a single poster which was displayed throughout the day. These ideas were also collected for further data analysis after the workshop. As with the focus group interviews, students were reminded of the supports available to them should they experience any emotional or psychological distress as a result of any of the workshop activities.

Creating a safe space. This15 minute activity focused on establishing the conditions for an inclusive and respectful workshop environment in which the students would be able to share their view and perspectives. Here, the project team revisited the purpose of the workshop and emphasised the importance of creating a safe space where everyone was supported to share their knowledge, opinions, and ideas. Students were grouped into pairs, and then asked to discuss the following questions:

- What would help you to share your knowledge, opinions and ideas in this space?
- What would make it difficult for you to share your knowledge, opinions and ideas in this space?

Responses to these questions were captured on note paper and were displayed on the wall throughout the day. These ideas were also collected via photographs for further data analysis after the workshop.

Bushfire in Upwey and surrounding area. In this 90 minute activity students were first provided with a short lesson on the bushfire history of Upwey and the surrounding area. The project team then demonstrated how to use websites, like the Emergency Management Victoria bushfire history map and Victoria's Department of Transport and Planning VicPlan map to assist the students in investigating the fires that have occurred in the Dandenong Ranges in the last 50 years. Students were also given a booklet that provided brief overviews of the 1983 Ash Wednesday fires, the 1997 Dandenong Ranges fires, and the 2009 Birdland fire. Students then used the

 VicPlan website to find Upwey High School on the map to assess their susceptibility to future fires. While not necessarily encouraged to do so, many of the students also located their houses on the map during this activity.

Student evaluation of the school closure policy for catastrophic fire danger days. In this 60 minute activity, students considered their plan during a Catastrophic Fire Danger Rating (FDR) Day (when schools would be closed). Students were asked to consider a series of questions, including:

- What would you do on a Catastrophic FDR day?
- What should all students to do on a day like this?
- What are students likely to do on a day like this? What are the reasons that they may not follow proper procedures?
- What should be done to make sure that people can leave/evacuate safely during a day like this?

In groups of 2-4, students were given large sheets of paper to write down their responses to each question and then were asked to share out loud, if interested.

Student evaluation of the Standard Operating Procedures– Shelter-in-Place. In this 60 minute activity students considered the standard operating procedures that will be enacted if bushfire occurs when they are at school. First, students were given an aerial view map of the school grounds. Each student was then given a dot sticker and instructed to "place the sticker on your designated shelter-in-place location is, according to the official school plan". Then, they were given another dot sticker and instructed to "place the sticker in the the location that you think would be safest in the event of a bushfire". The students were then asked to discuss how they felt about their designated bushfire shelter-in-place locations, what students at Upwey might do if a fire occurs, and what recommendations they might have (if any) for the school's shelter-in-place procedures. In the same groups as before, students were given large sheets of paper to write down their responses to each question and then were asked to share out loud, if interested. The

students then took a brief walk-through of Upwey's campus to visit the designated bushfire shelter-in-place locations.

Final reflections. For the final 15 minutes of the workshop, the students were asked to reflect on the following question: Do you think students should be more involved in bushfire planning? Why/who not? Students were then given the option of recording their reflections in text on a piece of poster paper or recording them in audio on the researcher's digital recorder.

Throughout the workshop, the research team took copious notes of the students' responses and, at key times throughout the workshop, certain discussions that had been recorded on sticky notes and poster paper were also collected and/or photographed for additional analysis were recorded to later transcribe. All data collected during the workshop was then analyse to inform the next phase of the project.

Phase 3: School Bushfire Planning Forum
In November 2023, students and key stakeholders (e.g., school leadership, teachers, and local emergency management personnel) attended a bushfire planning forum. In this forum, students presented their ideas and recommendations on bushfire planning in schools to key stakeholders and engaged in critical discussions about their involvement in bushfire planning at Upwey. In attendance were 12 students (7 students from Year 7 and 5 from Year 8) and 12 adult stakeholders (i.e., 3 from the Victorian Country Fire Authority, 3 from Victoria's Department of Education, 4 from Upwey High School, and 2 from Natural Hazards Research Australia). Students who engaged in the forum were recruited by the school's Year 7 Coordinator. In the recruitment process, students who originally engaged in the focus groups (Phase 1) and/or the workshop (Phase 2) were provided with a PISC form that needed to be signed by them and a parent or guardian if they wished to participate in the forum. Adult participants were also informed that if they were interested in participating, they also needed to sign the PISC form and return them to the research team.

The forum ran for 2.5 hours in the school library. Following an Acknowledgment of Country, a formal welcome, introductions, and an overview of the research project, the students presented their views and recommendations on the school's bushfire plans with a particular focus on plans for preemptive school closure on catastrophic fire danger days and the shelter-in-place procedures. In particular, students presented on: what they wanted to see happen in each case, the problems that might arise, and their recommendations on how to mitigate those problems to ensure the safety of students, school staff and their families. After each round of student presentations, the adults were given an opportunity to reflect on the students' perspectives. The students and adults then engaged in critical discussions which enabled the whole group to gain a deeper understanding of priority issues. Key points raised in those discussions were recorded via notes taken by the research team.

In the final 30 mins of the forum, two focus groups were conducted: one with 12 student participants and one with 9 adults (including both Upwey High School staff and external guests). Each group was facilitated by a member of the research team. The following questions were asked in the student focus group:

- What have you learned from today's forum?
- Do you think students should be involved in the development and implementation of the school's bushfire plan? Why or why not?
- Do you think this forum will have any influence on how this school approaches bushfire planning? Why or why not?
- What would you like to see happen next?

The following questions were asked in the adult focus group:

- What have you learned from today's forum?
- Should students be involved in the development and implementation of the school's bushfire plan? Why or why not?
- Do you think this forum will have any influence on your own practice? Why or why not?
- What would you like to see happen next?

All participants agreed to their focus group being audio recorded and those recordings were transcribed by a member of the research team for further analysis.

DATA ANALYSIS

Qualitative data analysis methods were used to organise and analyse all data gathered during the project, including transcripts of interviews and focus groups, field notes, and paper materials and photographs from student activities. As a first step to analyse the transcript / textual data, the team developed an initial set of codes that were used to tag the data. Overall, our analysis was interpretive which meant that we drew on descriptive, analytical and inferential coding. After completing the initial round of coding, the main team members reviewed the data collected within each code and identified overarching themes. The team member also identified archetypal quotes from participants that explained and illustrated these themes. The themes and their associated codes were then used to build the component parts of the emergent framework.

ETHICS APPROVAL

This research was approved by the RMIT STEM College Human Ethics Advisory Network (Project Number 25666).

Permission to conduct the research at Upwey High School was obtained from the Victorian Department of Education and the school principal.

AN EMERGENT FRAMEWORK FOR STUDENT PARTICIPATION IN SCHOOL BUSHFIRE PLANNING

PURPOSE AND SCOPE

This emergent framework is offered as a first step towards involving Victorian secondary school students as genuine participants in the development and implementation of their school bushfire plan. It is referred to as 'emergent' because it represents a model that will continue to evolve over time in response to emerging insights, needs and priorities. By allowing for continuous learning and adaptation, it is hoped that the framework can foster innovative and experimental approaches to addressing complex challenges.

The primary audience for the framework is any individual, group or entity that is involved in the development, implementation and/or evaluation of school bushfire plans and procedures in Victorian secondary schools. This includes members of school communities (e.g. students, school staff, parents/carers), emergency services personnel (e.g. fire agency staff and volunteers, municipal council staff), emergency management practitioners and policy-makers in state and local government, researchers and evaluation professionals. The secondary audience for the framework is anyone with an interest in promoting and supporting child and youth participation in disaster risk management.

While the framework has been developed in the context of the Victorian Government school sector, it may also have applicability to the Catholic and Independent sectors. However, verifying the framework's coherence with emergency management policy and practice in those sectors is beyond the scope of this first iteration. It must also be recognised that this framework has been developed with 12 to 16 year olds in a secondary school context and its applicability to the primary school context will require further research.

EXPECTED OUTCOMES AND GOAL

The overarching goal of this framework is to build capability and capacity for bushfire emergency response in Victorian secondary schools by including students as genuine participants in the development and implementation of school bushfire plans.

The expected outcomes include:
- increased understanding of school bushfire plans amongst students, parents/carers and the wider school community.
- increased sense of ownership of school bushfire plans amongst students, leading to higher levels of compliance in the event of a bushfire emergency at school.
- increased capacity to manage risks associated with preemptive school closures on catastrophic or extreme fire danger days.
- decreased levels of stress and anxiety amongst students in response to a bushfire emergency at school or in the community.
- reduced physical, psychological, social and educational impacts of bushfire hazards and emergencies on students, school staff, parents/carers and the wider school community.
- increased awareness of the value and importance of student participation in bushfire planning amongst decision-makers.
- increased commitment to building a culture of inclusive disaster risk management in Victorian schools.

PRIORITIES FOR ACTION

This emergent framework for student participation in school bushfire planning is comprised of three main priorities for action: 1) Build knowledge and understanding; 2) Promote voice, agency and leadership; and 3) Support innovation and change. Each priority includes four core tasks for effective implementation. The three priorities and their corresponding core tasks are presented on the right.

The identification and explication of the three priorities and their associated core tasks has been informed by the research data and a thorough examination of current policies and guidelines in emergency management and education. They have also been informed by the extant research on student learning and action for disaster risk management.

While the framework separates the priorities and core tasks into discrete components, they are inextricably connected and mutually dependent. For example, promoting voice, agency and leadership will inform approaches to building knowledge and understanding and vice versa. When developing plans for framework implementation, this should be taken into account.

The priorities and core tasks comprising this iteration of the framework are offered as a starting point for ongoing discussion, debate and problem-solving. As work in this area progresses, the priorities will be redefined, core tasks will be revised and new agendas will emerge. Critical, responsive and reflexive approaches to the ongoing development and implementation of the framework will help to ensure it is achieving desired outcomes and goals.

PRIORITY 1: BUILD KNOWLEDGE AND UNDERSTANDING

CORE TASKS

1.1. Develop curriculum-aligned teaching and learning resources
1.2. Increase student involvement in school drills and exercises
1.3. Engage students as educators
1.4. Explore opportunities for co-curricular activities

PRIORITY 2: PROMOTE VOICE, AGENCY AND LEADERSHIP

CORE TASKS

2.1. Position students as genuine partners in school bushfire planning
2.2. Create time and space for students to form their views
2.3. Embed mechanisms for students to share their views with decision-makers
2.4. Establish leadership positions for students

PRIORITY 3: SUPPORT INNOVATION AND CHANGE

CORE TASKS

3.1. Establish and strengthen collaborative partnerships
3.2. Ensure transparency and accountability in decision-making
3.3. Invest in evaluation and research
3.4. Share learning and celebrate success

PRIORITY 1: BUILD KNOWLEDGE AND UNDERSTANDING

It is essential that all students attending secondary schools on the Bushfire-At-Risk Register have access to quality education that builds their knowledge and understanding of their school's bushfire emergency plan. This will require authentic teaching and learning approaches that situate the school's bushfire plan within the broader context of the local bushfire risks and the bushfire safety options that are available to the school community. The role of students as educators should also be recognised and they should be provided with the resources and support they need to fulfill that role.

The student participants in this project were in wide agreement that the successful implementation of a school bushfire plan depends heavily on the degree to which students know and understand the plan. As they repeatedly emphasised, it is not enough for only the teachers to know the plan; everyone needs to know the plan, including the students.

> **Year 7 student:** Unless people know the plan, there isn't really a plan - if that makes any sense. I think it's excellent that we have an amazing plan, but we also need knowledge of the amazing plan.
>
> **Year 10 student:** It's good if the teachers know, but it's better if the students know what they have to do. Because there's not a lot of teachers, but there's a lot of students!

Yet, at the beginning of the project, when asked to consider the level of knowledge and understanding of the school's bushfire plan amongst their fellow students, students speculated that it was probably somewhat limited, particularly in the lower year levels.

> **Year 8 student:** I would say, I don't think many will know. Maybe people who've been at the school longer will - like year 10s, 11s, 12s, maybe more. But in my class, I know most of my friends did not know anything about the fire safety plan.

Most students suggested that whatever knowledge they did have about the plan had been acquired through emergency response drills. When reflecting on the utility of those drills as an educational tool, students commonly noted that the drill only tells them *what* to do; it doesn't tell them *why* they need do it. Through extensive discussions with the students throughout the project, it was also revealed that very few of them had previously participated in any kind of bushfire

education as part of their formal schooling. Consequently, students often struggled to understand the rationale underpinning particular response procedures in the school plan, and they identified this as a serious issue that has the potential to undermine student safety. As they explained, if students don't understand why a particular procedure is being initiated, they might decide not to comply.

> **Year 7 student:** I think some of the kids in my class would probably try and break out and run for the hills…They'll go to their lockers to get their phones and then just run..And the rest of the class. that the teacher still has, would try to follow the teacher.
>
> **Year 10 student:** The teachers might know what the plan is, but students aren't going to just go with it. The students want to know what's happening.

With that mind, the students in the project concurred that building knowledge and understanding of the school bushfire plan amongst the student body should be made a top priority. They also asserted that this would require going beyond conventional school drills to include a broader array of educational activities, and those activities would need to be incorporated into formal teaching and learning plans and whole school assemblies.

> **Year 7 student:** There will have to be a lot more in place to increase recognition throughout the school. I think they will have to do whole school assemblies and classes and set aside periods just to do it.

While the existing standards and regulations for bushfire planning in Victorian schools do require schools to ensure that students have an understanding of their school's emergency management plans[28] (see BOX 1.1), evidence-based guidance and resources that can support

schools to meet this requirement are lacking. While the last several years have seen a surge in the production of bushfire education materials for Australian school students, the vast majority of those materials are focused on planning and preparedness in the household context, and the topic of school bushfire planning has been largely overlooked.

It is essential to recognise that when teaching for understanding, we need to begin with the end goal in mind - what we want students to be able to do, know and understand - and then work backwards to plan learning activities and assessments. This enables the creation of meaningful and engaging learning experiences and encourages a focus on enduring understanding, transferable skills, and the development of students as critical thinkers and problem solvers.

If the end goal here is for students to have a clear understanding of their school bushfire plan, we need to begin with that goal in mind and design accordingly. For this reason, existing bushfire education materials that focus on the household context are not fit-for-purpose. This scarcity of resources and support for educators may lead to a lack of capability to build students' knowledge and understanding of their school's bushfire plan, as several adult participants in this project pointed out.

Bushfire research scientist: Having those resources, and the teachers being able to find those resources, is important because teaching some of those aspects of fire can be difficult.
Teacher: Yes, and having accurate information. I know in the past, some of the information I have given to students is incorrect information and through something like this [project], we know that the information we are giving to students is accurate.

While it may be possible to draw on the existing materials for specific content, building students' knowledge and understanding of their school's bushfire plan will require the development of new programs, tools, and resources that can effectively engage students in the concepts and practices of school bushfire planning in meaningful and purposeful ways.

Year 7 student: We need to find a way to make it actually meaningful and important...It needs to be so they [the students] know it's important.
Year 7 student: I don't know how to tell people about it [the plan] because if we have them all seated down, and for a long lecture, they get bored, and get zoned out.
Year 10 student: You can't just put it on people. They're going to be like "Oh god, why are we doing this? Like come on!". They need to know why you're doing it and stuff.

Importantly, the development of programs, tools and resources that focus on building students' knowledge and understanding of their school bushfire planning will also create opportunities for teachers to engage their students in authentic learning[29] (see BOX 1.2). Authentic learning for school bushfire planning would not only enable students to build their knowledge and understanding of the school's standard operating procedures for bushfire and its pre-emptive plans for school closure, it would also provide a meaningful context in which they could learn about local bushfire risks and the bushfire safety options that are available to their school community, thereby increasing their capability and capacity for informed action and decision-making beyond the school gate. As one of the school emergency management

BOX 1.1: RELEVANT OPERATIONAL POLICIES AND GUIDELINES FOR SCHOOL BUSHFIRE PLANNING

Victorian Registrations and Qualifications Authority - Guidelines on Bushfire Preparedness: Registered Schools and School Boarding Premises[27]
2.2 Schools and school boarding premises listed on the Bushfire At-Risk Register must have an EMP that details the school and school boarding premises response to managing bushfire risk; 2.3 Schools and school boarding premises listed on the Bushfire At-Risk Register must inform all students, staff and parents/guardians about their specific bushfire preparedness arrangements and train relevant staff in their bushfire preparedness roles.

Victorian Department of Education - Emergency Management and Critical Incident Planning Policy[28]
Schools must have a current EMP signed off by the principal that is reviewed at least annually by 1 September and following an emergency or critical incident > Schools must ensure that all staff, students and regular users of the school site, such as out of school hours care, have an understanding of the EMPs response procedures.

practitioners stated at the bushfire planning forum, learning about their school's bushfire plan provides a meaningful context within which students can make sense of bushfire hazards and risks at a broader community level.

School emergency management practitioner: What's really important is that the [school bushfire] plan opens up a lot of opportunity for other education for understanding "Why do we have to go there?", "What will be the effect of the fire?", and all of these things. And when you understand the basics of fire and how it's going to impact on the community, you are able to make better decisions as well.

This approach to educating students about their school bushfire plan would also provide valuable opportunities for collaboration between the education and emergency services sectors, enabling them to achieve shared goals. First, by supporting students to build their knowledge and understanding of their school bushfire plan, schools will be fulfilling their statutory responsibilities for emergency management. Second, by creating opportunities for authentic learning in the classroom and connecting student learning to real-world contexts, teachers will be encouraging students to recognise themselves as citizens, which is explicitly recognised by the Victorian Department of Education as a *Practice Principle for Excellence in Teaching and Learning*[31] (see BOX 1.3). Third, by increasing students' capability and capacity for informed decision-making and action through school education, government departments and emergency management agencies will be directly addressing key priorities and objectives in numerous disaster risk management frameworks, strategies and plans at the international, national and state level (see TABLE 1).

Teacher: Personally, I would love to educate students about bushfire through the school bushfire plan. I think that would be fantastic. I think if you can teach them the context of the emergency management plan, like the bushfire risk and stuff, then they can appreciate and respect the plan more. So, "Here's the risk, here are the examples and here's the problem or the problems that could arise". And then, when you talk to them about the drills, it's not just a drill, it's more than that.

Municipal council emergency management practitioner: I think it's fantastic. This can work well in the bushfire education area. I don't know of any other things like this, apart from the primary school activities. I don't think there is anything like this that the younger adults and teenagers are linked into, so the fact that all of this is happening is fantastic.

BOX 1.2: AUTHENTIC LEARNING FOR SCHOOL BUSHFIRE PLANNING*

Real-world relevance: Students engage in tasks that reflect real-world problems, challenges, or situations in school bushfire planning. This helps students see the direct relevance of what they are learning to their own lives.

Problem-solving: Students are presented with complex challenges that require critical thinking and problem-solving skills. This encourages them to apply their knowledge to improving and enhancing the school bushfire plan.

Collaboration: Authentic learning involves collaborative activities where students work together to solve problems. This reflects the teamwork and collaboration that is necessary for effective school bushfire planning.

Student ownership: Students are afforded a degree of voice and choice in their learning. They may be involved in setting goals, selecting projects, and determining how to approach and solve problems.

Integration of disciplines: Authentic learning encourages the integration of knowledge and skills from different disciplines. It recognises that effective school bushfire planning requires a transdisciplinary approach.

Use of technology: Real-world tools and resources are integrated into the student learning experience. This can include digital platforms, simulations and other technologies that are used to assess and manage bushfire risk.

Assessment of skills: Assessment focuses on evaluating not only content knowledge, but also skills such as critical thinking, problem-solving, collaboration, and communication.

*Adapted from *Authentic learning: Real world experiences that build 21st century skills*[29]

As highlighted by one of the teachers, building students' knowledge and understanding through authentic learning for school bushfire planning would empower them to make informed decisions about their safety, both now and into the future.

Teacher: It might actually help a student in their teenage years and in their adult life to make smart decisions about their safety, and I think empowering them at this age can only be a good thing. It would give them the kind of knowledge that might have previously been reserved only for adults because they're the ones that make the decisions about your wellbeing, your welfare and your safety in these things.

Developing education programs, tools and resources that meet the needs, priorities and expectations of schools, teachers, students, families and the emergency services will require a cross-sectoral, multidisciplinary approach underpinned by principles of co-design. One of the clearest findings to emerge from this project is that school bushfire planning occurs within a complex system characterised by a multitude of individuals, interconnected relationships and networks, established rules and norms, feedback loops hierarchical structures, and power dynamics. The use of co-design methods that acknowledge and engage with that complexity will enable the development of scalable and sustainable initiatives that can be delivered in schools with confidence.

Finally, the contributions that students can make to the advancement of quality education for school bushfire planning should not be underestimated. While they may require guidance and support to understand the scientific and technical aspects of bushfire risk management, they are experts in their own lives and they possess deep knowledge of the social, cultural and economic contexts in which their everyday activities, routines and relationships are embedded. Harnessing that knowledge will be key to developing educational initiatives that can increase capability and capacity for effective bushfire planning and response in Victorian secondary schools. As one of the students commented after the bushfire planning forum, the exclusion of young people from discussions and decision-making about bushfire emergency planning is outdated and needs to be addressed.

Year 7 student: Well, I've learnt that the system seems a little bit outdated because today [in the forum] when we were around all of those experts, everything we said seemed to really impress them and they seem to think we're geniuses. But the truth is we're not geniuses, we're just younger and that just shows that in the system, there are things that need to be changed. They were all blown away by what we are coming up with...Let's get more young people involved!

BOX 1.3: DEPARTMENT OF EDUCATION POLICIES AND GUIDELINES FOR AUTHENTIC LEARNING

Framework for Improving Student Outcomes (FISO 2.0)[30]
Core element 2: Teaching and learning > Teaching and learning refers to responsive practices and curriculum programs through which students develop their knowledge, skills and capabilities > Dimensions: Use of common and subject-specific high impact teaching and learning strategies (i.e. collaborative learning; multiple exposures) as part of a shared and responsive teaching and learning model implemented through positive and supportive student-staff relationships.

Practice Principles for Excellence in Teaching and Learning[31]
Principal 6: Rigorous assessment practices and feedback inform teaching and learning > When multiple forms of assessment and feedback inform teaching and learning practices, student engagement and achievement are enhanced > Actions: 6.1 Teachers design authentic, fit for purpose assessments to reflect the learning program and objectives.

Principle 8: Global citizenship is fostered through real-world contexts for learning > When students are empowered to recognise themselves as global citizens, they are more likely to identify and understand a range of perspectives, develop solutions and take actions that have a genuine impact on self and others > Actions: 8.1: Teachers support students to explore their role as global citizens; 8.2: Teachers model and facilitate using digital tools and resources to access, use and share learning; 8.3: Teachers and students co-design learning that connects to real-world contexts.

PRIORITY 1: BUILD KNOWLEDGE AND UNDERSTANDING
CORE TASKS
1.1. **Develop curriculum-aligned teaching and learning resources**
1.2. **Increase student involvement in school drills and exercises**
1.3. **Engage students as educators**
1.4. **Explore opportunities for co-curricular activities**

TABLE 1. Build knowledge and understanding: Disaster risk management policies, frameworks, strategies, and plans

Sendai Framework for Disaster Risk Reduction 2015-3030 United Nations Office for Disaster Risk Reduction [20]	Priority 1: Understanding Risk > 24. National and local levels: To achieve this, it is important > (l) To promote the incorporation of disaster risk knowledge, including disaster prevention, mitigation, preparedness, response, recovery and rehabilitation, in formal and non-formal education, as well as in civic education at all levels, as well as in professional education and training.
National Disaster Risk Reduction Framework 2022-2026 Department of Home Affairs [32]	Priority 1: Understand Disaster Risk > Strategies for action 2019-2023 • Strategy A: Improve public awareness of, and engagement on, disaster risks and impacts > Greater awareness of the potential long-term and highly uncertain direct and indirect impacts of disasters on all sectors requires formal and informal education and community-driven engagement; • Strategy G: Improve disclosure of disaster risk to all stakeholders > Information about disaster risks and their implications for all sectors of society should be disclosed to better enable all sectors to reduce risks within their control.
Second National Action Plan to Implement the National Disaster Risk Reduction Framework National Emergency Management Agency [33]	Priority 1: Understand risk • Outcome 1: An increased understanding of disaster risk across Australian society ◦ National Action 1: Create consistent, accessible information tools, guidance and programs to help everyone better understand their disaster risk and responsibilities, prepare risk mitigation plans and take appropriate action to manage their risks > Implementation ideas: including disaster risk reduction within school curricula, supporting school-based risk mitigation plans.
Australian Fire and Emergency Services Strategic Directions 2022-2026 Australasian Fire and Emergency Service Authorities Council [34]	Strategic Direction 1: Supporting resilient communities through risk reduction > Fire and emergency services will enhance resilient communities by: 5) Supporting disaster resilience education and collaborative approaches to engagement with children and young people in schools and other settings, with a focus on place-based learning, student agency and local action.
Victorian Emergency Management Sector Strategic Action Plan 2023-2026 Emergency Management Victoria [35]	Priority 1: Work with Victorians to understand and reduce the risk of emergencies > Action 6. Support individuals, schools and communities with the tools and information they need to understand and take action to reduce risks: This action will support education in communities (including schools) by providing the information they need.

Strategic Roadmap for Emergency Management in Victoria 2022–28
Emergency Management Victoria[36]

Priority 1: Work with Victorians to understand and reduce the risk of emergencies > We will empower individuals with the information, tools and education they need to reduce their own emergency risks. We'll do this by further developing programs in schools, community groups and business forums.

Victorian Preparedness Framework
Emergency Management Victoria[15]

Core capability 2. Community Information and Warnings
Description: Deliver public information and warnings that are authoritative, consistently constructed and relevant for all Victorians and visitors in all emergencies. Provide timely and tailored information that supports the community to make informed decisions before, during and after emergencies. Critical tasks 2.1 Provide information to people and communities on the risks, risk mitigation actions, and incident / events that may affect them 2.2 Deliver a whole-of-Victorian-Government preparedness and awareness campaign. 2.3 Deliver timely, coordinated, accessible, tailored and relevant information and warnings to communities.

Victorian Bushfire Safety Policy Framework
Emergency Management Victoria[14]

Priority area 5 - Bushfire safety options: It is important that advice to the public about bushfire safety options communicates that: not all options will afford the same degree of protection from a bushfire; personal circumstances and local conditions in a fire area will affect the extent to which any of these options provide relative safety; some options should only be considered as a backup or last resort, rather than a primary safety option; movement through a fire affected landscape on foot or in a vehicle is dangerous > Objectives: 1. Communities have a range of bushfire safety options available that are appropriate to the local circumstances and are identified in local plans; 2: People are aware of and understand the bushfire safety options for their community.

Country Fire Authority Strategy and Outcomes Framework 2020-2030
Victorian Country Fire Authority[37]

Goal 1: We put the community at the centre of everything we do > We need to understand the community we serve so we can connect with them and tailor our services and advice to meet their unique needs. We will respect our communities and acknowledge their individual needs. We will engage with communities in diverse ways that work for them, and provide a range of diverse opportunities for engagement, based on their unique needs and preferences > Outcome 1.2: The community is educated, engaged and empowered to manage its fire risk.

Education and Training Climate Change Adaptation Action Plan 2022–2026
State of Victoria Department of Education and Training[22]

Victorian Government Education and Training system responsibilities > System component: Teaching and learning, curriculum > Responsibilities: Preparing students and workforces with knowledge and skills to understand and adapt to the impacts of climate change and to prepare for, respond to and recover from climate-related events.

Proposed climate change adaptation actions of the Education and Training system > Climate change adaptation actions: 5 year plan > Focus area: Develop measures to support adaptive capacity of the education and training sector > Proposed actions: Convene a diverse group of students to advise on the most engaging learning and teaching resources relating to climate change, climate change adaptation and disaster risk reduction, and communicate these to schools and TAFEs.

The Department of Education and Training works with children, young people, parents and employee organisations to ensure stakeholders are valued contributors to policy and program design > Short-term objectives (2026) > Incorporate climate change adaptation – supported by appropriate training, guidance and evidence – into decision making processes and practices, and across the emergency management cycle, including by: Preparing learners, through the curriculum and in age-appropriate ways, to understand climate change and its impacts on them and their world; and providing opportunities to use this knowledge via appropriate teaching and learning programs, and a supported teaching workforce.

1.1. Develop curriculum-aligned teaching and learning resources

The development of curriculum-aligned teaching and learning resources will provide schools with a systematic, evidence-based strategy for educating students about their school bushfire plan. A rigorous approach to this task will involve the production of an intensive integrated unit of study for Year 7 students, as well as additional teaching and learning resources that enable students to remain informed and up-to-date on the school plan as they progress through secondary school.

Over the last decade, research on school-based bushfire education has clearly established that simply providing children and young people with information about bushfire response procedures is not only ineffective, it actually has the potential to increase risk.[38] This is because children and young people are not blank slates: they are active meaning-makers and problem-solvers who are constantly striving to make sense of their world.[39] When they have not been afforded the opportunity to learn about the specific mechanisms and processes by which bushfire hazards cause harm to people and communities, they will very likely have misconceptions that will exert a strong influence on their interpretation of new information and advice about bushfire safety.[38,7] As shown in the research, this often results in misunderstandings about emergency plans, which has serious implications for their own safety and the safety of others.[7]

If the goal is for students to really *understand* their school bushfire plan, they will need to develop an understanding of bushfire hazards, the social construction of bushfire risk, and current good practice in bushfire community safety. They will also need to develop understanding of the valuable contribution that local people, including young people, can make to effective bushfire planning and response. Drawing again on the existing research, supporting students to develop this understanding will require the development of high quality, age-appropriate teaching and learning resources that are aligned to the formal curriculum and can be delivered by teachers with the support of local emergency services.[8,38,40]

Based on data and insights gathered throughout this project, one viable way to approach this is to develop a curriculum-aligned integrated unit of study for year 7 students that is framed around the school bushfire plan. Designing this unit of study for year 7 students

would maximise both effectiveness and sustainability for two primary reasons. Firstly, focussing on Year 7 would ensure that all students have the opportunity to develop their knowledge and understanding of the school bushfire plan as part of their induction into the school community, which would help to establish a culture of safety within the school that can be reinforced and strengthened over time. Secondly, the mandated curriculum for Year 7 includes a multitude of content descriptions, spread across key learning areas, that could be effectively taught through an authentic transdisciplinary unit of study on bushfire (see BOX 1.4), thereby directly addressing the Victorian Department of Education's *Practice Principles for Excellence in Teaching and Learning*[31] (see BOX 1.3). As emphasised by a member of the school leadership, carving out space in the mandated curriculum for new teaching and learning programs is a perennial challenge: however, with the adoption of a strategic, transdisciplinary approach, that challenge is not insurmountable.

Member of the school leadership: One of our challenges will be where we put that into the curriculum. And when you have to actually try and do that, it's like okay, to do that we have to take something else out of the curriculum because the curriculum is mandated and in some instances, like in humanities, they get a certain number of periods a week. So it's like what are we going to move? However, there are ways that we can look at doing this. For example, we can look at a novel in English and we've already got a couple of books in the library that look at bushfires and the impact of bushfires and the impact on the environment, so we could do some work around that...So yes, I think that would be our challenge, but it's absolutely not an insurmountable challenge.

Developing a curriculum-aligned integrated unit of study that supports authentic transdisciplinary learning for school bushfire planning is no small task and would require a significant investment

of time, resources and expertise. However, it would have major benefits for student learning, development and wellbeing. Significantly, it would also provide schools with a systematic, evidence-based approach to implementing Department of Education policies that require schools to ensure that students have an understanding of their school's emergency management plans and response procedures[28] (see BOX 1.1).

While an integrated unit of study for Year 7 students would provide schools with a robust strategy for ensuring that all students are supported to build their knowledge and understanding of the school bushfire plan, keeping students informed throughout secondary school will require the development of additional teaching and learning activities that are vertically integrated across the secondary curriculum. As several students pointed out, those additional learning activities would not need to be intensive or time-consuming, they would just need to remind students about the plan and keep them up-to-date on any changes.

> **Year 8 student:** I think there should be lessons once a term or every now and then, even just when it's updates or something, so that everyone knows exactly what to and also, so they don't forget.
>
> **Year 7 student:** I think we also need at least one lesson a term or semester on what would happen if we had a bushfire, like if we had to deal with this circumstance.

Regardless of the goals or scope of teaching and learning resources, it is essential that the development process involves a genuine collaboration between the education and bushfire risk management sectors. Ensuring that resources are pedagogically robust and appropriately aligned to the curriculum requires the experience and expertise of teachers, school leaders and curriculum specialists. Meanwhile, ensuring that

resources reflect the best available knowledge and evidence for bushfire risk management requires the input of policymakers, practitioners, researchers and Traditional Owners with expertise in that field. It is also essential that students themselves are actively involved in the development of teaching and learning resources because they are experts in their own learning and they will be able to provide valuable input on learning outcomes, teaching and learning activities, and methods of assessment.[2] When it comes to bushfire education, it is not uncommon for adults to underestimate the capacities of young people, so having students actively involved in resource development will ensure that whatever is produced meets their needs, priorities and expectations.

Bushfire research scientist: One of the things that impressed me was the depth of information that the students found and how they did the research and how they looked around them. So, they really have this ability to find what they need and understand a complex bit of information and make sense of it. So, that's really impressive.

To support the implementation of new curriculum-aligned teaching and learning resources, it will be important to consider the professional learning needs of teachers. As found in previous research, for many teachers, the prospect of teaching students about bushfire risk management can be daunting and they highly value opportunities to build their competence and confidence through content-focussed professional learning programs.[40] In the wider literature on teacher professional learning, there is also strong evidence that professional learning communities (PLCs) can promote collaborative learning that supports the adoption of new teaching practices and contributes to improved student outcomes.[42] At this stage, the research on PLCs indicates that positive outcomes are underpinned by a focus on teaching practice and student learning, expert facilitation and moderation, and a collegial environment that supports critical discussion and reflection.[42] The potential benefits of PLCs in the context of teaching and learning for school bushfire planning is worthy of consideration.

Also worthy of consideration is how the involvement of the local emergency services can support teachers to implement curriculum-based learning activities in ways that will enhance student learning outcomes. In recent years, one of the most consistent findings to emerge from the research on school-based bushfire education is that involving local emergency services in curriculum-based learning provides students with access to valuable local knowledge and expertise which has a positive influence on student learning and wellbeing.[8,38,40] As one teacher in this project noted, involving of the local emergency services also lends credibility to the safety messages that are being delivered by the teachers.

Teacher: I think getting the local CFA involved so that students can picture the people who will be helping them and that it's someone who knows what they should be doing rather than us as teachers saying "You should do this and you shouldn't do that", and it doesn't have to be CFA but someone from outside.

KEY CONSIDERATIONS
- What is the overarching goal of curriculum-aligned teaching and learning for school bushfire planning?
- What are the desired student learning outcomes?
- Where do the desired student learning outcomes align with content and achievement standards in the formal curriculum?
- What will count as evidence of the desired student learning outcomes?
- What kinds of teaching and learning activities will promote student understanding, knowledge and skill?
- What role will students, teachers, school leaders and bushfire risk management experts play in the development of teaching and learning resources?
- What professional learning programs and support will be needed to build teacher capability and capacity for implementation?
- How can local emergency services support the implementation of teaching and learning activities?

1.2. Increase student involvement in emergency drills and exercises

Emergency drills and exercises are essential for testing school bushfire plans and improving the bushfire response capabilities of school communities. They can help identify strengths and weaknesses, enhance coordination and communication, and build confidence and trust among staff, students and families. Increasing the active involvement of students in emergency drills will not only enhance their understanding of the plan, it will also provide valuable opportunities for them to develop their critical-thinking, problem-solving and decision-making skills.

All of the students involved in this project reported that they had previously participated in bushfire emergency drills at the school. This was not surprising, given that Victorian schools on the Bushfire-at-Risk Register are required to practice bushfire emergency drills at least once per term between October and April (see BOX 1.5).

While the students consistently recognised school drills as an essential mechanism for increasing their knowledge and awareness of the school's bushfire response procedures, they felt that the benefits of drills would be substantially enhanced if students were able to take a more active role in planning, implementing and reviewing the drills. As one student argued, this would provide students with a deeper appreciation for why drills are such an important part of school emergency management planning.

> **Year 10 student:** We need to put something together so that we actually do get involved. And not make it just an "OK, we're just going to do a drill". Do like *how* it works and *why* you do it.

One of the main issues identified by the students in this project was that many of their fellow students don't take the drills seriously. According to numerous students, this is because everyone knows that it's a drill and not a real bushfire emergency.

> **Year 8 student**: In the drills there's no actual real fire and everyone is kind of mucking around. Like they are still doing it [the drill], but everyone is laughing.
>
> **Year 7 student**: Everyone knows that there's not actually a fire and the teachers go over it like "This is a drill. It's not a real fire", so people don't really care.
>
> **Year 7 student**: With the drills in primary school, it was much more of a large event because they didn't tell us whether it was a drill or [a real] fire. I'm not sure if that's a good or a bad thing, but it definitely meant that people took it a lot more seriously.
>
> **Year 8 student**: Nobody takes it seriously because there's no real threat. Everybody knows its fake, so yeah.
>
> **Year 8 student**: I kind of wish they [the teachers] could pretend that it's a real fire, so they can see how we react. And they could see that we kind of suck at this!

BOX 1.5: RELEVANT OPERATIONAL POLICIES AND GUIDELINES FOR BUSHFIRE EMERGENCY DRILLS IN VICTORIAN SCHOOLS

Victorian Registrations and Qualifications Authority - Guidelines on Bushfire Preparedness: Registered Schools and School Boarding Premises[27]
2.3 Schools and school boarding premises listed on the Bushfire At-Risk Register must inform all students, staff and parents/guardians about their specific bushfire preparedness arrangements and train relevant staff in their bushfire preparedness roles. There must be records of: > the practice of evacuation drills at least once per term during the October–April bushfire season. School and/or school boarding premises evacuation drills must involve all students and all staff moving to either a nominated on-site 'shelter-in-place' or an off-site evacuation point as per the school or school boarding premises EMP.

Victorian Department of Education - Emergency Management and Critical Incident Planning[28]
Schools must test emergency arrangements for core emergency response procedures (as listed in your EMP) for a variety of emergency scenarios such as fire in the neighbourhood, intruder, or loss of an essential service, at least quarterly per annum.

Emergency Drills > Practicing emergency response procedures through drills: ensures widespread familiarity with emergency response procedures and the capacity to efficiently and effectively implement them in a live emergency; and promotes more effective emergency response procedures, by ensuring that evacuation locations and pathways are practical and workable in different emergency scenarios and that safety will be maintained throughout the response procedure. Emergency drills should be followed by a debriefing of all staff and the school's incident management team (IMT).

Many of the students argued that if drills are going to serve as an effective learning strategy, they will need to feel more realistic. How an increased sense of realism can be achieved is a matter for further discussion; however, the students were resolute that something needs to be done if drills are to be taken seriously.

> **Year 7 student:** I think we need to make these drills a bit more realistic...Because what's the point of doing it if we're not doing it how it would be? Because if they are doing it like it's pretend, when a real fire's coming, we only know how to act like it's pretend. We don't know what's going on if that fire is actually real.

Some students also wondered if the current frequency of drills is adequate or needs to be increased. As noted earlier, schools on the Bushfire-at-Risk Register are required to conduct drills twice a year. However, there was a concern that at this frequency, it is possible that some students might miss out on the benefits of participating in a drill if they are absent on those days.

> **Year 10 student:** I feel like they should do the drill more often.
> **Year 10 student:** Yeah because what if people aren't there for the day?

Students also pointed out that students in the senior year levels often leave campus during their free periods, and this would mean that they could miss out on the benefits of participating in a drill.

> **Year 10 student:** There's some people that might not even be here, because if it's early in the morning some people might not even be at school yet, because they have first period off. And I think Year 12s, I'm not sure if this is right or not, they can leave if they have second period or third period off. They can leave and then come back.
> **Year 10 student:** Here's an idea. We do one drill at the start of the year with everyone in their home groups, and then one drill towards the end of the year, everyone not in their home groups. But really the home groups thing is just a problem for the senior years, because that's when we start splitting off.
> **Year 10 student:** And people with free periods in the later years that might have gone home as well.

When reflecting on how students could be more actively involved in the implementation of schools drills, school staff suggested that it could be beneficial to assign students to the role of 'drills observers'

who can monitor the drill in real-time and provide their feedback to the school leadership. As one member of the school leadership commented, the school already has members of staff serving as observers during the drills, and it would be entirely possible to engage some of the students in those roles as well.

> **Member of the school leadership team:** I think you could absolutely have a student observer at the drill. Like obviously we have observers that walk around and so we could absolutely have a student observer at the drills and then they could feed that back.

Another approach to involving students in drills that would have significant benefits for student learning would be to engage them in after-action reviews. As one teacher explained, this would involve providing students with some information about the drill in advance and then bringing them back together after the drill for a critical discussion about strengths, weaknesses and areas for improvement.

> **Teacher:** I think having a drill and getting them some information about what we should do at the drill and then afterwards looking at worked and what didn't work.

Students agreed that engaging them in after-action reviews would have positive benefits, not only for their own learning and development, but also for the continuous improvement of the plan.

> **Year 10 student:** Well, [in this project] the way that we thought about the shelter-in-place drill that we did earlier [this year], we realised so many issues that we probably didn't think of in the actual moment. And the fact that we're the ones that are experiencing this, and that maybe the teachers haven't picked up on this.
> **Year 10 student:** Even after the shelter-in-place drill, they could just get us to do a little survey or something and say, "How did this work?", "What were the issues?"

KEY CONSIDERATIONS
- How can students be encouraged to take drills more seriously?
- What are the advantages and disadvantages of increasing the frequency of drills?
- What are the benefits of having students act as drill observers?
- How can students be effectively engaged in after-action reviews?

1.3. Engage students as educators

Students have deep and embedded knowledge of their peers, their households and their wider community. When combined with a technical understanding of bushfire hazards, risks and safety options, this makes them powerful risk communicators and educators. Providing students with resources and support to exercise their unique capabilities for educating others can help to increase understanding of a school's bushfire plan across the school community.

For the last 15 years, international researchers working in the area of youth-led disaster risk reduction have been documenting the crucial role that young people can play in educating others about disaster prevention, mitigation, preparedness and response.[17,24,43,44] In Australia, research on school-based bushfire education has also demonstrated that when students take ownership of their learning, they are highly motivated to educate their peers, teachers, parents/carers, the emergency services and other key actors. Moreover, that research has also demonstrated that this sharing of knowledge can lead to tangible improvements in planning and preparedness in their households, schools and communities.[2,8]

As this project progressed, the students began to recognise that they have unique capabilities for educating others about their school bushfire plan. As one student explained, young people have important insights into how other young people think and behave, which puts them in a privileged position for delivering information in ways that will resonate with that demographic.

Year 7 student: Like being kids, we know how other kids think and how they will react, whereas adults are like "If we tell them this, they should definitely just listen to us and they'll be fine" .

Throughout the project, students were constantly coming up with creative ideas for how they could increase knowledge and understanding of their school bushfire plan amongst the student body. For example, one group of students proposed that simple, easy to digest information about the school bushfire plan could be displayed on the digital screens that are mounted outside classrooms and in the main office area.

Year 7 student: I think I have an idea on how we can make kids aware. Okay, so we always have these slides on these TVs all around school. I know when I'm waiting for something, I always look at them. During summer, we can just have a brief thing, like "This is the emergency points". Just maybe three dot points on the things that would happen if there's a fire...If you put too much on there, you're like, "Oh, there's so much, I'm not going to read it".
Year 7 student: I definitely know my class would definitely be aware, because where we have science, there's a TV right outside where we wait and we always stare at the TV.
Year 7 student: We've got one right out in the front office too.
Year 7 student: Yeah, I know that whenever I'm waiting for a parent to pick me up, if I'm sick of something, I'll be sitting there and I'll just be looking at the TV. People like shiny things!

Other creative ideas for educating their fellow students included painting murals and writing catchy jingles to convey key messages about the plan.

Year 7 student: Okay, so I was thinking we could find a blank wall and paint it. Do like a bushfire ready mural thing!

Year 7 student: The explanation of the plan needs to be short and snappy. And I did a TSP [Talented Students Program], 'Cause for Change', and you learn a lot about campaigning. And I'm not even kidding - just having a short and snappy, rhymey little song that some students just put together – you get that jingle stuck in your head, and every time someone says the word 'fire' that jingle is in your head!

It is important to note that all of these ideas emerged without any prompting or encouragement from the researchers. Rather, having recognised the need to increase knowledge and awareness amongst their peers, the students immediately began brainstorming ideas for achieving that objective. This is a powerful demonstration of youth motivation capability for community education and engagement that has been documented in previous research.[5,8,45]

Many of the students in this project also recognised the role they can play in educating their families. At the beginning of the project, very few students had discussed the schools bushfire plan with their parents/carers. However, by the end of the project, when they had been able to develop a clearer understanding of the school bushfire plan and its implications for them and their family, they were highly motivated to share that understanding and work with their parents/carers to develop household plans.

Year 8 student: I definitely did find the [bushfire planning] forum really interesting. I learnt a lot and I'm definitely going to talk about this with my dad because right now we don't have plans for it.

Year 8 student: I've never really talked about it with my parents, but I probably will after [the bushfire planning forum] today because yeah, I don't know what we'd do!

Year 7 student: Before this, I never thought about bushfires and the last time I was genuinely concerned about this was the 2019 fires when I was down at the beach and we tried stay there. And it was so smokey, you couldn't see, and then we had leave. But I don't really think about it at all. It's not something that I worry about. But now that I've learnt about the actual risks, I'm thinking about it more and I will go and talk to my family and stuff.

Importantly, the adults involved in the project also came to recognise students' unique capabilities as educators. Reflecting on the students' learning and development over the course of the project, one teacher suggested that they not only have a role to play in educating their fellow students, they can also help to educate school staff and visitors to the school.

Teacher: I think even after this experience, it would be interesting to look at having a couple of students who are the designated students who have got really clear ideas of what they are doing so they can help other students, and even teachers. Because sometimes there are casual relief teachers and they might not know what they are supposed to do. So, if we have one or two students in each class who have a clear understanding, they can direct and make sure the teacher knows and make sure the other kids know, and yeah, just make it smoother that way.

Interestingly, during the project, the students identified several issues and concerns that they were keen to address through their roles as educators. One of the priority issues they identified was related to the school's plans for preemptive closure on catastrophic fire danger days. The students were very concerned that many students in their school community would not have an adequate understanding of the school's plans for preemptive closure. They were also concerned that there would be students and families in their school community who do not recognise the importance of leaving high bushfire risk areas on catastrophic fire danger days. When discussing how to address these issues, the students saw themselves as having a key role to play. In a set of recommendations they presented to decision-makers at the bushfire planning forum, the students suggested that in the event of a preemptive school closure, they could warn people who might not be aware of the dangers associated with a catastrophic fire conditions; call their friends and make sure they are safe; and contact people at risk to check on them and their plans. As noted by one of the school emergency management practitioners at the bushfire planning forum, this desire to educate and inform others reflects a deep sense of community that should be nurtured and built upon going forward.

School emergency management practitioner: They have that sense of community and making sure that people are aware of that public messaging. I think they've got an understanding of where that needs to go...It's so much bigger than just the school plan - it's them going out to their community and going out to their family and going out to their friends with their own local knowledge and their understanding, which would only be built upon over the years as they go through the school.

KEY CONSIDERATIONS
- What resources and support do students need to optimise their contributions as educators at school, at home and in wider the community?
- How can students' roles as educators be integrated into other educational activities, such as curriculum-aligned teaching and learning programs and school drills?
- Are there any potential risks associated with engaging students as educators? If so, how can those risks be mitigated?

1.4. Explore opportunities for co-curricular activities

Co-curricular activities can provide opportunities for students to extend their involvement in school bushfire planning beyond the traditional realm of curriculum-based learning and school drills. Co-curricular activities can also enable the active involvement of students who are less inclined to engage in a traditional classroom setting, but have important contributions to make.

Victorian secondary schools provide students with access to a wide range of co-curricular programs and activities that promote their skill development and personal growth. Typical examples of co-curricular activities include camps and excursions, school sport, special interest clubs, theatre productions, and debating. Co-curricular activities complement the traditional academic curriculum but are not part of the regular teaching and learning plan. Unlike extra-curricular activities, which are often pursued outside of regular school hours, co-curricular activities can be integrated into the school day.

As one teacher pointed out, some of the students who took part in the workshop tend to struggle in traditional academic settings, but in the interactive workshop environment those students were highly engaged and made critically important contributions to the discussions and debates. The development of co-curricular activities that utilise more interactive, participatory methods of engagement could provide valuable opportunities for those students to learn about and participate in school bushfire planning.

Teacher: It's really interesting, you know like [name redacted] came to the workshop and he actually had some really good ideas and thoughts and things... And you know they weren't just sitting there writing or reading - it was very interactive - and for kids like him that's really important because he struggles a fair bit in class, but he doesn't struggle to talk!

At the same time, teachers recognised the challenges involved in getting students to sign up for co-curricular activities, especially when they are juggling so many other activities and commitments.

Teacher: Some of the students involved in this [project] are also involved in Volleyball, they're involved in the production, they're involved in a lot programs. So trying to think about kids who would be great value to have there, but trying to get to them to realise that it's something important and not just seeing it as something that's no use, or something else they to add on to what they are already doing.

When asked to consider how students could be supported to become more involved in the development of school bushfire plans, several students suggested that the work they had been doing as part this project would make for a good 'Talented Students Program' [TSP].

Year 7 student: Well, there is STP on Wednesdays which is like a subject, and there's a bunch of different students that go to a bunch of different subjects. There's Volleyball and Cause for Change and Wonders of the World, and we could make one for like a bushfire thing.

At this particular school, the TSP supports students to develop their talents in a range of intelligence areas, such as 'Naturalist Talents' (Nature Smart), 'Interpersonal Talents' (People Smart), 'Spatial Talents' (Picture Smart) and 'Linguistic Talents' (Word Smart). The program runs one afternoon a week and all students from year 7 to year 9 participate. The teachers and school leadership agreed that developing a TSP around bushfire risk management and the school bushfire plan is a potentially viable option.

Member of the school leadership team: We've also got an option in our TSP program, so we can see what that's going to look like moving forward.

KEY CONSIDERATIONS

- What benefits and opportunities can co-curricular activities provide for students who want to get more involved in the development and implementation of the school bushfire plan?
- What do students want to gain from co-curricular activities?
- What information do students need to be able to make an informed decision about participating in co-curricular activities?
- How can external agencies and organisations contribute to the design and delivery of co-curricular activities that are engaging and empowering for students?

PRIORITY 2: PROMOTE VOICE, AGENCY AND LEADERSHIP

Student voice, agency, and leadership in school bushfire planning positions students as genuine partners in school safety and affords them opportunities to influence decision-making and action. When students are engaged as genuine partners, they are more likely to take ownership of the plan and actively support its implementation. Promoting voice, agency and leadership in school bushfire planning will not only enhance the quality of plans, it will also foster a sense of empowerment amongst students and build a culture of inclusive risk management across the school community.

Student voice, agency and leadership enables students to actively participate in decision-making processes within educational institutions.[46,47,48] It emphasises creating an environment where students have a meaningful role in shaping policies, curriculum, and school activities, with a view to fostering a sense of ownership and engagement in their learning experience[49] (see BOX 2.1). The students in this project clearly identified the importance of incorporating student voice, agency and leadership into the development and implementation of their school bushfire plan.

Year 7 student: I think kids should be involved in stuff like this because they have really good ideas and adults never really think about them because they're just kids.

Year 8 student: Adults need more input from the kids because we have a lot of ideas that can help.

As they progressed through the research activities - from the focus groups to the participatory workshop to the bushfire planning forum - the students became increasingly aware of the knowledge and expertise they bring to the task of school bushfire planning. They also began to understand how their knowledge can be utilised to develop plans that meet student needs. As the students explained, they have privileged insight into the attitudes and behaviours of their peers, which is crucial to the development of robust emergency plans.

Year 7 student: I mean, whether or not it would make any change to the plan, I think it would be wise to add some student voice into this...The students know the other students better than anyone else...I think, a Year 12 student, or a Year 7 student, or a Year 8 student, or a Year 9 student knows the other students at their school, especially in their class, and what they should or would do.

Year 8 student: I definitely think [involving the students] would help because knowing what the students might do, how the students would react to the fire plan, like going to their lockers and getting their phones or running out of school immediately and being unaccounted for. So, knowing that, I definitely think it improves the fire plan.

Another student noted that an individual's perspectives and priorities change as they develop; what matters to an adolescent is different from matters to a young child, and what matters to an adult is different again. She suggested that developing plans that meet students' needs requires understanding and considering different perspectives as part of the planning process.

Year 7 student: It's like you have different perspectives and it's good to hear everything - from a Year 12 to a Year 7 to an adult - because everyone sees things differently. To a Year 7, the most important thing in that situation is your phone and your friends. To an adult the most important thing is getting your child out. To a little toddler, the most important thing is grabbing all your toys.

The consensus view amongst the students was that if they are given a voice in the development of the plan, they are more likely to pay attention to information about the plan and, by extension, they will be more aware of the plan.

Year 7 student: I do think students should be more involved [in making the plan] because then we're aware of it.

Year 7 student: If a teacher made it, I have nothing against the teachers making it, but they're going to put it up and we're going to walk right past it. But let's say all the students sat down, just little groups of them sat down to contribute. Little groups of them were asked or emailed, you get to know what everything is.

It was also suggested that students will engage more seriously with the plan if they are involved as genuine partners. For example, one student explained that if they are not actively involved in the planning process, they are more likely to 'zone out' and 'muck around' when their teachers try to educate them about the plan.

Year 7 student: If you were to make some sort of student-involved plan, I feel students would be more active in it. If the teachers make it, they'll obviously try and make us aware of it, but then everyone just sort of zones out, starts talking, starts mucking around.

There was wide agreement amongst the students that promoting student voice in the planning process would also give them a sense of ownership over the plan, which would in turn, increase their capacity to enact the plan as required.

Year 10 student: If students are involved, they will be better at enacting the plan because they feel like it's *their* plan. They are not just being told what to do – they have ownership of the plan.

The adults involved in the project agreed that students feeling a sense of ownership over the plan would have significant benefits for school safety. As proposed by one of the teachers, if the students' have a sense of ownership over the plan, they will have increased capacity to respond appropriately to a bushfire event.

Teacher: Some ownership over the plan would mean that most students would know what they are supposed to be doing in the event of a bushfire emergency.

Another teacher warned that if students don't have a sense of ownership over the plan, there is a high risk of noncompliance. A local CFA volunteer with extensive experience in community bushfire safety policy and practice strongly agreed with that assessment.

Teacher: I think involving the students in the development of the plan is great because they're the ones that have to abide by the plan. And if it's coming from their perspectives and the lens that they see things through, then it's probably going to be more effective.

CFA volunteer: If students don't own the plan, they are not going to run with it.

BOX 2.1: STUDENT VOICE, AGENCY AND LEADERSHIP

Student voice acknowledges that students have unique perspectives on learning, teaching, and schooling, and they should have the opportunity to actively shape their own education.[48,49] Authentic student voice goes beyond giving students the opportunity to communicate their ideas and opinions; it allows students to influence decision-making and drive change.[47,50] Incorporating student voice into school operations not only increases student engagement but also improves student learning and wellbeing.[48] Furthermore, it has the potential to create positive changes that benefit the entire school community.[49]

Student agency refers to the level of autonomy and power that a student experiences in their learning environment. It acknowledges that students have the ability and the will to set goals, reflect, and act responsibly to exert a positive influence on their own lives and the world around them.[46] Student agency involves taking action rather than being acted upon, shaping rather than being shaped, and making responsible decisions and choices rather than accepting those determined by others.[46] Affording students agency in their school environment leads to an increased sense of ownership over their own learning and wellbeing.[46,48] It is also associated with heightened self-efficacy and greater confidence in one's own ability to solve problems and overcome challenges.[46]

Student leadership refers to the active involvement and influence that students have in shaping the culture, policies, and activities within a school community.[49,50] Student leaders are individuals who take on roles of responsibility, demonstrate initiative, and contribute positively to the school environment. Student leadership can take various forms and it includes both formal positions and informal initiatives.[48,49] Enabling and supporting the development of student leaders helps create a positive school culture that fosters trust, empathy, and a sense of responsibility amongst students while also preparing them for future leadership roles in other contexts.[48,49]

Throughout this project, students were provided with a platform to share their views and perspectives on the school bushfire plan with a wide range of subject matter experts and decision-makers. For most of the students, having a platform to share their views and perspectives on something as serious and important as the school bushfire plan was a new experience.

> **Year 8 student:** I just thought it was really interesting hearing the different points of view...This was a whole new thing.

The students were deeply appreciative of the opportunity to engage in dialogue with experts and decision-makers, particularly in the bushfire planning forum where they were positioned as genuine partners in school bushfire planning who have a valuable contribution to make. As one of the students explained, having the opportunity to share her ideas with experts and decision-makers and influence their thinking gave her a strong sense of empowerment.

> **Year 7 student:** It felt very empowering that they are like professionals and they are listening to us and they are being influenced by what we're saying and we're influencing people who are quite high up in this whole bushfire association. It was just very interesting to have professional people listen to us and take our ideas on.

Reflecting on his own experience of the bushfire planning forum, another student emphasised how much he valued the opportunity to meet with decision-makers to discuss an issue of such major significance and consequence for his local community.

> **Year 7 student:** I think it was really wonderful having all of the experts here and I'm so glad that students can have a say in stuff that affects them. But also, it was kind of amazing having 12 senior members of whatever profession they are in, just sitting around listening to us - 13 students aged 12 to 14 years old - giving them ideas on their daily work...Just the fact that we get that kind of influence on such a large amount of decision-making around a very certain area which affects everyone in our school and local area.

Amongst the students who participated in this project, a strong sense of agency emerged. As they collaborated with their peers, teachers and decision-makers, they began to recognise the positive impact

they can have on bushfire safety. This sense of agency was very clearly articulated by a year 7 student when she was asked if students should be involved in school bushfire planning.

> **Year 7 student:** I definitely think students should be involved in school bushfire planning because even just this one workshop, it's been really eye opening - just learning about all of these things that I don't really think about. We can involve students by doing what we did today - like making lists of the problems and people's mindsets, and going through those and coming up with solutions to each of them, to really make a plan that suits everyone, that everyone has agreed on and contributed to, and that everyone can tell everyone about.

For many of the students, this sense of agency was not limited to bushfire safety inside the school gates: rather, it extended to encompass the wider community.

> **Year 8 student:** It was good to have the opportunity to have input into stuff that could actually affect the community and change stuff.

It is important to emphasise that the adult experts and decision-makers in this project were equally appreciative of the opportunity to engage with the students and listen to their ideas and concerns. As one of the adult participants in the bushfire planning forum explained, understanding what matters to students is key to developing effective plans that will address their priority needs and concerns.

> **Disaster research scientist:** I think also having the students involved, the school can learn from them because they are experts in their own lives. Like their desire to ensure that communication with their family and to understand that their families knew what was happening is important. And a school might not necessarily prioritise that as part of its plan, but they [the students] can say 'Well, this is what matters to us and this is what we need to have in the plan".

There was also wide agreement amongst the adults that promoting student voice in school bushfire planning should be made a key priority going forward. As one of the CFA volunteers argued, with the likelihood of dangerous bushfires increasing across Victoria, student input into school bushfire plans will be a critical component of effective risk management.

Teachers also emphasised the value of student involvement from a leadership perspective. One teacher, who was involved in every stage of the project - from the researchers' initial engagements with the students through to the bushfire planning forum - explained how involving the students in bushfire planning provides them with an authentic context for developing their leadership skills. Over the course of the project she had observed the students developing their leadership skills in a range of domains, including communication and strategic thinking, and she viewed this as one of the most important project outcomes.

Teacher: For them individually, obviously [the benefit is] a leadership role and participating in something which gets them to think about something outside of what they normally do at school. Yeah, that's for sure. And the ability to speak to adults and work out when you're planning anything, what are some of the steps that you need to go through. So making sure there is a plan and making sure the plan is gonna work. And just the whole student voice aspect of being involved. It's their school and they should have some say in it.

The development of students' leadership skills was certainly evident in the reflections of the students. As one student explained, the increased knowledge, awareness and confidence they had gained through having a voice in the planning process would enable them to support other students through a bushfire emergency by providing guidance and reassurance.

Year 7 student: It's also good because then in the event of a bushfire we've been involved in the planning. So, if there was a bushfire and the person next to you didn't know what to do, I could say like "Oh yeah, this is the plan because…" and reassure them, and say that like "The school's got such a good bushfire plan in place. We are going to be safe. The best place to be right now is being at school – it's safer than being at home."

A particularly important aspect of leadership capability demonstrated by the students was their commitment to ensuring inclusion and diversity in the planning process. All of the students in this project expressed a strong desire to actively work towards creating an inclusive environment in which all students are supported with the knowledge and resources they need to feel and be safe.

Year 7 student: If we have asthma, I think that's a big concern. I think the medical things, we need to learn how that would go. And like "Oh, yeah, this person needs to go first, because she cannot breathe because of the smoke", or "This person needs to go first because they're in a wheelchair and they need to get out".

The students' capabilities for inclusive leadership did not go unnoticed by the adults in the project, with many of them highlighting how impressive it was to see the students advocating for a culture of respect, understanding and care in emergency management planning.

Municipal council emergency management practitioner: I noticed that there was a huge list of people they wanted to think about and in the end they just said "Everyone!". That was good. It was good that they were thinking that way. There was very little comment about them personally, it was all about the school community and others that aren't so aware, so that's really good.

The students' leadership capability was also very apparent in the their expressed commitment to addressing the problems they had identified through this project. Upon completion of the approved research activities, the students felt that while important progress had been made, real change would require ongoing advocacy, awareness-raising and organising. At the top of the students' agenda was conducting more workshops to further clarify the rationale that underpins the plan and increase awareness of the plan across the entire student body. For example, following the bushfire planning workshop, one of the students explained that he was still unsure about the level of safety the designated shelter-in-place location would provide. He articulated specific concerns regarding the availability of exits and he was very keen to see those concerns addressed through additional student workshops.

Year 8 student: Is there gonna be a workshop to make a new better school fire plan or whatnot? Because I'm still a bit unsure - like we're down there in that building with like no exits and you can't really get out if something did happen down there, down in the shelter-in-place building. [We need] more workshops to actually make a better fire plan or make students aware of the fire plan.

While the promotion of student voice, agency and leadership in school bushfire planning is a relatively new proposition for Victorian schools, it strongly aligns with numerous Victorian Department of Education policies and standards including the *Framework for Improving Student Outcomes (FISO 2.0)*[30] and the *Practice Principles for Excellence in Teaching and Learning*[31] (see BOX 2.2). Based on the experiences of students, teachers, and school leaders in this project, promoting student voice, agency and leadership in school bushfire planning would provide schools with a powerful and authentic mechanism for implementing those policies and standards, while simultaneously increasing capability and capacity for effective bushfire risk management in the school community.

Importantly, promoting student voice, agency and leadership in school bushfire planning also aligns directly with the international, national and state-level frameworks, strategies and plans for disaster risk management, all of which emphasise the fundamental importance of local knowledge and leadership, genuine dialogue, and community participation in decision-making (see TABLE 2).

PRIORITY 2: PROMOTE VOICE, AGENCY AND LEADERSHIP

CORE TASKS

2.1. **Position students as genuine partners in school bushfire planning**

2.2. **Create time and space for students to form their views**

2.3. **Embed mechanisms for students to share their views with decision-makers**

2.4. **Establish leadership positions for students**

BOX 2.2: DEPARTMENT OF EDUCATION POLICIES AND GUIDELINES FOR STUDENT VOICE, AGENCY AND LEADERSHIP

School Operations: Student voice, agency and leadership[48]
Student voice, agency and leadership have a central role in improving student outcomes and supporting student safety and wellbeing. Schools are encouraged to implement measures which support student participation and collaboration to empower student voice, agency and leadership.

Framework for Improving Student Outcomes (FISO 2.0)[30]
Core element 1 - Leadership: The development of shared processes and actions by staff and students that build a positive school climate for learning and wellbeing through practices and relationships based on high expectations, shared values and a culture of trust > Dimension: The strategic direction and deployment of resources to create shared goals and values, high expectations, and a positive, safe and orderly learning environment.

Core element 4 - Engagement: The relationships and actions that support student learning, participation and sense of belonging to their school community > Dimension: Activation of student voice, agency, leadership and learning to strengthen students' participation and engagement in school.

Practice Principles for Excellence in Teaching and Learning[31]
Principle 3: Student voice, agency and leadership empower students and build school pride > When students are empowered as learners and leaders, actively contributing to both their own education and to whole school initiatives, their self-efficacy is enhanced and they experience significant growth in motivation, wellbeing and achievement > Actions: 3.1: Teachers empower students to have a democratic voice in the running of the communities in which they learn; 3.2: Teachers co-design opportunities for students to exercise authentic agency in their own learning; 3.3: Teachers provide leadership opportunities; 3.4: Teachers build school pride and connectedness.

TABLE 2. Promote voice, agency and leadership: Disaster risk management policies, frameworks, strategies, and plans

Sendai Framework for Disaster Risk Reduction 2015-2030 United Nations Office of Disaster Risk Reduction [20]	Hyogo Framework for Action: lessons learned, gaps identified and future challenges > 7. Disaster risk reduction practices need to be multi-hazard and multisectoral, inclusive and accessible in order to be efficient and effective. While recognizing their leading, regulatory and coordination role, Governments should engage with relevant stakeholders, including...children and youth...in the design and implementation of policies, plans and standards; Section III. Guiding Principles A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. Section V. Role of stakeholders (ii) Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula. Priority 1: Understanding Risk > Ensure the use of traditional, indigenous and local knowledge and practices, as appropriate, to complement scientific knowledge in disaster risk assessment and the development and implementation of policies, strategies, plans and programmes of specific sectors, with a cross-sectoral approach, which should be tailored to localities and to the context.
National Disaster Risk Reduction Framework Department of Home Affairs [32]	Priority 4: Governance, ownership and responsibility > Strategies for action 2019-2023 > Strategy C: Support and enable locally-led and owned place-based disaster risk reduction efforts > Where disaster risks are location-specific, governments and other relevant sectors should support local ownership and delivery of place-based disaster risk reduction efforts.

Second National Action Plan to Implement the National Disaster Risk Reduction Framework
National Emergency Management Agency [33]
	Priority 2: Accountable Decisions
	• Outcome 3: Disaster risk is addressed in all relevant decisions
	  ◦ National Action 6: Create hazard mitigation plans and scale across different levels, from individual and household plans through to community, regional, state and national plans > Implementation Ideas: taking a participatory approach to planning, including representation from everyone the plans will cover, in developing, reviewing, updating and implementing, to ensure priorities are grounded and shared; facilitating plans for those with specific needs, including...the young and the aged.
	• Outcome 4: More decision-makers are informed, empowered and capable of reducing risk
	  ◦ National Action 9: Incorporate a range of community values into decision-making processes that acknowledge the broader benefits achievable through inclusive disaster risk reduction.
	  ◦ National Action 11: Strengthen the capability and capacity of individuals and communities to become leaders and make informed risk reduction decisions relevant to their local contexts > Implementation ideas: equipping the next generation of Australians to act and become future community leaders.

Second National Action Plan to Implement the National Disaster Risk Reduction Framework (contd.) National Emergency Management Agency[33]	Priority 4: Governance, ownership and responsibility • Outcome 8: Create spaces, opportunities and governance arrangements for inclusive and diverse community representation, participation and access to the disaster management system. 　○ National action 19: Create spaces, opportunities and governance arrangements for inclusive and diverse community representation, participation and access to the disaster management system. • Outcome 9: Increased recognition of shared ownership and responsibility for risk management 　○ National Action 22: Understand barriers to risk reduction to ensure all in Australian society are empowered to reduce risk without disadvantage > Implementation Ideas - To ensure all of society is empowered to participate in disaster risk reduction where they can and explore opportunities to remove barriers and disincentives, actions could include – but are not limited to: undertaking meaningful community-led conversations to understand experiences of disasters and set agendas for recovery and risk reduction plans.
Strategic Roadmap for Emergency Management in Victoria 2022–28 Emergency Management Victoria[36]	Priority 1: Work with Victorians to understand and reduce the risk of emergencies > We will support Victorians to reduce their own emergency risks. Communities are best placed to understand and manage their own local risks because nothing beats local knowledge. We'll continue supporting individuals, communities, businesses and local government to implement locally-based, community-led risk reduction efforts and create opportunities for more. Priority 3: Support communities to be prepared and recover well after emergencies - We will embed community and place in how we do business and prioritise those most at-risk > Services will be person-centred, equitable, inclusive, culturally safe and focused on empowering people and communities. We will identify and engage with those most at risk in emergencies to understand their lived experiences and needs, so we can target our support, build on strengths and achieve better outcomes…We will focus on understanding the unique experiences, strengths and challenges facing particular Victorians in our planning, decision making, and service delivery. We will deliver more authentic engagement and increase opportunities for greater inclusivity in our planning and programs. Priority 5: Strengthen governance arrangements to improve accountability, cooperation and participation - Victorians will have opportunities to shape, influence and inform decisions that affect them > The Victorian Government will build governance mechanisms that provide formal and informal opportunities for community, volunteers and industry to have a voice in shaping emergency management decisions that affect them.

Victorian Emergency Management Sector Outcomes Framework
Emergency Management Victoria[51]

Priority 1. Reducing risks and impacts
- Outcome 2. Victorians are empowered to proactively manage their own emergency risks > Indicators: 3. Increase community and business capability to undertake mitigation actions to manage their emergency risk; 4. Increase community led and owned place-based risk reduction efforts.
- Outcome 3. Victorians are actively involved in decisions that affect them > Indicators: 2. Increase community and business leadership capability in emergency management; 3. Increase the accessibility of emergency management forums for community participation; 4. Increase the use of local and industry knowledge to inform planning and decision making.

Priority 2. People-centred programs and services
- Outcome 6: Victorians can access emergency management programs and services that are person-centred, equitable and inclusive > Indicators: 1. Increase community and business engagement in the timing, design and delivery of services and programs.

Victorian Preparedness Framework
Emergency Management Victoria[15]

Core Capability 1- Planning: Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and / or tactical level approaches to meet defined objectives > Critical tasks: Community and agency stakeholders are engaged to explore, determine and implement mitigating actions to reduce or manage the likelihood and / or consequences of emergency events.

Core capability 6 - Building Community Resilience > Building community safety and resilience includes working together at the local level. Communities can strengthen their lifelines by better connecting and working together with appropriate support from organisations > Critical tasks: Using local knowledge to better understand and identify local needs.

Victorian Bushfire Safety Policy Framework
Emergency Management Victoria[14]

Priority area 2 – Community capacity building: Community involvement and leadership of localised bushfire safety activities can deliver great benefit.
- Objective 1: Government and agencies work with communities to identify local networks and provide support to enable groups to initiate and lead local approaches to bushfire safety.
- Objective 2: Government and agencies participate in and support a range of community driven initiatives to undertake their own bushfire preparation, planning and response

Victorian Bushfire Safety Policy Framework (contd.) Emergency Management Victoria[14]	Priority area 3 - Local community planning: Local collaborative planning processes are an important part of preparation as the community and supporting organisations can consider the context from a range of different perspectives, while identifying strategies to appropriately address particular situations and the needs of the community. • Objective 1: Communities and other stakeholders are effectively engaged in the development and implementation of local community planning processes. • Objective 2: Inclusive decision-making processes support the development of locally generated information based on a combination of local knowledge and expertise.
Victoria's Bushfire Management Strategy (Draft for Public Consultation) State of Victoria Department of Environment, Energy and Climate Change[16]	Outcome 1 - People and Community Safety: Communities are safer from and less impacted by bushfires and bushfire management > Communities that understand bushfire risks and apply practical solutions to reduce exposure to bushfire hazards and minimise their impacts are more resilient. The impacts of natural [sic] disasters, including bushfire, are magnified for some communities and groups (including culturally and linguistically diverse Victorians, newly arrived migrants, women, survivors of family violence, people with disability, younger Victorians and older Victorians). The sector and community service organisations will work together so that communities can actively include at-risk groups and those communities that are situated in high bushfire risk areas and at urban–rural interfaces in bushfire management activities > To achieve this outcome the sector must: • 1.1 Empower people and communities to manage bushfire risk, response, and recovery more effectively in their local area and on their own land > Facilitated conversations about living with bushfire will be integrated into all bushfire risk reduction activities, including in schools. Outcome 5 - Informed decision-making, evidence-based approaches and tools: Adapting to and reducing the influence of climate change on bushfire risk requires a strong and continuously improving foundation of knowledge, evidence and tools > To achieve this outcome, the sector must: • 5.4. Use community and, with consent, Traditional Owner knowledge and values to inform decision making, and clearly communicate the evidence base for these decisions > The sector will establish practices that ensure the community and Traditional Owners can participate in the decision-making process. Decisions will be collaborative and will reflect community values and, with consent, Traditional Owner knowledge…The sector will work with the community to: understand community values and incorporate them meaningfully into decision-making (this is informing decisions on community safety, the environment, and other values); develop community engagement strategies and planning processes that ensure community knowledge and values inform planning decisions.

Education and Training Climate Change Adaptation Action Plan 2022–2026
State of Victoria Department of Education and Training [22]

Proposed climate change adaptation actions of the Education and Training system > Climate change adaptation actions: 5-year plan > Focus area: Improve understanding of climate change risks and vulnerabilities, and build capability to embed climate change adaptation, where relevant, into decision making, policy and processes > Action 4: Support the establishment and evaluation of mechanisms for the participation of children and young people in the design and implementation of policies, plans and standards for climate change adaptation and disaster risk reduction.

The Department of Education and Training works with children, young people, parents and employee organisations to ensure stakeholders are valued contributors to policy and program design > Short-term objectives (2026) > Incorporate climate change adaptation – supported by appropriate training, guidance and evidence – into decision making processes and practices, and across the emergency management cycle, including by: developing age-appropriate approaches to engage and empower children and young people to understand their role and take action on climate change.

2.1. Position students as genuine partners in school bushfire planning

Once viewed as passive victims of hazards and disasters who are entirely dependent on adults for their safety and wellbeing, children and youth are now viewed as agents of change who have valuable contributions to make to disaster risk management. This shift in the narrative has been written to numerous policy frameworks and strategies, which can be harnessed to position students as genuine partners into school bushfire planning.

An essential first step towards promoting student voice, agency and leadership for school bushfire planning requires positioning students as genuine partners in the planning process. It is important to recognise that until very recently, both in Australia and globally, children and young people were positioned as passive victims devoid of agency in the face of hazards and disasters.[19] It is only in the last decade that researchers and child rights advocates have been able to subvert that narrative and replace it with one that recognises children and youth as active citizens who can make legitimate and valued contributions to disaster risk management in their households, schools and communities.[2,4,5,]

This shift in the narrative on children and disasters is clearly reflected in the Victorian Department of Education policy guidance on bushfire preparedness, which advises schools that *"By actively involving your students in the school's emergency planning, they will also be better equipped to follow the necessary procedures in the event of a bushfire emergency"*.[6] It is also reflected in many of the international, National and State level frameworks, strategies and plans for disaster risk management.

At the international level, the *United Nations Sendai Framework for Disaster Risk Reduction*,[20] to which Australia is a signatory, explicitly recognises the need to engage children and young people as genuine partners in disaster risk reduction policy and practice. In the Preamble it states, *"While recognising their leading, regulatory and coordination role, Governments should engage with relevant stakeholders, including...children and youth...in the design and implementation of policies, plans and standards"* (p.10). In 'Section III Guiding Principles', it states that *"A gender, age, disability and*

cultural perspective should be integrated in all policies and practices,and women and youth leadership should be promoted" (p.13). In 'Section V Role of Stakeholders', it states that *"Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula"* (p.23).

At the national level, the *Second National Action Plan to Implement the National Disaster Risk Reduction Framework*[22] makes specific reference to the importance of youth leadership. In this plan, under 'Priority 2: Accountable Decisions', Outcome 4 is focussed on ensuring that *"More decision-makers are informed, empowered and capable of reducing risk"* (p.29). Connected to that outcome is National Action 11, which seeks to *"Strengthen the capability and capacity of individuals and communities to become leaders and make informed risk reduction decisions relevant to their local contexts"* (p.31). Significantly, one of the proposed ideas for implementing that National Action is *"Equipping the next generation of Australians to act and become future community leaders" (*p.31).

At the State level, *Victoria's Bushfire Management Strategy (Draft for Public Consultation)*[16] includes 'Outcome 1: People and Community Safety', which recognises that *"The impacts of natural [sic] disasters, including bushfire, are magnified for some communities and groups (including culturally and linguistically diverse Victorians, newly arrived migrants, women, survivors of family violence, people with disability, younger Victorians and older Victorians)"* (p.22). As stated in the strategy, *"The sector and community service organisations will work together so that communities can actively include at-risk groups and those communities that are situated in high bushfire risk areas and at*

urban–rural interfaces in bushfire management activities" (p.22). The strategy also proposes that to achieve this outcome the sector must, "*Empower people and communities to manage bushfire risk, response, and recovery more effectively in their local area and on their own land",* which will involve *"Facilitated conversations about living with bushfire will be integrated into all bushfire risk reduction activities, including in schools."* (p.6).

The Victorian Government's *Education and Training Climate Change Adaptation Action Plan 2022–2026* also recognises children and young people as genuine partners in disaster risk management.[22] For example, among the proposed climate change adaptation actions to be implemented over the next 5 years is Action 4, which will involve supporting "*the establishment and evaluation of mechanisms for the participation of children and young people in the design and implementation of policies, plans and standards for climate change adaptation and disaster risk reduction"* (p.31).

Positioning students as genuine partners in school bushfire planning will require that all parties with a role and/or responsibility in school emergency management are made fully aware of these guiding frameworks and strategies and their implications for student voice, agency and leadership. For students, this might involve the production of youth-centred educational resources that are made available in accessible formats for students of all ages and abilities. For school staff, emergency management practitioners and policymakers it might involve the provision of targeted professional development and advisory support. For parents/carers, it might involve the development of standardised resources, such as newsletter articles and letter templates, and other communication tools that schools can adapt and use as appropriate. Regardless of the audience and the mode of delivery, the overarching message should be that students have valuable contributions to make to the development and implementation of school bushfire plans and the whole school community will be safer if they are involved.

For the students and teachers involved in this project, the notion that students should be engaged as genuine partners in school bushfire planning was widely accepted.

Year 7 student: Students should be involved in making the school bushfire plan [because] it's always good to have a second opinion on everything...There are a lot of people who have really good ideas and they deserve to be listened to.

Teacher: Students should be more involved in the plan because it's *their* school and they should have some say in it.

Year 10 student: It would be good if students were more involved because it's our safety.

However, it must be acknowledged that in some socio-historical contexts, positioning students as genuine partners in school bushfire planning may challenge existing power dynamics and cultural norms. In these circumstances, the emphasis should be on fostering trusted relationships through open and respectful dialogue that welcomes diverse viewpoints and perspectives. This will facilitate the enhanced understanding and creative problem-solving that is necessary for meaningful change.

KEY CONSIDERATIONS

- What are the most effective strategies for informing students and adults about the position of students as genuine partners in school bushfire planning?
- How can the effectiveness of different strategies be measured or evaluated?
- What contribution can students make to informing adults about their position as genuine partners?
- What resources and support will be required in socio-historical contexts where the position of students as genuine partners is not readily accepted?
- How can students be involved in the design of policy that will further embed their position as genuine partners in school bushfire planning?

2.2. Create time and space for students to form their views

For students to become genuine partners in school bushfire planning, they need to be able to form their views on the matters that affect them and they must be afforded safe and inclusive spaces in which to do so. This requires that students are given the time and support they need to understand the key elements of the school bushfire plan and their role in it. It also requires the provision of appropriate and accessible resources to support student wellbeing.

In this project, creating time and space for students to form their views was a major priority.[55,56] It began with the focus groups, where students were encouraged to articulate their perceptions of the local bushfire risk and share their existing knowledge of the school's bushfire plan. The focus groups also provided students with an opportunity to start thinking about the possible benefits of student participation in the development and implementation of school bushfire plans. For most of the students, this was the first time they had ever engaged in an in-depth discussion about bushfire risk or bushfire planning, with many of them reporting that the questions posed by the researcher had prompted them to think about issues they had never considered previously.

Importantly, the insights gained through the focus groups enabled the research team to design a participatory workshop that would provide a safe and inclusive environment in which the students would be able to form their views. As one of the students explained, prior to this project, she hadn't given much thought to the school bushfire plan, but through her engagement in the workshop activities, she was able to form a very clear view on various aspects, including the need to build knowledge and understanding of the plan amongst the student body.

> **Year 8 student:** I thought it was really good. I learnt a lot about the different risks, like what they actually are and stuff. And I also learnt more about our plan, like what we would do if there is actually a bushfire. And I think it's really important that everyone else knows about it too because like I've never really heard anything about it, which I mean, if there was a bushfire like today or tomorrow, like no one would really know what to do and that would really raise the stress levels and how much panic there is because no one would really know what to do or where to go, but if everyone knew about the plan there wouldn't be as much panic and stuff.

The importance of creating time and space for students to form their views was clearly articulated by one of the teachers who had observed the students grow in confidence as the project progressed. She noted that in the focus groups at the beginning of the project, the students were simply answering the researcher's questions, but by the end of the workshop, they were providing additional insights and ideas beyond the questions posed to them, suggesting an increase in their critical consciousness.

> **Teacher:** I think that the students have gained so much confidence. Especially since the focus group when you were asking questions and they were answering those questions, but as we moved along, you were asking questions, but the students were going beyond what you were asking and being more interactive and sort of coming up with things themselves as well.

A key factor contributing to the students' high level of engagement in the workshop was the provision of appropriate and accessible information that enabled them to understand the relevance of this school bushfire planning project to their own lives. An emergency management practitioner, who provided additional logistical support to the research team at the workshop, was able to observe this understanding develop in real-time.

> **Municipal council emergency management practitioner:** That was amazing being in the room. I was fascinated to see the way they were given some leads to follow so that they could discover things themselves and looking up some of those online resources to see the history in the areas where they live and the room really started to get more quiet as they focussed and they were like "Oh that's near my Nan's house!" or "That's only a street away from where I live!". That was fascinating just to see that they went from thinking "These are things that the adults look after and we just do what we are told", to kind of going "Hang on, I'm engaged now". I thought that was great.

Given that many of the students came to workshop with only a limited understanding of their school bushfire plan, it was important to provide them with key information about the standard operating procedures, as well as the plans for preemptive closure on catastrophic fire danger days. While this information was no substitute for the kind of in-depth transdisciplinary unit of study being proposed under *Priority 1: Build Knowledge and Understanding*, it did provide the students with the requisite knowledge and awareness they needed to be able to evaluate the school bushfire plan from their own perspectives and develop recommendations that they could share with decision-makers. Perhaps most importantly, it also provided them with a solid basis for developing recommendations relating to student participation in school bushfire planning.

In addition to providing students with the information they need to form their views, it is also necessary to create an environment where they feel safe to ask questions, discuss their ideas, and share their worries and concerns. In this project, ensuring a safe environment for the students was crucial to achieving the project's objectives and several introductory activities in the workshop were specifically designed to meet this end.

Firstly, at the beginning of the workshop, the researchers engaged the students in a discussion about the general principles that underpin inclusive disaster risk management. Throughout this discussion, the researchers also highlighted the importance of creating spaces for learning and decision-making where everyone's views and perspectives are valued are respected. The students were then invited to develop of a consensus set of guidelines that would determine the acceptable standards of behaviour for their workshop space (for a full description of this activity, see the *Research Aims and Strategy* section of this report). The resulting set of guidelines was then displayed on the wall for the duration of the workshop and, on multiple occasions, it served as a gentle reminder of the standards that all of the students had agreed to at the beginning of the day. Empowering the students to set the standards of behaviour

that they expected from both the adults and each other, enabled the creation of a safe space where they could say whatever was on their minds without fear of judgement or ridicule.

Year 7 student: I learnt that everyone's ideas need to be take into consideration. Even if they are terrible ideas!

Secondly, creating a safe space in which the students were supported to form their views required the researchers and school staff involved in the project to explicitly acknowledge that thinking and talking about bushfires can sometimes elicit negative emotional reactions and that this is entirely normal. To help promote care for self and others during the workshop, the students were invited to anonymously submit their favourite 'go-to' strategies for managing stress, anxiety and negative emotions. The various submissions were then written up on a poster that was displayed on the wall and the students were encouraged to implement their strategies as needed throughout the day (for a full description of this activity, see the *Research Aims and Strategy* section of this report).

While the creation of a safe space in which students could form their views was a methodological and ethical imperative for the research team, the importance of student safety and wellbeing was also front of mind for the teachers and local emergency services who participated the project. As one of the teachers emphasised, raising students' critical consciousness of bushfire hazards and risks has the potential to make them feel uncomfortable, worried or afraid and the school must ensure that appropriate and accessible resources and support for student wellbeing have been put in place.

Teacher: We would want to give the students the opportunity to debrief whenever they need to and just talk to them about it, [for example] "If you're not feeling comfortable you could do this or you could this and at the end, if you're still worried, either personally or on a school basis or on a home basis, there are people who can help you and talk to you about it".

Meanwhile, one of the local CFA volunteers highlighted the importance of understanding the local context and taking that into

account when creating spaces for students to explore and discuss issues related to natural hazards and disaster risk management. As he suggested, it is always wise to consult with teachers in advance.

> **Local CFA volunteer:** There is also the need to think about other risks and past events – like a lot of kids around here are still bound up in the storm so we always check before we do these things, and we make sure [to find out] what should we talk about and what should we not talk about.

In this project, the students formed their views through a relational process. Most of the workshop activities involved the students working on tasks in pairs or small groups and then feeding back to the main group. There were also many lively whole group discussions and debates. In the context of this school, with these students, this approach was highly effective and enabled the formation of a rich and diverse range of views that could be shared with decision-makers.

> **Year 8 student:** I thought it was really impressive. I think it was really interesting how all the things were pretty much covered. I think it was really nice to see a bunch of people coming together and putting all their ideas onto one piece of paper.

It also needs to be emphasised that when creating spaces for students to form their views, equity and inclusion are of paramount importance. Genuine participation in school bushfire planning will require that all students, regardless of their backgrounds or abilities, have access to safe spaces that will accommodate their needs. The opportunity to form and express a view should not be privilege that is reserved for the most literate, articulate or outgoing students; rather, it should be granted to every student in the school. As decades of disaster research has consistently shown, it is often those most at risk who are marginalised from decision-making processes.[52,53] If efforts to increase student participation in bushfire planning are to have the intended effect of reducing risk and increasing resilience, it will be necessary to develop a full understanding of the barriers that might prevent students from accessing the necessary time and space

to form their views and work systematically to eliminate them. In this context, it is worth reiterating that students in this project demonstrated a strong commitment to principles of equity and inclusion in school bushfire planning, and this bodes well for the creation of safe, inclusive and equitable spaces going forward.

The final issue that requires discussion here is the importance of providing students with sufficient time to form their views. In this project, a full school day was allocated for the purpose of supporting the students to form their views. However, the amount of time students need to form their views will vary greatly depending on a range of factors, including their extant knowledge of local bushfire risks and risk management strategies. Given that most of the students involved in this project had not had access to any kind of bushfire education previously, the allocation of a full school day was deemed both appropriate and necessary. Over time, as the scaled implementation of student-centred, place-based bushfire education gains momentum across Victoria, students will be in a much stronger starting position from which to form their views. Notably, there will also be opportunities to incorporate time and space for students to form their views into curriculum-aligned teaching and learning activities under Priority 1.

KEY CONSIDERATIONS
- What resources and support do schools need to create safe and inclusive spaces in which students can form their views about the school bushfire plan?
- What measures can be put in place to ensure that the time and resources made available for students to form their views are adequate and sustainable?
- What methods and approaches are most useful to students as they seek to form their views?
- How can students contribute to the development of new methods and approaches?

2.3. Embed mechanisms for students to share their views with decision-makers

Once students have had the opportunity to form their views, they should be provided with mechanisms for sharing their views with decision-makers, including teachers, school leaders, school emergency management practitioners and local emergency services. By fostering an environment where students' views are valued and respected, and where decision-makers actively listen and respond to student input, schools can cultivate a culture of genuine student participation in school bushfire planning.

After they were provided with time and resources to form their views on school bushfire planning at the participatory workshop, the students in this project were supported to share their views with adult decision-makers and subject matter experts at a bushfire planning forum. Over a period of several hours, the students and adults engaged in facilitated dialogue about the development and implementation of the school bushfire plan. The students informed the adults about the potential problems and issues they had identified in the workshop and presented their recommendations for how those problems and issues could be addressed. The adults listened carefully to what the students had to say and shared their reflections and ideas in response. This dialectical exchange enabled the students and adults to gain a deeper understanding of each others' views and perspectives, which created a safe and supportive environment for intergenerational learning, problem-solving and shared decision-making.[55, 56]

When reflecting on the bushfire planning forum, all of the students expressed a deep appreciation for the knowledge and expertise that the adults had shared. It was clear from their reflections that the students viewed the forum as a valuable learning experience.

> **Year 8 student:** I think they [the adults] were all really knowledgeable and it was really interesting to see them all come together. And you know, they all know so much about fire danger and to see them all come together to help us become more knowledgeable on this topic, I think it goes a long way because now we'll teach people what we have learned, so it just builds off all of this.
>
> **Year 8 student:** I think it's good as well that people who go to meetings like this for their job and [who] create bushfire plans and create safety plans, it's good that they were also incorporated into this discussion and not just year 7 and 8s because if it was just year 7 and 8s we are not going to be as informed as we are now if there weren't those other experts in the room.

Through their dialogue with the adults at the forum, the students also gained a deeper understanding of the valuable contribution that they, as students, can make to the development and implementation of school bushfire plans. For example, one of the students had assumed that the problems and issues the students identified in the participatory workshop would have already been identified by adults; it had not occurred to him that the students would be making original contributions that can help to improve the plan.

> **Year 7 student:** Before we did this forum with all the experts, I kind of thought that what we were writing down on those pieces of paper [in the workshop] must have already been thought of. I thought it must have already happened. But I never actually thought about the fact that perhaps we might be coming up with new ideas that hadn't been implemented!
>
> **Researcher:** And is that something that you've realised today in the forum?
>
> **Year 7 student:** Yep, definitely!

The forum also helped students to understand that bushfire planning is a social process that requires the involvement of the whole school community. Many of the students had entered into this project thinking that school bushfire planning is the exclusive domain of adults. However, by the end of the forum, they had realised that students have crucial knowledge and expertise to contribute.

> **Year 8 student:** I just thought it was interesting knowing how much people know because I never knew anything about it, but I kind of just thought "Well I'm a kid, it doesn't really matter because the adults know". But being here and us saying things that are common knowledge to us and the other people [the adults] going like "Whoa, that's crazy!", it makes me wonder how much adults actually know about it as well.

In the post-forum discussions with the students, it was clear that they had come away from the forum with a strong sense of their own

agency in relation the development and implementation of school bushfire plans. Not only had they come to recognise the importance of sharing their views and perspectives with decision-makers, they had also realised that they can make a real difference in their school community.

Year 8 student: I've learned that the way we would act is very different to a lot of the adults...I think that our suggestions are really important because we just have a different perspective.

Year 8 student: [It was] good to have the opportunity to have input into stuff that could actually affect the community and change stuff.
Researcher: How does it feel having that influence?
Year 8 student: Pretty cool!
Year 7 student: It's good!

The teachers and members of the school leadership who attended the bushfire planning forum also recognised its benefits for the students. As one teacher commented, the students involved in the forum displayed a confidence and enthusiasm that he had not observed in them before.

Teacher: It was amazing how the confident kids were talking to the adults at the forum. It was just incredible. Like how you had adult professionals there and the kids were happy to chime in and put their hands up and speak their minds.

In post-forum discussions, the experts and decision-makers reflected on the benefits of the forum for their own learning and development. For example, one of the disaster risk scientists reflected on how the forum had prompted a shift in her mindset about young peoples' capabilities for leading initiatives in their schools and communities. She had also recognised the importance of feedback loops and systems of reciprocity for driving change.

Disaster risk scientist: [At this forum] I think I've learnt how much adults could learn from young people. There is a lot that they brought up where I saw lots of opportunities for them to lead some things with their community, but also in feeding back to agencies, councils, the school community and the governing body for the school as well. I saw a lot of opportunity. It's reciprocal. It's not one direction. It's very much a cycle.

One of the teachers, who also has experience as an emergency services volunteer, emphasised that these kinds of forums where young people can share their views have major benefits for the emergency services. He suggested that students can provide their local emergency services with honest, unfiltered reports on the status quo in their communities, which is an essential first step toward effective community engagement.

Teacher: I think that emergency services coming to the school and hearing real kids talking about things is a really great thing for *them* as well. And I think that trust thing is different too because I feel like if you put some older people or adults in the room with those EM [emergency management] people and they said "Oh no we're not going to do that", the EM people would probably challenge them on it and say "Well, why not? You should!", but they're not going to do that to a child and so the students can just share unreserved opinions. You know, kids are going to say "Well, people around here aren't going do that, no way" and that's what the emergency services need to hear.

An emergency management practitioner from the municipal council agreed that the candidness of students can be a valuable asset when assessing the rigour of plans and procedures. In this project, for example, the students were not afraid to express their doubts or concerns about the school's shelter-in-place procedures, and she viewed this a valid and reliable form of feedback.

Municipal council emergency management practitioner: It's really good to have the kids input. They were raising things that were interesting. Like if they are saying "I'm not going to go to that building, I'm just going to go home" and it's like "Oh, that's going to be interesting for the teachers to manage!". The kids' feedback tells us if any of this has a chance of working.

Meanwhile, a local CFA volunteer highlighted that students can also provide people like himself with valuable insight on the most effective ways to provide knowledge and information to the youth demographic.

Local CFA volunteer: I was interested to ask them like how do they find out stuff, like what are your sources of information so it's a broader question I guess about how do they find information because we in [fire] agencies need to actually tap into that and use those sources.

It is important to emphasise that the shared understanding and synthesis of ideas made possible by the bushfire planning forum also had positive benefits for the plan itself. One of the most compelling examples relates to the school's systems and procedures for emergency communication with parents/carers. In both the focus groups and the participatory workshops, the students frequently commented that in the event of a bushfire emergency at school, the first thing they would do is run and get their phones. When asked why they would take this action, which clearly goes against the school's standard operating procedures, the students explained that they would need to make contact with their parents/carers. Asked to explain further, some of the students said they would want to make sure that their parents/carers were safe.

Year 8 student: It would also be very stressful for people because they won't know if their family is safe or not because they won't have their phones on them.
Year 7 student: I agree.
Year 8 student: Yeah, because you want to call your family and make sure they're okay.

Some students said they would want to call their parents/carers so they could tell them to come and pick them up.

Year 7 student: I'd probably call my mum and tell her to come pick me up, because there's a fire.

Other students suggested they would want to tell their parents/carers that they were safe and that they should *not* come to pick them up. As one student explained, her parents would be worried and their first instinct would be to come to the school to collect her.

Year 7: My parents would probably be really worried. So, they would probably just try to get me. They wouldn't really think properly and would probably just come and get me because that's the first thing they'd want to do.

When presenting their views and perspectives to the adults at the bushfire planning forum, the students explained how important it would be for them to be able to access their phones so they could contact their parents/carers. This opened the doors for a robust discussion about how the school will communicate with parents/carers in the event of a bushfire emergency. The students did not realise that the school already has systems in place to ensure that parents/carers are kept informed, nor did they realise that 900 students trying to call their parents at the same time would quickly overwhelm the carriage service, so they probably wouldn't be able to reach their parents anyway. As a result of this discussion, the teachers and school leadership learned that they need to provide the students with clearer information about the school's emergency communications systems and the students learned that they do not need to run and get their phones to call their parents/carers.

Municipal council emergency management practitioner: They all wanted access to their phones so they could reach their parents so they could have that communication and have that link. I thought was really important for us to know.

Therefore, by creating a safe and supportive environment that was conducive to genuine dialogue between the students and the adults, a problem of significant concern to the students could be better understood and effectively addressed. Further steps can now be taken to ensure that all students are made aware of the emergency communications systems that the school has in place.

Municipal council emergency management practitioner: The kids don't know what the school is going to do and vice versa the school doesn't know what the kids don't know, so putting those two things together is a great step. So, there is clarity on both sides and there will still be gaps and issues but at least the plans that they have got will be better known.

The general feedback from the students and adults involved in the bushfire planning forum was that it constituted a highly effective mechanism through which students could share their views with decision-makers. As one CFA volunteer noted, engaging with this demographic can be challenging, but that was certainly not the case here.

CFA volunteer: It's a notoriously hard group to engage with...So, I was really impressed with their level of engagement and the thoughtfulness of their responses.

The teachers agreed that the students had been highly engaged in the forum, and they were deeply appreciative of the time and effort that the forum guests had invested in the activity.

Teacher: The students were really excited about presenting and being listened to by the adults and I know that the forum guests are all really busy and have lives outside of education, and I really appreciate that they gave our students that opportunity.

Meanwhile, the students' appreciation for the time and effort invested by the forum guests was clearly reflected in the words of thanks they articulated at the conclusion of the event.

Year 7 student: Thank you for your knowledge and adding to our ideas.

Year 8 student: I really appreciate you coming in today because of your knowledge. And considering that's your career, your knowledge has helped us be knowledgeable as a group together. We've made more ideas, talked about it and then we've given you our ideas and you've appreciated our ideas and put it into the back of your mind just as a little idea if you need it.

Year 7 student: Thank you for coming. I really appreciate you taking time out of your day to come and educate us. It's going to make a big impact on our lives and the lives of the future generations.

Year 8 student: Thank you for coming in and sharing your knowledge. I really found it interesting and I learned a lot.

Year 7 student: Thank you for being here and valuing our input and just hearing us out.

Year 7 student: Thank you for listening to our ideas and seriously taking them on. We are all very appreciative of you taking the time out of your day to listen to us and to learn something new from us.

Year 7 student: I think it's really great that you all came to listen to our suggestions and perhaps we could implement that in future as a more common procedure.

Thus, from the perspectives of the forum participants, both the adults and the students, the bushfire planning forum functioned as a highly effective mechanism through which the students could share their views and perspectives on school bushfire planning with decision-makers. It is also clear from the reflections of the forum participants that it also created opportunities for intergenerational learning and the development of trusted relationships.

While the experience in this project would suggest face-to-face forums that support dialectical discussion and debate represent an effective mechanism through which students can share the views, it will be important to identify other mechanisms going forward. For example, as one student pointed out, a mechanism through which students can provide their input anonymously. As she explained, there may be circumstances in which students have ideas about how to improve the plan, but they don't feel comfortable sharing them publicly.

Year 7 student: Well, I definitely know something that has helped me have a voice. I discovered a website online. It's just it's free counselling and everything. But I really like the idea of everything's private. Everything you could say, and no one's going to judge you. And I think definitely a website that says, "Do you have any ideas of what to improve?" It's anonymous - you don't have to say your name, your number, your email, anything. You just have to say it.

It will also be important to identify the specific factors that influence the effectiveness of particular mechanisms. For example, in this project, a key factor influencing the effectiveness of the bushfire planning forum was that the students had been provided with the time and space to form their views in advance. Another factor was the level of respect that the forum guests demonstrated toward the students at every stage of the proceedings. Identifying the full range of factors that influence effectiveness stands as a worthwhile pursuit.

> **KEY CONSIDERATIONS**
> - What mechanisms for sharing students' views with decision-makers are most effective?
> - Are some mechanisms more effective than others in specific contexts?
> - What factors influence the effectiveness of particular mechanisms?
> - Who needs to be involved in the design and implementation of mechanisms for sharing students' views?

2.4. Establish leadership positions for students

Establishing leadership positions for students will amplify the impact they can have on policies and activities for school bushfire planning within their school community. By leveraging existing leadership positions and creating new ones, schools will be providing students with valuable opportunities to contribute positively to school bushfire planning and the broader school environment.

After the bushfire planning forum, when asked to provide suggestions and recommendations for next steps, the adult participants all emphasised the importance of establishing leadership positions for students. From the perspective of the school leadership, this would involve building on the momentum gained through this project, as well as leveraging off the existing student leadership structures that exist within the school. For example, home group captains and house captains could have an important role to play in setting agendas for action going forward.

Member of the school leadership: We have to build on what we've already got so we have to build on the work of the students that you worked with this year. And at each year level, like at year 7, 8 and 9 we have home group captains and house captains and we need to use those kids who meet regularly with the [staff] team leaders and say "Okay what is it we can look at in our environment and not only our school environment but also our broader environment?".

The value of engaging senior student leaders within the school to act as mentors to the younger students was also highlighted.

School leadership: We've just done our interviews for our 2024 Year 12 leaders and it is quite interesting because we had really high calibre applicants and they are relatively active in the broader community. So, I think it's around making sure we can use those kids as well, to work with the younger kids [and] to mentor them.

Meanwhile, teachers with a delegated responsibility for promoting student voice within the school would also have a role to play in making sure that student leadership is recognised and supported.

Member of the school leadership team: I think absolutely making sure leadership is a priority and we've got a position of responsibility for a staff member who is going to be looking at things like student voice and the SRC [Student Representative Council], so getting them involved is really important as well.

The emergency management practitioners who attended the bushfire planning forum also had recommendations for how student leadership could be fostered and encouraged. One practitioner, whose work is focussed specifically on school emergency management, raised the possibility of appointing emergency management captains.

School emergency management practitioner: When I speak at principals' forums and things like that, I always speak about things like student voice and getting the students to be emergency captains and things like that. I do know of one primary school that has emergency management captains.

Another practitioner, working in the bushfire risk management sector, proposed that leadership positions for students could also be established at the state level, with school fire captains from across Victoria coming together to learn from each other and advocate for change.

CFA Community Engagement Advisor: They could be great ambassadors for leading the plan and they could get a qualification or a certificate. It would be good to see this become like a state forum, so you've got [school] fire captains from across Victoria and they are doing this as a one day or two day thing where they all come together.

KEY CONSIDERATIONS

- How can existing student leadership structures and positions be leveraged for the purpose of school bushfire planning?
- What benefits might be associated with establishing student leadership forums at the district or state level?
- How can the role of student leaders be formally recognised and rewarded?

PRIORITY 3: SUPPORT INNOVATION AND CHANGE

The genuine participation of students in school bushfire planning represents a significant paradigm shift in current policy and practice. Enabling this shift to take hold will require a strong commitment to innovation and change. It will also require the development of collaborative partnerships and clear lines of accountability, underpinned by an ethos of shared responsibility. Meanwhile, ongoing monitoring, evaluation and research that supports school communities and partner organisations to identify and promote evidence-based practice will be crucial to the scaled implementation of change processes, from the local to the state level.

In the focus groups and interviews that were conducted at the end of this project, students and school staff expressed a strong commitment to building on what had been achieved. While they all agreed that the project had been highly beneficial for everyone involved, they were very clear that expanding those positive outcomes into the wider school community would require ongoing effort and commitment.

> **Teacher:** I think the students in this project have a really good understanding now and they are thinking about it, and they will probably make really good plans, but that's obviously only a really small percentage of the students at the school. So, to widen that out to everyone else at the school - it would be interesting to see how we could do that.
>
> **Year 8 student:** I don't think people outside of who we have here [in the project] know about this or that this is going on, because I don't think that many people really think about it. Maybe if everyone was to have more influence to put more focus on bushfire planning and just get the knowledge spreading out - the knowledge of what to do, what's going to happen - I think that would definitely benefit, but right now, I don't think this is really doing enough.

Members of school staff involved in the project suggested that the first step towards initiating change at the school level would be to secure a commitment from the school administration (e.g. the school principal and the assistant principals) to design and implement policies and programs that will engage students as genuine participants in school bushfire planning. As one teacher emphasised, this kind of change requires dedicated time and resources, support for staff and the adoption of an organisational learning approach -

none of which is possible without the support of the school administration.

> **Teacher:** It's really important to have the support of the school admin. They don't have to drive it, but they definitely need to support it because otherwise there's too many barriers. When you're working in the system, you see those things.

Teachers and members of the school leadership also underscored the importance of 'champions' - members of the school staff who firmly believe that student participation is a powerful tool for enhancing the development and implementation of the school bushfire plan. Champions can be real catalysts for change: they can advocate for the value of student participation by increasing awareness of students' contributions; they can create spaces for experimentation and innovation; and they can provide their colleagues with guidance and advice on good practice. As one member of the school leadership asserted, the importance of champions cannot be overstated.

> **Member of the school leadership:** You've got to have a champion who is there to take ownership of it and who can take charge of it. You have to have that. If that's not there, it's not going to work. That's probably the start and the end of it to be honest.

As such, supporting innovation and change at a school level will require the active engagement of existing champions and the recruitment of new ones. As one teacher warned, relying on just one or two teachers to support and enable change initiatives in schools is not a sustainable approach and building a larger network of

champions would help build resilience into the system.

While the commitment of the school administration and the engagement of champions represent essential first steps towards increasing student participation in school bushfire planning, the development of effective and sustainable approaches will require the establishment of collaborative partnerships with a much broader range of actors beyond the school staff and students, such as parents/carers, emergency management services, local government, the Department of Education, and other individuals and organisations with a delegated responsibility for bushfire community safety in the local area. This would not only ensure that schools have access to the knowledge and expertise they need to implement change initiatives, it would also help to ensure a coordinated approach to emergency management at the local level.

Significantly, this collaborative approach is strongly aligned with the Victorian emergency management sector's commitment to 'shared responsibility' (see BOX 3.1). Over the last decade, the Victorian Government has adopted shared responsibility as the central principle that underpins all emergency management policy and practice across the state. As outlined in Victoria's Emergency Management Manual,[54] *"The management of emergencies is a shared responsibility involving many people and organisations in the community. It is not something done by one sector of the community to or for the rest of society, although some organisations have specialist roles"* (p.7).

Throughout this project, the importance of a shared responsibility approach to student participation in school bushfire planning became increasingly evident, particularly in discussions regarding the school's pre-emptive school closure action plans for catastrophic fire danger days. In this context, many students voiced concerns about other students who would be living in high risk locations without the

knowledge, resources and support they need to make informed decisions about their actions on those days. Clearly, this is an issue that can only be addressed through a shared responsibility framework that enables a coordinated effort between the school, the local authorities, the students, their families and other relevant actors or entities.

BOX 3.1. DEFINING SHARED RESPONSIBILITY FOR EMERGENCY MANAGEMENT IN THE VICTORIAN CONTEXT
Shared responsibility for emergency management refers to the collective obligations and accountabilities held by a range of actors. It recognises that no single actor can be responsible for emergency management and that individuals, communities, organisations, businesses, all levels of government and the not-for-profit sector all have a role to play in planning for, responding to and recovering from emergencies.[15] For shared responsibility to be equitable, inclusive and strengths-based, it must be embedded in system-wide in strategies, governance, planning, policy, programs, services and processes, as well as in communications and culture.[15] Shared responsibility in emergency management recognises that limiting the impact of hazards and disasters requires a coordinated effort across and within many areas beyond the traditional emergency management sphere, including land use planning, infrastructure, social policy, agriculture, education, health, community development, energy and the environment.[32] It also recognises that collaborative partnerships with local communities are key to ensuring the protection of lives, assets, and cultural and environmental values.[15,32]

The collaborative approach being proposed here not only embodies the inclusive, equitable and strengths-based principles of shared responsibility, it also directly aligns with the Victorian Department of Education's policy agenda, which emphasises the importance of learning partnerships between students, teachers, parents/carers, service providers and community organisations[30,31] (see BOX 3.2).

With a strong commitment from schools and the adoption of a shared responsibility approach, there are real opportunities for innovation and change in the way students participate in school bushfire planning, as well as bushfire community safety, more broadly. There will be some instances where change is slow and incremental, and there will be others where it is rapid and transformative. There will also be particular contexts and circumstances in which change is not possible. As one member of the school leadership pointed out, there are strict guidelines that schools are required to follow when developing and implementing their bushfire plans and there are limits to what they can do outside of those guidelines. However, she also recognised that explaining those guidelines to students was a key accountability measure that would have positive benefits for student learning and engagement.

Member of the school leadership: One of the first challenges is that the department has a template that we have to fill out every year and it's pretty specific for what you need to do and what it needs to look like. So, I think based on what the students have said, I think having a look around the bushfire responses and explaining why we do what we have to do is something that we could do.

It is also noteworthy that as a result of this project, students developed an increased awareness of the regulatory landscape in which school bushfire planning takes place. Through their numerous discussions with researchers, teachers, and emergency management practitioners, the students gained new insights into the rules and norms that govern the planning process, and this enabled them to understand the potential constraints and limitations on their roles and contributions as active participants.

Year 8 student: During the forum, I also got to thinking about how many restrictions the teachers have with the planning as well, and there are certain things they can't do for the students because there are rules that they have to adhere to as teachers.

Regardless of the nature, pace or extent of change, ensuring transparency and accountability in decision-making will be imperative to establishing and sustaining positive and supportive relationships

between students, school staff and other collaborative partners. Such relationships are essential to creating an environment in which students feel safe and motivated to share their ideas and opinions. With clear lines of communication between students and decision-makers, and agreed upon mechanisms and timeframes for providing feedback on students' recommendations and suggestions, it will be possible to build the trust, respect and reciprocity upon which genuine student participation depends.

Innovation and change will be also be supported by ongoing evaluation and research that provides reliable data and evidence on the process, outcomes and impacts of student participation in school bushfire planning. Investing in evaluation and research will enable students and decision-makers to identify current needs, challenges, and opportunities, which will be essential for designing effective, relevant and sustainable programmatic approaches in schools. It will also enable the identification of potential risks associated with increased student participation and support the development of appropriate mitigation strategies for managing those risks. Evaluation and research will also serve an important accountability function by establishing clear criteria for success and measuring progress against those criteria. This kind of accountability is essential for maintaining focus and momentum during periods of change.

importantly, evaluation and research will provide schools with the data and evidence they need to drive the prioritisation, development, and implementation of actions to increase student participation in school bushfire planning. It will also enable the development of evidence-based strategies that can be shared with schools and their collaborative partners through toolkits, practice guides and professional learning programs. Significantly, both the *Framework for Improving Student Outcomes (FISO 2.0)*[30] and the *Practice Principles for Excellence in Teaching and Learning*[31] underscore the fundamental importance of evidence-based practice and professional learning (see BOX 3.3).

It is also notable that all of these strategies for supporting innovation

and change - from the development of collaborative partnerships to data driven decision-making and evidence-based practice - are recognised as key priorities in disaster risk management frameworks strategies and plans from the international to the state level (see TABLE 3). While student participation in school bushfire planning may represent a paradigm shift for schools, it is fully aligned with the current goals and objectives of the disaster risk management sector.

BOX 3.3: DEPARTMENT OF EDUCATION POLICIES AND GUIDELINES FOR EVIDENCE-BASED PRACTICE AND PROFESSIONAL LEARNING
Framework for Improving Student Outcomes (FISO 2.0)[30]
Core element 2 - Teaching and Learning: Responsive practices and curriculum programs through which students develop their knowledge, skills and capabilities > Dimension: Use of common and subject-specific high impact teaching and learning strategies as part of a shared and responsive teaching and learning model implemented through positive and supportive student-staff relationships

Core element 3 - Assessment: Use of evidence and data by school leaders and teachers to assess student learning growth, attainment and wellbeing capabilities to design and implement priorities for improvement > Dimension: Systematic use of data and evidence to drive the prioritisation, development, and implementation of actions in schools and classrooms.

Practice Principles for Excellence in Teaching and Learning[31]
Principle 7: Evidence-based strategies drive professional practice improvement > When teachers improve their knowledge and skills using evidence-based strategies, they are more precise and purposeful in their practice > Actions: 7.1. Teachers evaluate the impact of teaching on learning by analysing multiple sources of data; 7.2: Teachers identify and target areas for professional learning; 7.3. Teachers draw on current research and use an inquiry improvement cycle; 7.4: Teachers challenge and support each other to improve practice.

PRIORITY 3: SUPPORT INNOVATION AND CHANGE

CORE TASKS
3.1. Establish and strengthen collaborative partnerships

3.2. Ensure transparency and accountability in decision-making

3.3. Invest in evaluation and research

3.4. Share learning and celebrate success

TABLE 3. Support influence and impact: Disaster risk management policies, frameworks, strategies, and plans

Sendai Framework for Disaster Risk Reduction United Nations Office for Disaster Risk Reduction [20]	Priority 1: Understanding disaster risk > Build the knowledge of government officials at all levels, civil society, communities and volunteers, as well as the private sector, through sharing experiences, lessons learned, good practices and training and education on disaster risk reduction, including the use of existing training and education mechanisms and peer learning.
National Disaster Risk Reduction Framework Department of Home Affairs [32]	Priority 1: Understand Disaster Risk > Strategies for Action 2019-2023 > Strategy F: Support long-term and solution-driven research, innovation and knowledge practices, and disaster risk education > Greater policy-research connection and innovation is needed to ensure necessary evidence bases are available to inform efforts to identify, prioritise and reduce disaster risks. A greater variety of knowledge practices, including Indigenous knowledge practices, should also be better integrated in research and knowledge application.

Second National Action Plan to Implement the National Disaster Risk Reduction Framework
National Emergency Management Agency [35]
	Priority 1: Understand risk
	• Outcome 2: An effective and connected disaster risk reduction knowledge system that provides a solid foundation for action
	  ○ National action 3: Collaborate to harmonise and improve how data, information and research is produced, shared, tailored and used to inform effective approaches to risk reduction.
	  ○ National action 4: Build evidence, intelligence and insights by integrating local knowledge and lived experience, including traditional knowledge, to inform effective decisions.
	  ○ National action 5: Facilitate continuous improvement through monitoring and evaluating risk reduction activities and sharing lessons.
	
	Priority 4: Governance, ownership and responsibility
	• Outcome 8: Disaster management arrangements are inclusive, networked and aligned, supported by meaningful partnerships
	  ○ National action 20: Form and encourage meaningful partnerships and support place-based, community-led, locally-implemented, regionally coordinated approaches to disaster risk reduction, which ensure equity and inclusion across the system
	• Outcome 9 Increased recognition of shared ownership and responsibility for risk management
	  ○ National Action 23: Strengthen mechanisms to improve cooperation and further support devolved disaster risk reduction planning and management at local and risk-appropriate regional levels.

Australian Fire and Emergency Services Strategic Directions 2022 – 2026 Australasian Fire and Emergency Service Authorities Council [34]	Strategic Direction 5: Informed by knowledge, innovation and research. Fire and emergency services will be informed by knowledge, innovation and research by > 8. Anticipating and responding to emerging community, industry and government needs through deep engagement and understanding of the changing environment.
Victorian Emergency Management Sector Outcomes Framework Emergency Management Victoria [51]	Priority 2. People-centred programs and services • Outcome 8. Victorians' lived experiences with emergencies and best practice inform continuous improvement > 1. Increase the identification and sharing of lessons to inform continuous improvement across the sector 2. Increase the use of research and evidence.
Strategic Roadmap for Emergency Management in Victoria 2022–28 Emergency Management Victoria [36]	Priority 5: Strengthen governance arrangements to improve accountability, cooperation and participation > We will build and embed partnerships in our arrangements. The emergency management sector cannot meet the challenges of the future alone. Partnerships will be increasingly vital to how we work together. To keep Victorians safe we will need to recognise, work with and leverage the expertise, capability and capacity of all levels of government, academia, industry and the not-for-profit sector.
	Core capability 6. Building Community Resilience > Building community safety and resilience includes working together at the local level. Communities can strengthen their lifelines by better connecting and working together with appropriate support from organisations > Critical tasks: Working together to identify local context and develop local solutions.
Victorian Preparedness Framework Emergency Management Victoria [15]	Core Capability 21. Assurance and Learning: Support continuous improvement to improve emergency management practice and community safety by extracting understanding from experience and research, reviewing community consequences, investigating causes and outcomes, providing assurance and translating lessons into behaviour change > Critical tasks: Undertake assurance activities before, during and after major emergency events; Analyse insights and identify lessons from assurance activities; Assess identified lessons for change / improvement activities; Monitor and measure improvement of activities and outcomes; Provide opportunities for all personnel to access and utilise identified lessons.

Country Fire Authority Strategy and Outcomes Framework 2020-2030 Country Fire Authority [37]	Goal 2: We deliver programs and services that make a positive difference > For our service delivery to make a positive difference for each unique community, we need to tailor our programs and services to the local fire risk environment of each community, and measure our performance based on the outcomes we achieve…We will tailor our service delivery to the community, recognising that a one size fits all approach will not work to support the diverse and varied needs of the Victorian communities we serve. We will constantly monitor, evaluate and improve the programs and services we deliver so that we know we are doing the best we can to support our community. We will operate as part of Victoria's 'all communities, all emergencies' approach to emergency management, and utilise strategic partnerships to deliver sustainable and effective emergency services. We will continue to strengthen our relationships with our partner agencies, so that we can work together and play our part to achieve the sector-wide vision of safer and more resilient communities.
Education and Training Climate Change Adaptation Action Plan 2022–2026 State of Victoria Department of Education and Training [22]	Victorian Government Education and Training system responsibilities > System component: Health and wellbeing of the people in the system, with a focus on vulnerable people, and emergency management and disaster recovery > Responsibilities: Keeping people within the system (vulnerable communities in particular) safe and well in an environment impacted by climate change. This includes ensuring that the system is resilient to the impacts of climate change, such as extreme weather events. It includes emergency planning, preparedness, response and recovery; Emergency management in education facilities includes collaboration with the state's emergency management sector, staff, students and school communities who contribute to maintaining physically and psychologically safe environments. They do this by appropriate and proportionate risk management, and by preparing and providing support to schools. Successful adaptation will involve working collaboratively with communities, businesses and nongovernment organisations > Strategic partnerships with community groups and peak bodies, and not-for-profit organisations, such as the Municipal Association of Victoria and the Victorian Council of Social Services, can be built and sustained to support climate change adaptation, including for people in the Education and Training system who are experiencing disadvantage.

Victoria's Bushfire Management Strategy (Draft for Public Consultation)
State of Victoria Department of Environment, Energy and Climate Change[16]

Outcome 4 - Working together, accountability and shared responsibility: When it comes to bushfire management, all Victorians have a role to play. As the climate changes, and bushfire risk increases across the landscape, shared responsibility becomes more important > The sector, land managers, communities and industry work together effectively and share responsibility for managing and adapting to bushfire risk across public and private land. To achieve this outcome the sector must:

- 4.1. Collaborate with sector partners, including industry and the community > The sector will work in collaboration with stakeholders to manage fire and its impacts and will support industry and the community to take on enhanced roles in bushfire management. This includes harnessing opportunities through and providing support to work being delivered within and beyond the bushfire management sector, including initiatives related to: education and training, to help schools and early childhood services to prepare for and respond to extreme weather and bushfires and comply with bushfire preparedness guidelines.

Outcome 5 - Informed decision-making, evidence-based approaches and tools: Adapting to and reducing the influence of climate change on bushfire risk requires a strong and continuously improving foundation of knowledge, evidence and tools > To achieve this outcome, the sector must:

- 5.1. Make collaborative decisions based on high quality shared data, science, and research > High-quality data will be essential to decision making. The sector will work with communities to collect high-quality, reliable data, particularly data gathered through long-term studies. The sector will use this data to better identify and respond to bushfire risk.
- 5.3. Build a culture of evidence-based decision making at all levels of fire management > The sector will continue to build a culture of evidence-based decision making. Knowledge and insights gained from monitoring, evaluation, and research will be used by leaders to inform decisions about managing bushfire risk most effectively. Decision-makers will be empowered to make decisions that are underpinned by the evidence and science available.

3.1. Establish and strengthen collaborative partnerships

The importance of collaborative partnerships for innovation and change is consistently emphasised in emergency management policies and guidance from the international to the local level. Collaborative partnerships enable the sharing of resources and expertise and the coordination of effort, which increases capability and capacity for effective planning and response. It also fosters the trusted relationships and mutual support upon which responsive, inclusive and equitable emergency management depends.

As stated in the Victorian Government's *Education and Training Climate Change Adaptation Action Plan*,[22] "*Emergency management in education facilities includes collaboration with the state's emergency management sector, staff, students and school communities who contribute to maintaining physically and psychologically safe environments. They do this by appropriate and proportionate risk management, and by preparing and providing support to schools*" (p.13). The plan also states that "S*uccessful adaptation will involve working collaboratively with communities, businesses and non-government organisations*" (p.12). This emphasis on collaboration has major relevance to student participation in school bushfire planning for a number of reasons.

First, collaborative partnerships for student participation in school bushfire planning will allow school communities, emergency services and other organisations to pool their resources, knowledge and expertise. This collective effort will ensure that schools have access to the necessary support they need to effectively engage their students as genuine participants in school bushfire planning. It will also minimise the duplication and wastage of resources, which is a major priority in both the emergency services and education sectors.

Second, through collaborative partnerships between the emergency services and the wider school community, schools can engage students in the development of more comprehensive bushfire plans that address a wide range of scenarios, including those related to pre-emptive school closures on catastrophic fire danger days. Ensuring that diverse perspectives and experiences are considered will lead to more inclusive, equitable and adaptable plans. Importantly, collaborative partnerships between the emergency

services and the school community will also allow for the development and implementation of training exercises to test plans and improve response capabilities.

Third, collaborative partnerships will help to facilitate enhanced emergency communication, both within the school and across the school community. For example, students, school staff and parents working together to clearly establish emergency communication and notification systems will help to ensure that in the event of a bushfire emergency, the expectations and efforts of all parties will be coordinated and aligned.

Finally, collaboration will support effective community engagement and enable buy-in from the school community. Given that genuine student participation in school bushfire planning represents a major shift in policy and practice, collaborative partnerships that foster trust, cooperation, and mutual support amongst students, school staff, households and the emergency services will be crucial.

> **KEY CONSIDERATIONS**
> - Which individuals, groups and organisations need to be engaged as collaborative partners to support student participation in school bushfire planning?
> - What resources and support need to be in place to establish and maintain collaborative partnerships at the local and state level?
> - How can the influence and impact of collaborative partnerships be monitored and measured over time?

3.2. Ensure transparency and accountability in decision-making

Transparent and accountable decision-making procedures are crucial components of genuine student participation. In the context of school bushfire planning, transparency and accountability in decision-making will demonstrate to students that their views and perspectives are valued and taken seriously. It will also provide students with valuable opportunities to learn about democracy, governance and their rights and responsibilities as citizens.

It is important to recognise that creating time and space for students to form their views and providing them with mechanisms to share those views with decision-makers does not mean that their views should be implemented in all circumstances and in all aspects: however, it does require that their views are given proper consideration and that any subsequent decision is reported back to the students with an explanation of how their views had an influence, and why the decision was made.[55,56] As one member of the school leadership explained, there will be times when students' suggestions and recommendations will not be implemented, but their views should not be dismissed out of hand. Rather, there needs to be a feedback mechanism that provides students with the rationale underlying the decision-making process. The decision-makers also need to ensure that the students understand that rationale and that any questions they may have are addressed.[55,56]

> **Member of the school leadership:** We have staff members who have existing relationships with the kids, so going through that process and making sure they understand why we are doing what we are doing, [that] is the main thing that we need to be able to get across. And that's where having a consultative group where they can sit and discuss [is useful]. This year for example, the SRC [Student Representative Council] has had a staff member who has overseen it and who has been a facilitator, but it's been mainly student run, so it's about them seeing that they are going to get feedback, they are going to get answers to their questions or get explanations as to why things are the way they are. Because in the end, we have a duty of care to them and we have to do certain things and they may think "Okay it's great if we can all run around with our phones" but it's actually not. So I think it's about educating them, or explaining to them, why we're doing what we're doing and what the benefits of that are.

It is worth highlighting that in this project, many of the students' worries and concerns about the plan were the result of not fully understanding why certain decisions had been made. For example, the concerns that some students had about the school's shelter-in-

place procedures largely stemmed from a lack of knowledge about decision-making processes involved in their development.

> **Municipal council emergency management practitioner:** Some kids didn't understand the rationale behind the decision to choose certain rooms or buildings. So you kind of need to make them aware, but also explain the reason why because some of them were like "I don't want to go in there!"...But schools wouldn't do this lightly - they would've gone through a detailed discussion about where and how and why, so the rationale would be there, but the kids don't know that. They would think it's some random decision. The kids don't know that the teachers have given it a lot of thought.

To be effective and sustainable, models of student participation in school bushfire planning will require transparent and accountable decision-making procedures that inform students about what decision was made, how their views were regarded and the reasons why action has proceeded in a certain way.[49,55,56] This will create a system in which students views on school bushfire planning are not just valued and respected, but are seen as integral to decision-making. In the long term, this will only be brought about through education and awareness raising, for both students and adults. As benefits of transparent and accountable decision-making processes accrue, they will become embedded in school policy and practice, fostering a culture of honesty, openness and fairness in the school community.[49,56]

> **KEY CONSIDERATIONS**
> - Are there existing good practice protocols or guidelines for transparent and accountable decision-making procedures that can be adapted for the purpose of school bushfire planning?
> - What role can students play in the design and implementation of decision-making procedures in their school community?

3.3. Invest in evaluation and research

Evaluation and research will be essential for enhancing the effectiveness and sustainability of programs and initiatives aimed at increasing student participation in school bushfire planning. This investment will enable continuous improvement, evidence-based decision-making, informed policy development and strategic advocacy. Importantly, the data and evidence generated through evaluation and research will also provide a strong foundation for the development of programs and initiatives that can be implemented at scale.

At both the National and State levels, the Australian disaster risk management sector places high premium on evidence-based practice. For example, in the *National Disaster Risk Reduction Framework*,[32] under 'Priority 1: Understand Risk', the key strategies include supporting *"long-term and solution-driven research, innovation and knowledge practices...to ensure necessary evidence bases are available to inform efforts to identify, prioritise and reduce disaster risks" (p.13).* Moreover, the *Second National Action Plan to Implement the National Disaster Risk Reduction Framework*[35] includes three National actions that are designed to deliver on that strategy:

- National action 3: Collaborate to harmonise and improve how data, information and research is produced, shared, tailored and used to inform effective approaches to risk reduction (p.17).
- National action 4: Build evidence, intelligence and insights by integrating local knowledge and lived experience, including traditional knowledge, to inform effective decisions (p.18).
- National action 5: Facilitate continuous improvement through monitoring and evaluating risk reduction activities and sharing lessons (p.19).

Meanwhile, in the *Victorian Emergency Management Sector Outcomes Framework*,[51] under 'Priority 2: People-centred programs and services', Outcome 8 requires that *"Victorians' lived experiences with emergencies and best practice inform continuous improvement"* (p.4). Key actions for achieving this include "*increase the identification and sharing of lessons to inform continuous improvement across the sector*" and *"Increase the use of research and evidence"* (p.4). The *Victorian Preparedness Framework*[15] also prioritises monitoring and evaluation. For example, 'Core Capability 21: Assurance and Learning', is focussed on supporting *"continuous improvement to improve emergency management practice and community safety by extracting understanding from experience and research, reviewing community consequences, investigating causes and outcomes, providing assurance and translating lessons into behaviour change"* (p.39). As outlined in that Framework, critical tasks for building this capability include analysing insights and identifying lessons from assurance activities, assessing identified lessons for change/improvement activities and monitoring and measuring improvement activities and outcomes.

The Victorian Department of Education also places a high premium on evidence-based practice. For example, in the *Framework for Improving Student Outcomes (FISO 2.0),*[30] Core Element 3: Assessment requires the *"Use of evidence and data by school leaders and teachers to assess student learning growth, attainment and wellbeing capabilities to design and implement priorities for improvement"*, which includes the *"Systematic use of data and evidence to drive the prioritisation, development, and implementation of actions in schools and classrooms".* Similarly, in the *Practice Principles for Excellence in Teaching and Learning,*[31] 'Principle 7: Evidence-based strategies drive professional practice improvement' encourages teachers to *"evaluate the impact of teaching on learning by analysing multiple sources of data"* and *"draw on current research and use an inquiry improvement cycle".*

Hence, there is a strong institutional basis for investment in evaluation and research that can support the identification of evidence-based

strategies and facilitate continuous improvement for student participation in school bushfire planning. Given the current lack of research on this specific topic, as well as the broader dearth of research on school bushfire planning, directing resources towards ongoing evaluation and research will be a necessary part of supporting innovation and change.

Setting an agenda for evaluation and research that can drive innovation and change from the local to the state level will require the adoption of forward-thinking, multi-disciplinary, participatory approaches that engage both the emergency management and education sectors. Through this approach, it will be possible to design evaluation and research initiatives that can accomodate the complexity inherent in school bushfire planning. It will also be important to engage students, school staff, and local emergency management practitioners as the end-users of evaluation and research because their perspectives and insights will be crucial to informing research objectives and strategies that can produce the knowledge and evidence that is needed to implement change at the school level.

The value of engaging students as researchers and co-researchers should also be considered. In the 'students as researchers' model, students identify issues for investigation and researchers support them to develop skills and carry out the research.[57] In the 'students as co-researchers' model, researchers identify issues for investigation and engage students as fellow researchers.[57] In this model, researchers and students are learning and researching together, side-by-side. Both of these models strongly align with the philosophies, theories and concepts that underpin the practice of student participation in school bushfire planning and they would serve to further amplify student voice, agency and leadership in change processes.

When designing evaluation and research to support innovation and change, it must be recognised that conducting participatory research in schools is both time and resource intensive. There are many procedural safeguards that need to be adhered to and this increases the complexity of the ethics approval process, the recruitment of participants, the scheduling of research activities and the interpretation and reporting of results. Successfully navigating this complexity requires the development of trusted relationships between researchers, students and school staff and a strong commitment to the best interests of the research participants. However, with realistic timeframes and adequate resources, participatory evaluation and research that engages school communities as genuine partners in innovation and change has transformative potential.

Signs of this transformative potential are clearly apparent in this research project. Through the use of a participatory research methodology that privileged the perspectives of teachers, school leaders, emergency management practitioners and students themselves, it has been possible to gain an increased understanding of the concept and practice of student participation in school bushfire planning. It has also been possible to identify evidence-based recommendations that can support innovation and change going forward. Moreover, the strong relationships and networks that have been established through this project will increase capability and capacity for progressing change in contextually appropriate and sustainable ways.

KEY CONSIDERATIONS

- Who needs to be involved in setting the research agenda on student participation in school bushfire planning?
- How can students be engaged as researchers or co-researchers?
- How can universities and research organisations build capability and capacity for multidisciplinary, participatory research that supports innovation and change?
- To what extent do existing funding models and arrangements support research that has transformative potential?

3.4. Share learning and celebrate success

Supporting innovation and change, over time and at scale, will require the design and delivery of professional learning opportunities that build capability and capacity in both the emergency management and education sectors. Recognising, celebrating and amplifying successful programs and initiatives led by school communities will further augment a culture of innovation and change.

As good practice in student participation in school bushfire planning becomes more firmly established and opportunities for scaled implementation begin to emerge, building capability and capacity across the education and emergency sectors will become a priority task. A major component of that task will involve the provision of quality professional learning opportunities for teachers, school leaders and emergency management practitioners. While the most appropriate approaches to professional learning will be determined by the specific learning needs of practitioners, the following options can provide a useful starting point for discussion and planning:

- **Courses and workshops:** Focussed, interactive learning activities will provide practitioners with opportunities to learn about the benefits of student participation in school bushfire planning, develop their knowledge of good practice strategies and techniques and build their skills for effective implementation.
- **Online webinars and tutorials:** Synchronous or asynchronous online learning experiences that provide flexibility for self-paced or live sessions would ensure that practitioners who are located in regional and remote areas are able to access quality professional learning opportunities.
- **Mentorship and coaching:** Pairing more experienced practitioners with less experienced ones to provide guidance, support, and feedback would support the development of context-sensitive strategies and techniques and increase competence and confidence for implementation.
- **Professional learning communities:** Bringing practitioners together, either online or in-person, to reflect, problem-solve, and share good practices would facilitate the collaborative and collegial relationships that are needed for effective and sustainable implementation.

- **Peer and observational learning:** Providing opportunities for practitioners to observe activities in other schools or classrooms would promote collaboration, reflection, and the sharing of effective Teaching practices among colleagues.
- **Conferences and seminars:** Presenting research findings and good practices at conferences and seminars will promote the use of research and evidence and support continuous improvement.

Building and maintaining momentum for innovation and change will also be supported by recognising and celebrating the efforts of school communities who actively support innovation and change. For example, there could be rewards and incentives for students, school staff and emergency managers who lead activities that increase levels of student participation in action and decision-making. There could also be a platform for profiling and amplifying good practice programs and initiatives from around the State. Award schemes and prizes for excellence in policy and practice may provide an additional mechanism through which to celebrate success and encourage school communities to involve their students as genuine participants in school bushfire planning.

> **KEY CONSIDERATIONS**
> - What kinds of professional learning opportunities will be needed to build capability and capacity for the scaled implementation of programs and initiatives across Victoria?
> - What role can students play in the design and delivery of professional learning opportunities?
> - How can the successful efforts of school communities be recognised, celebrated and amplified?

BUILDING ON A STRONG FOUNDATION

This Emergent Framework for Student Participation in School Bushfire Planning demonstrates the critical value of engaging students as genuine partners in disaster risk management. Not only to ensure that plans and procedures meet their needs, priorities and expectations, but to capitalise on the knowledge, skills, enthusiasm, creativity and ethic of care that they bring to the task. Students in this project have shown that when they are afforded the time, resources and support they need to form and express their views, they can make significant contributions to policy and practice. With this Framework, it is hoped that more students across Victoria will have the opportunity to actively participate in the development and implementation of their school bushfire plans and, by extension, reduce disaster risk and increase resilience in their school communities.

The Framework's three priorities and their associated core tasks provide an evidence-based benchmark for assessing existing policy and practice, identifying needs and gaps, and developing evidence-based strategies and plans for action. As emphasised in the Framework, these activities will need to be undertaken in collaboration and partnership with teachers, school leaders, emergency managers, parents/carers, and most importantly, students themselves. It is only through a strengths-based shared responsibility approach, underpinned by principles of equity and inclusion, that the expected outcomes and goals of the Framework can be fully realised.

The Framework's characterisation as 'emergent' underscores the need to support its continuous improvement over time. Central to this iterative process will be the sustained engagement of students in co-producing influence and change at every level. Ensuring the framework remains relevant and coherent in the context of students' lives will require that they remain involved in repeated cycles of: acting and reflecting; identifying goals and priorities; investigating and testing ideas; and engaging in critical dialogue with decision-makers. Importantly, the priorities and core tasks comprising the Framework provide an evidence-based guide for engaging students as partners in it's ongoing development.

This project has achieved its stated aim of designing a conceptual framework that can support the genuine participation of Victorian secondary school students in the development and implementation of school bushfire plans. However, it is the trusted relationships that have been forged through the design process that will enable it to have an impact beyond the school community from which it has emerged. These relationships, which span the emergency management, education, local government and research sectors will be essential for the socialisation of the Framework and the scaled expansion of the programs and initiatives that come from it.

As climate change, population growth and increasing social and economic inequality continue to expose increasing numbers of Victorian school students to the impacts of bushfires hazards and disasters, the development of effective and sustainable approaches to school bushfire planning has never been more important.

So, let's get to work. There's no time to waste.

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